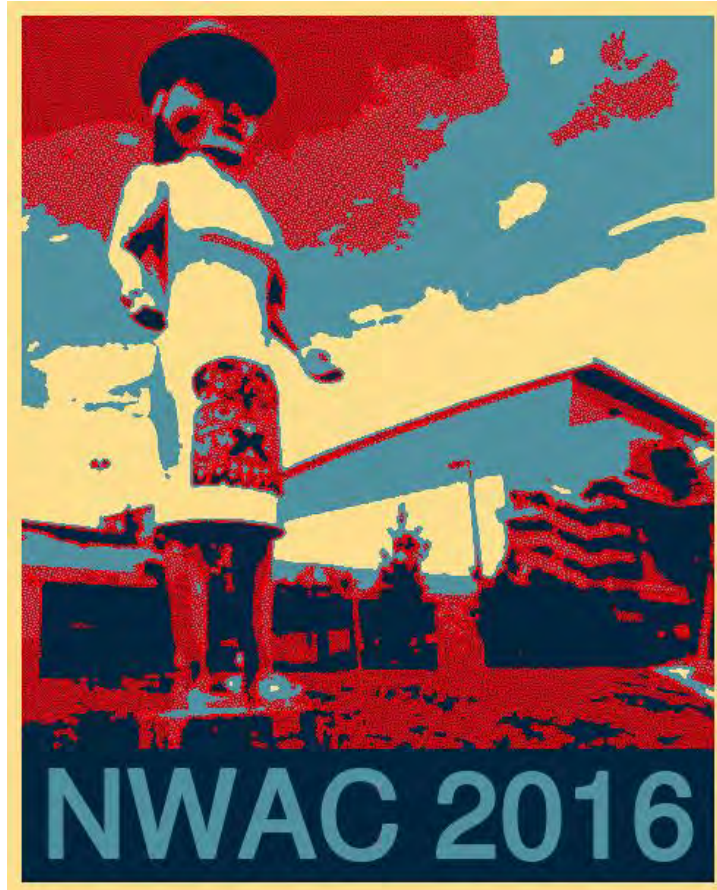


69th Annual Northwest Anthropological Conference



Tacoma, Washington

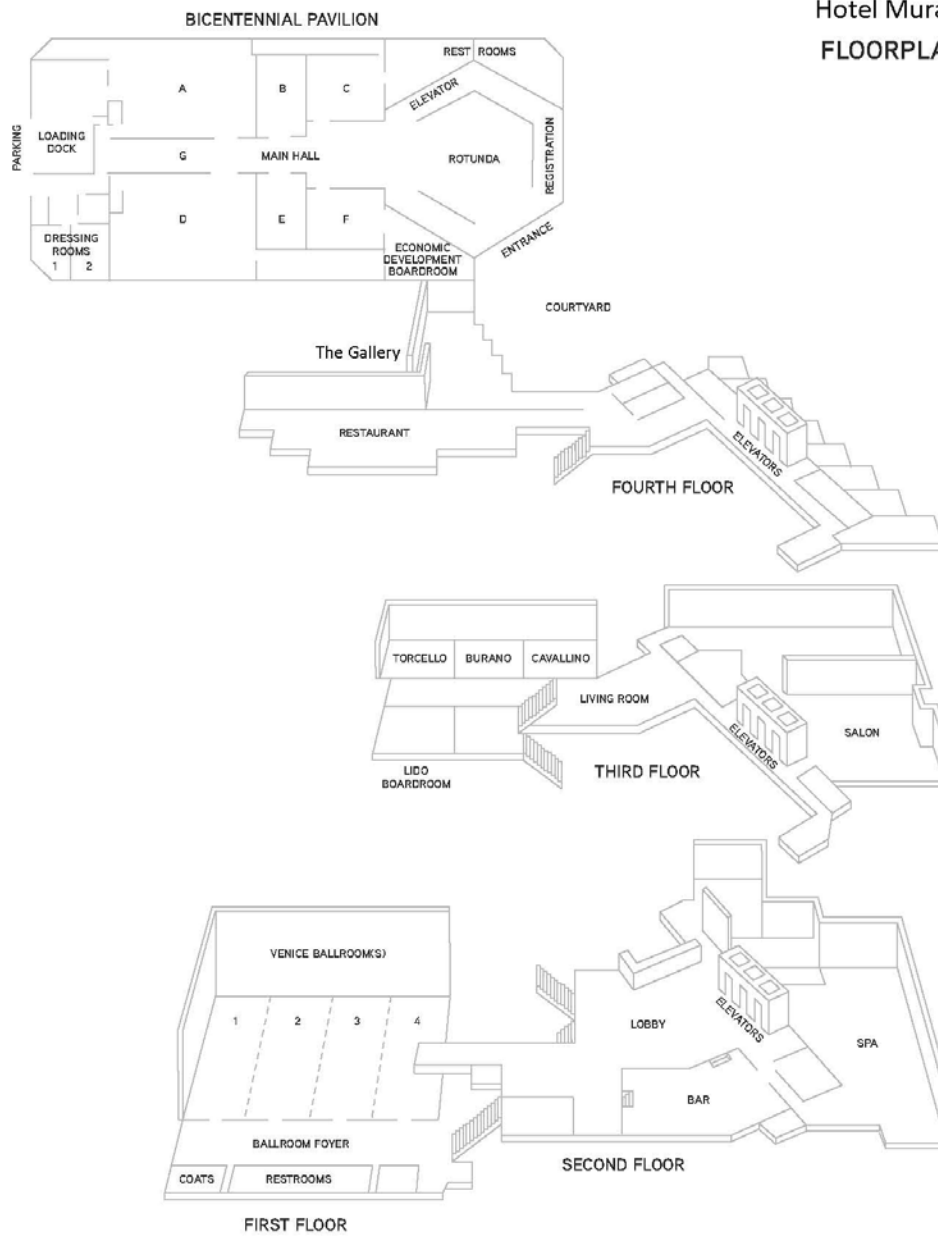
March 24-26, 2016

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Schedule of Conference Events

Conference Registration- **Conference registration is required for all conference events.*

Bicentennial Pavilion

Wednesday- March 23, 2016	4:00 PM - 7:00 PM
Thursday- March 24, 2016	7:00 AM - 5:00 PM
Friday- March 25, 2016	8:00 AM - 5:00 PM
Saturday- March 26, 2016	8:00 AM - 12:00 PM

Single Day registration and additional banquet tickets may be purchased on-site. Registration tables will be located in the Bicentennial Pavilion located immediately adjacent to the Murano Hotel, accessible from the Hotel Lobby (Mezzanine Level 3).

Opening Reception- **No Host*

Bicentennial Pavilion

Wednesday- March 23, 2016 5:00 PM – 7:00 PM

Please join us and fellow conference attendees for a no-host reception at the Hotel Murano to welcome the start of the 69th Annual Northwest Anthropological Conference! Refreshments will be available 5:00 PM- 7:00 PM in the Ballroom Lobby.

Tribal Welcome and Opening Ceremony-

Meeting Room A, Bicentennial Pavilion

Thursday- March 24, 2016 8:00 AM – 8:40 AM

The Puyallup Tribe of Indians will join us for a special welcome and opening ceremony at 8:00 AM in Meeting Room A located in the Centennial Plaza.

Student Luncheon-

The Gallery, Hotel Murano

Thursday- March 24, 2016 12:00 PM - 1:20 PM

Students may enjoy a complimentary brown-bag lunch and mingle with Archaeologists and Anthropologists representing tribes, government agencies, consulting firms and academic institutions.

Banquet Reception- **No Host*

Venice Ballroom Lobby, Hotel Murano

Friday- March 25, 2016 6:00 PM- 7:00 PM

A no-host reception will begin at 6:00 PM, prior to the start of the conference banquet in the Ballroom Lobby.

Conference Banquet- **Tickets required and are available for purchase at the registration table.*

Venice Ballroom, Hotel Murano

Friday- March 25, 2016

Dinner 7:00 PM - 8:00 PM

Keynote Speaker 8:00 PM - 9:00 PM

Book Signing 9:00 PM - 9:30 PM

Banquet Keynote Speaker- Dr. Brian Fagan, University of California, Santa Barbara (Emeritus)

"Frankenstein, Godzilla, Little Ice Ages, and Medieval Warming: An archaeologist looks at climate change"

Additional Sponsored Events

Reception- Washington State History Museum

Sponsored by the Washington State Historical Society

Washington State Historic Museum, 1911 Pacific Avenue, Tacoma, WA 98402

Thursday- March 24, 2016 5:00 PM – 7:00 PM

Enjoy some light refreshments and no-host bar while exploring the East Wenatchee collection exhibit and other interactive displays, videos and dioramas showcasing some of Washington's earliest inhabitants at the Washington State History Museum.

AWA Pub Crawl

Sponsored by the Association for Washington Archaeology (AWA)

Hotel Murano Lobby

Thursday- March 24, 2016 6:00 PM – 10:00 PM

Cost \$20.00

Join the AWA for the 1st Annual NWAC Pub Crawl fundraiser. Participants (must be 21 years of age or older) will learn about the history of brewing in the South Puget Sound area on a walking tour of three local Brew Pubs including Pacific Brewing and Malting, The Forum Bar in the Olympus Hotel (built by the founder of the Olympia Brewery), and Odd Otter Brewing. Space is limited to 50. Contact Alex Stevenson at washingtonarchaeology@gmail.com.

Meetings

Washington Curation Summit

Economic Development Boardroom, Bicentennial Pavilion

Thursday- March 24, 2016 12:00 PM – 1:15 PM

Association of Oregon Archaeologists (AOA)

Meeting Room C, Bicentennial Pavilion

Thursday- March 24, 2016 4:00 PM – 6:00 PM

NWAC Business Meeting

Economic Development Boardroom, Bicentennial Pavilion

Friday- March 25, 2016 12:00 PM – 1:15 PM

Association for Washington Archaeology (AWA) –“Brews and Dues”

Meeting Room A, Bicentennial Pavilion

Friday- March 25, 2016 5:00 PM – 7:00 PM

Conference Vendors

Bicentennial Pavilion Rotunda

Thursday- March 24, 2016 8:00 AM – 5:00 PM

Friday- March 25, 2016 8:00 AM – 5:00 PM

Association of Oregon Archaeologists

Association for Washington Archaeology

Center for Digital Antiquity

Louis Collins Books

Direct AMS

FCRPS Cultural Resource Program

Journal of Northwest Anthropology (JONA)

Phoenix Obsidian Designs

Project archaeology/Fort Walla Walla Museum

Sam Wilson

Simon Fraser University/Archaeology Press

Simon Fraser University/Professional Heritage

University of Washington – Tacoma, Bookstore

Presented Papers

Timekeeping

The allotted presentation time for papers is **20 minutes** (including questions). Please be mindful of the schedule and present your material in a timely manner. A Volunteer has been assigned to each meeting room to assist with timekeeping; however, the session chair is responsible for managing time and keeping presentations on schedule. **If a cancelation occurs, DO NOT move or change the order of presentations.** Take a 20 minute break and resume with the next paper as scheduled.

Room Setup

Each meeting room has been setup in a theater-style configuration (chairs, no tables) and equipped with a laptop computer (Windows OS with Microsoft Office products), digital projector and podium. A microphone, projector remote with laser pointer, and reading lamp are provided at each podium.

Meeting rooms will be open at 8:00 AM Thursday, Friday and Saturday prior to the start of sessions and during scheduled breaks (10:00 AM- 10:20 AM, 12:00 PM- 1:20 PM, and 2:20 PM- 2:40 PM) to provide an opportunity for presenters to upload presentations. **Please upload presentations in advance of your session and take time to become familiar with the technology and room layout.**

Poster Sessions

Poster sessions (I and II) have been scheduled on Thursday, March 24, 2016 and Friday, March 25, 2016 from 9:00 AM- 2:20 PM in the Venice Ballroom (3 and 4). Note the letter in brackets following your abstract to identify your session. Please hang your poster on the stands marked with the corresponding letter and number.

Plan to arrive 30 minutes prior to your session for setup. Poster stands are double-sided and fabric-covered. All mounting hardware (Velcro and push-pins) will be provided. Be sure to retrieve your poster and other materials by the end of your session (2:20 PM), all remaining items will be recycled.

Thursday

	Room A	Room B	Room C	Room D	Room E	Room F	Venice Ballroom
8:40	Tribal Welcome			Session 7: Archaeology of the Burnett Site (35CL96)	Session 10: Yama: A late 19th and Early 20th Century Japanese Transnational Community	Session 13: ODOT- WSDOT Transportation Symposium	
9:00		Session 2: The CCT: a Multi-faceted Approach to Cultural Resources Mangement	Session 5: Archaeology of the Periphery				Poster Session I: Group A, B, C, and D
9:20	Session 1: Archaeology of the Mt Rainier Area:						
9:40							
Break 10:00-10:20							
10:20	Papers in Honor of Greg Burtchard						Meet the Authors- Group A and B
10:40							
11:00							
11:20					Session 11: Pacific Northwest Food Studies		
11:40							
Lunch 12:00-1:20							
1:20		Session 3: Consultation, Collaboration, and Risk Management	Session 6: Bastions of Identity: Frontier Forts and the Complexities of	Session 8: Crossing the Line: State and Tribal cooperation in the Investigation at		Session 14: Pre Contact Archaeology of the Interior	Meet the Authors- Group C and D
1:40							
2:00							
Break 2:20-2:40							
2:40			Colonialism in the PNW	the Indian Shaker Mother Church	Session 12: Digital Resources and Emerging Research Methods		
3:00		Session 4: Perpetuating Living Cultural Resources		Session 9: Facing the Reality of Misidentified Human Remains and Sacred Objects in Curated Archaeological Collections		Session 15: Archaeology of the NW Coast- Part I	
3:20							
3:40							
4:00							
4:20							

Friday

Time	Room A	Room B	Room C	Room D	Room E	Room F	Venice Ballroom
8:40	Session 16: Environmental Anthropology	Session 17: Society Outreach: Lessons in Engagement with Membership and the Public	Session 20: Lithic Analysis	Session 22: The Ancient One: The 20 Year Anniversary of the Discovery of Kennewick Man	Session 24: Historical Archaeology	Session 26: Looting- An Inside Perspective to the Legal Process, Damage Assessment, and Mitigation	Poster Session II: Group E, F, G, H and I
9:00							
9:20							
9:40							
Break 10:00-10:20							
10:20		Session 18: Research in a Nutshell- Powered by Pecha Kucha				Session 27: General Anthropology- Perspectives on Health, Nutrition, and Death	Meet the Authors: Group E and F
10:40							
11:00			Session 21: Archaeology of the NW Coast - Part II				
11:20							
11:40					Session 28: Gen. Anth. Part I Language.		
Lunch 12:00-1:20							
1:20		Session 19: Maritime and Underwater Archaeology				Session 29: Little gems: Papers on People, Artifacts, and Ideas Picked up Along the Way	Meet the Authors: Group G, H and I
1:40							
2:00							
Break 2:20-2:40							
2:40				Session 23: Topics in Physical Anthropology		Session 30: Can't See the Features for the FMR?	
3:00							
3:20							
3:40							
4:00							
4:20							

Saturday

	Room A	Room B	Room C	Room D	Room E	Room F
8:40		Session 31: General Anthropology- Language, Identities, and Social Norms, Part II	Session 32: Emerging Trends in Digital Archaeology, Data Management, and Museums			Session 34: Zooarchaeological Analysis
9:00						
9:20						
9:40						
Break 10:00-10:20						
10:20						
10:40						
11:00			Session 33: Archaeo- Astronomy			
11:20						
11:40						
12:00						

Thursday- March 24, 2016

Meeting Room A

8:00 AM **Tribal Welcome and Opening Ceremony**
Puyallup Tribe of Indians

Session 1: Archaeology of the Mount Rainier Area: Papers in Honor of Greg Burtchard (*Invited Symposium*)
Organizer and Chair: Bradford W. Andrews

9:20 AM Rice, David G.
The Beginnings of Archaeological Research in the Mountains of Washington at Mount Rainier National Park

9:40 AM Andrews, Bradford W., Kipp O. Godfrey, and Greg C. Burtchard
Lithic Tales: Specifying the Late Prehistoric Use and Utility of the Berkeley Rockshelter

10:00 AM **Break**

10:20 AM Holm, Emma
Inferences about Land Use using Lithic Tools and Debitage: A Comparison of Four Archaeological Sites in the Mount Rainier Area

10:40 AM Wonderly, Megan
Analysis and Implications of Obsidian Sources Represented in Mount Rainier Archaeological Sites

11:00 AM Gleason, Eric B. and Jacqueline Y. Cheung
Finding Buried Sites: Constant Volume Sampling at the Ohanapecosh Campground, Mt. Rainier National Park

11:20 AM Abrams, Georgia
Difficulties with Dating: the Use of Tephrochronology at Mount Rainier National Park

11:40 AM McClure, Rick and Cheryl Mack
Late pre-contact land use on the lower Ohanapecosh River: the archaeology of Awxanapak-ash (45LE220)

12:00 PM **Lunch**

1:20 PM Brown, James W., Caitlin P. Limberg, Anne B. Parfitt, Patrick C. Lewis, and Patrick T. McCutcheon
A Statistical Analysis of the Spatial and Temporal Components of the Sunrise Ridge Borrow Pit Site (45PI408), Mt. Rainier, Washington

1:40 PM Gahr, D. Ann, Patrick Rennaker, and Patrick T. McCutcheon
Methodological Issues in Paleoethnobotanical Analyses at MORA

2:00 PM Ferry, Joy D., Patrick T. McCutcheon, and Kevin Vaughn
Technological and Functional Variation in Four Lithic Assemblages on Mount Rainier, Washington

Thursday- March 24, 2016

2:20 PM	Break
2:40 PM	Davis, David R., Patrick C. Lewis, and Patrick T. McCutcheon <i>Significant Variation on the Organization of Technology Revealed Through Analysis of < 0.635 cm Mesh Size Lithics at the Sunrise Ridge Borrow Pit Site (45PI408), Mt. Rainier National Park, Washington</i>
3:00 PM	Diaz, Ben and Melody Chester <i>Mount Rainier Ice Patch Archaeology and Monitoring</i>
3:20 PM	Belding, Samantha Nemecek <i>New research indicates rise in importance of Mount Rainier as a repository of natural resources to historically associated Tribes.</i>
3:40 PM	Hooper, David <i>Traditional plant collection within Mount Rainier National Park and its Ecology</i>
4:00 PM	Pritchard, Emily, Jacqueline Y. Cheung, and Eric Gleason <i>Layered Landscapes: Historic Archaeology at Ohanapecosh Campground, Mount Rainier National Park</i>
4:20 PM	Burtchard, Greg C. <i>(Discussant)</i>

Meeting Room B

Session 2: The Confederated Tribes of the Colville Reservation Utilize a Multi-faceted Approach to Cultural Resource Management *(Invited Symposium)*
Organizer and Chair: Jon Meyer

9:00 AM	Coyote, Arrow <i>Combining Archaeology and Traditional Cultural Knowledge: Eagle Rock Case Study</i>
9:20 AM	Armstrong, Elizabeth and Eric Oosahwee-Voss <i>Confederated Tribes of the Colville Reservation Perspectives on the 2014 Wanapum Reservoir Emergency Drawdown</i>
9:40 AM	Orsen, Aren <i>Ball and Dodd Funeral Home Grand Coulee Dam Reservoir Burial Removals: An Analysis of Archival Maps</i>
10:00 AM	Break
10:20 AM	Meyer, Jon <i>The Aftermath of the 2015 Fire Season on the Colville Reservation</i>
10:40 AM	Robson, Kali <i>Monitoring Traditional Cultural Plants on the Colville Reservation</i>

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11:00 AM Adolph III, Lewis
Developing a Relational Database for the Colville Tribe's Traditional Cultural Plant Project

11:20 AM Campbell, Lola J.
Where Culture Meets Science: The Colville Tribal Herbarium

12:00 PM Lunch

Session 3: Consultation, Collaboration and Risk Management

Chair: Kelly Bush

1:20 PM Harrison III, James Burr
Consultation, Consent, or Circumvention: The Endangered Mount Spokane (čq'wulsum) TCP

1:40 PM Bush, Kelly
More Than Just "It's the Law"

2:00 PM Allen, Jennifer and Emily Pritchard
Protocol for Field going Archaeologists: How and When to Speak to the Public

2:20 PM Break

2:40 PM Bush, Kelly
Risk Management Tools

Session 4: Perpetuating Living Cultural Resources (Workshop)

Organizer and Chair: Maurice Major

3:00PM Workshop

Meeting Room C

Session 5: The Archaeology of the Periphery (Invited Symposium)

Organizer and Chair: Kevin Lyons

9:00 AM Lyons, Kevin
A Story about Much Loved and Often Poorly Understood Numbers: An Emerging Zeitgeist of Archaeology as Database

9:20 AM Johnson, Jeff
Projectile Point Variation in the Pend Oreille River Valley

9:40 AM Carney, Molly
To Throw into the Fire: Paleoethnobotanical and Geoarchaeological Analyses at the Flying Goose Site 45PO435

10:00 AM Break

10:20 AM Goodman Elgar, Melissa, Molly Carney, Elizabeth Truman, and Kevin Lyons
Up in Flames: Reconstructing Firing Conditions from a Burnt Prehistoric Depression a 45PO435, Pend Oreille Valley, WA

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- 10:40 AM Hoke, Amanda
The Story of Coyote, Salmon, Trout and the Pend Oreille
- 11:00 AM Maroney, Kendra
What lurks below... deep analysis of three GPR projects near the Pend Oreille River.
- 11:20 AM Hicks, Brent
(Discussant)
- 11:40 AM Tushingham, Shannon
(Discussant)

12:00 PM Lunch

Session 6: Bastions of Identity Frontier Forts and the Complexities of Colonialism in the Pacific Northwest *(Invited Symposium) Organizer and Chair: Doug Wilson*

- 1:20 PM Wilson, Doug
Exploring Frontier Forts and the Complexities of Colonialism in the Pacific Northwest
- 1:40 PM Taber, Emily, Doug Wilson, Robert Cromwell, Kate Wynia, and Alice Knowles
Gastroliths and Avifauna at Fort Vancouver's Village
- 2:00 PM Tveskov, Mark and Chelsea Rose
Disrupted Identities and Frontier Forts: Enlisted Men and Officers at Fort Lane, Oregon Territory, 1853-1856
- 2:20 PM Break**
- 2:40 PM Horton, Beth
Run It Up the Flagpole: Traditionally-Flaked Tools and Military Power Relationships at mid-19th century Vancouver Barracks, Washington
- 3:00 PM Griffin, Dennis
Archaeology of the Oregon National Guard: A Search for Archaeological Evidence of Early Military Encampments in Oregon

Meeting Room D

Session 7: Archaeology of the Burnett Site (35CL96) (Invited Symposium) *Organizer and Chair: Terry Ozbun*

- 8:40 AM Bajdek, Brennan
After the Floods: Oswego Lake during the Early Holocene
- 9:00 AM Cowan, Jason
Modeling obsidian effective hydration temperature in the Willamette Valley to date the Burnett Site (35CL96)

Thursday- March 24, 2016

- 9:20 AM Hulse, Eva
Chronology and Geoarchaeology of the Burnett Site (35CL96)
- 9:40 AM Ozbun, Terry
Cascade Lithic Reduction Technology at the Burnett Site (35CL96)
- 10:00 AM Break**
- 10:20 AM Walker, Cam
Would you like the Venison, the Duck, or the Lamb? Residue Analysis Results at the Burnett Site (35CL96)
- 10:40 AM Blaser, Andrea and Nicholas Smits
Iron and Old Town: Interpreting Lake Oswego's Industrial Past through Historical Research and Archaeological Evidence from the Burnett Site (35CL96)
- 11:00 AM Harrelson, David
Tribal Art as Outreach for Phase 3 Data Recovery within 35CL96
- 11:20 AM Buchholz, Terry
A Project Sponsor's Perspective – What are the Implications of Finding Significant Resources for My Project?
- 11:40 AM Ames, Kenneth M.
(Discussant)
- 12:00 PM Lunch**

Session 8: Crossing the Line: State and Tribal Cooperation in the Investigation of Probable Burials at the Indian Shaker Mother Church (Invited Symposium)

Organizers and Chairs: Guy L. Tasa, Ph.D. and Rhonda Foster

- 1:20 PM Foster, Rhonda and Guy L. Tasa
Project Overview
- 1:40 PM Henry, Margaret, Brandon Reynon, and Jackie Wall
Tribal Perspective: Indian Mother Shaker Church, Cushman, and Indian Burials.
- 2:00 PM Reynon, Brandon, Juliette Vogel, and Stephanie Neil
Feature and Artifacts
- 2:20 PM Break**
- 2:40 PM Panel Discussion: Guy L. Tasa, Margaret Henry, Brandon Reynon, Jackie Wall, Stephanie Neil, and Juliette Vogel

Session 9: Facing the Reality of Misidentified Human Remains and Sacred Objects in Curated Archaeological Collections: A Collaboration between the Lummi Nation and Western Washington University (Invited Symposium) Organizer and Moderator: Guy L. Tasa, Ph.D.

- 3:00 PM Panel Discussion: Sarah Campbell, Ryan Desrosiers, Alyson M. Rollins, Lena Tso, Ralph Tom, and Tamela S. Smart

Thursday- March 24, 2016

Meeting Room E

Session 10: Yama: A Late 19th and early 20th Century Japanese Transnational Community (Invited Symposium)
Organizer and Chair: Caroline Hartse, Organizer and Chair

- 8:40 AM Aranyosi, Floyd
Archaeology at Yama
- 9:00 AM Evans, Etsuko
A Closer Look at Religious Life within the Yama Community
- 9:20 AM Moran, Chelsea
Identifying and Comparing the Residential Areas of Yama and Nagaya
- 9:40 AM Fliger, Donna
Bottle Analysis at Yama
- 10:00 AM Break**
- 10:20 AM Christensen, Anne
Designs and Motifs
- 10:40 AM Allen, Zachary
Feature Analysis of Yama, an Early Japanese Immigrant Village in the Pacific Northwest
- 11:00 AM Hannah, Jean
Small Brick Structure Remains at Yama and Nagaya Port Blakely, Bainbridge Island, Washington

Session 11: Pacific Northwest Food Studies (Invited Symposium)
Organizer: Maureen Flanagan Battistella, Chair: Edwin Battistella

- 11:20 AM Johnson, Katie and Chelsea Rose
What's For Dinner? Interpreting the Faunal Assemblage from the Jacksonville Chinese Quarter
- 11:40 AM Edmunson-Morton, Tiah
Recreating a legacy lager: Connecting Past, Present, and Community Through Historic Beer
- 12:00 PM Lunch**
- 1:20 PM Arndt Anderson, Heather
Keep Everlastingly At It: The Culinary and Feminist Legacy of Lilian Tingle
- 1:40 PM Battistella, Maureen Flanagan
Mrs. Mark O. Hatfield: The Cookbooks of Antoinette Kuzmanich Hatfield and How They Reveal Her Public and Private Lives: A Cultural Study of Food and Politics
- 2:00 PM Lebo, Kate
All Tomorrow's Pie Ladies: Baking as Metaphor, Self Help, and Big Business in Modern Fiction and Memoir
- 2:20 PM Break**

Thursday- March 24, 2016

Session 12: Digital Resources and Emerging Research Methods

Chair: Sara E. Palmer

- 2:40 PM Starnes, Kandi Leigh
Excavating an Archive: Using Old Oral Histories to Explore the Pasts of Latah County, Idaho
- 3:00 PM Thornburg, Aaron
La Grande Life: Digital Autoethnography in Rural Oregon
- 3:20 PM Haller, Jonathan M. and Ashley M. Morton
Mapping the Memory of Walla Walla's Chinatown, Collaboration in Digital Public Archaeology
- 3:40 PM Senn, Amy
Enhance Your CRM Reports: Conduct Historical Research Online....For FREE!
- 4:00 PM Reid, Kenneth C., Kenneth P. Cannon, and Houston L. Martin
Sometimes the Map is the Territory: Using Historic Maps and Geomorphic Fieldwork to Understand 153 Years of Change at the Bear River Massacre National Historic Landmark in Southeastern Idaho

Meeting Room F

Session 13: From There to Here: ODOT-WSDOT Annual Transportation Symposium (Invited Symposium)

Organizers and Chairs: Carolyn Holthoff and Scott Williams

- 8:40 AM Williams, Scott and Carolyn Holthoff
Opening Remarks
- 9:00 AM O'Neill, Brian
Anticipating Historic Features on a Dynamic Urban Landscape
- 9:20 AM Pettit, Daniel
Opportunities for 3D Scanning and Historic Properties: A Demonstration Project of Two Bridges
- 9:40 AM Rudnicki, Larissa
Tree Trucks: The Story of Logging and Oregon's Highways
- 10:00 AM Break**
- 10:20 AM Graham, Tyler
Digitizing the Paper Trail: Replacing Paper Forms with Mobile GIS
- 10:40 AM Rose, Chelsea
Rising from the Ashes: A New Look into Jacksonville's 19th Century Chinese Quarter
- 11:00 AM Holter, Russell
Developmental Pressures on Linear Historic Resources (a case study on the Hawaiian Railway Society)

Thursday- March 24, 2016

11:20 AM Rinck, Brandy
SR 532 Davis Slough Bridge Replacement Project and Mitigation at Dugwalla Bay, Island and Snohomish Counties, Washington

11:40 AM Williams, Scott and Carolyn Holthoff
Closing Remarks

12:00 PM Lunch

Session 14: Pre Contact Archaeology of the Interior

Chair: Tom Connolly

1:20 PM Davis, Mary Anne
Meeting with an Old Friend: Dry Sailing to Rock Art Sites in Southern Idaho

1:40 PM Connolly, Tom, Nick Jew, Mark (Jack) Swisher, Bill Cannon, Michel Waller, and Kelsey Sullivan
Picking Up the Pieces: Analysis of a Looted Collection of Lithic and Perishable Artifacts from Rattlesnake Cave, South-Central Oregon

2:00 PM Hotze, Karla
Exploring Relationships Between Stacked Rock Features and Rock Art within the Traditional Territory of the Klamath Tribes

2:20 PM Break

2:40 PM Hackenberger, Steven D. and Sarah M. H. Steinkraus
Archaeological Context for Reservoir Archaeology in the Cascade Region of Washington State

Session 15: Pre Contact Archaeology of the Northwest Coast - Part I

Chair: Scott Williams

3:20 PM Carriere, Ed and Dale Croes
Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition: Master Salish Basketmaker and Wet Site Archaeologist Explore 100 Generations of Cultural Knowledge

3:40 PM Hawes, Kathleen
Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition: Cellular Analysis and Identification of the Biderbost Wet-Site Basketry Collection

4:00 PM Chatters, James C., David Sheldon, Bruce Gustafson, and Steven D. Hackenberger
The Bray Site: a Lacarno Beach- Aged Plant-Processing Field Camp in Southern Puget Sound

Thursday- March 24, 2016

Murano Hotel Ballroom

Poster Session I

9:00 AM – 2:20 PM

Meet the Authors

10:20 AM- 11:20 AM

Group A- *Exploring the History of Brewing Across the Pacific Northwest: Tacoma and the South Puget Sound*

Boswell, Sharon

Not Just the Beer: Breweries, Saloons and Community Development

Bowden, Bradley and Jennifer Olander

The (Briefly) Lucrative World of Hop Farming in the Southern Puget Sound, 1880-1920

Cooper, Jason B., Tyler McWilliams, and Tim Gerrish

Hop to It: Growing Hops in the White River Valley During the 19th Century in South King County, Washington

Shong, Mike

Native American Contribution to the Early Hops Industry in the Southern Puget Sound

Stevenson, Alexander and Steve Navarro

Pacific Brewing and Malting: Rise, Fall, and Rebirth of a Tacoma Brewery

Meet the Authors

10:20 AM- 11:20 AM

Group B- *Historical Archaeology*

Butler, Alexander

Bringing Archaeology into the Community: School Outreach

Coffin, Mikelynn

Astor Fort Okanogan Collections Research

Falzon, Rachel

The Archaeology of Historic Pen d' Oreille City (1860-1880)

Fashing, Allison, Emma Scott, and Darcy Wayman

The Pursuit for Happiness in Times of Darkness: An Exploration into Recreational Activities at the Kooskia Internment Camp (1943-1945)

Gamble, Erin

Bush Homestead Archaeology Project: Results from First Field Season

Hibdon, Sarah R. and Stephanie A. E. Jolivet

Clothing Fasteners from the Historic Morgue at the Washington State Insane Asylum

Jolivet, Stephanie A. E. and Sarah J. Van Galder

Late 19th Century Daily Lives of Patients at Western State Hospital

Kiers, Roger

A Tale of Two Privies: Residents of Early Tacoma's Lower Pacific Neighborhood

Litzkow, Jamie M.

The Development of an Historic Mining Context for Northeastern Washington State

Thursday- March 24, 2016

McConnell, Kelson

Maker's Marks on Ceramic Artifacts from the 2015 Bush Homestead Excavation

Montine, John and Emily Chesterfield

Into the Woods: Early 20th Century Logging in Skagit County

Sappington, Ericha E.

Surviving the Florida Frontier: An Examination of Spanish and Native American Agency and Trade at Fort San Marcos de Apalache, 1639-1821

Skinner, Trent, Robert Dickenson, Katee Withee, and Kay Shelnutt

Chinese Miners at the Happy Camp Mining Complex

Taylor, Amanda, Mark Adler, Alejandra Barrera-Pallares, Amber Brown, Shaleigh Diaz-Ryder, Marcy Galloway, Emma Holm, Jack Johnson, Mara Page, Nicole Plastino, and Jordan Thompson

The Roche Harbor Homestead Project

Meet the Authors

1:20 PM- 2:20 PM

Group C- *Archaeology of the Northwest Interior: Methods and Results*

Armstrong, Elizabeth and Eric Oosahwee-Voss

Erosive Effects of the 2014 Wanapum Reservoir Emergency Drawdown on Archaeological Sites as Observed by the Confederated Tribes of the Colville Reservation

Bobolinski, Kathryn

A Spatial Analysis of Artifacts from the Housepit 54 Ilc Floor at the Bridge River Site (EeR11), Middle Fraser B.C.

Dampf, Steven, James Harrison, and Kendra Maroney

Geophysical Survey at the Sandy Heron Site (45SP485), Spokane County, Washington

Danner, Bryce

The Lochsa River: A Precontact Overview

Davis, David R., Jenn Calabro-Pecora, Max Morton, Patrick McCutcheon, and Patrick M. Lubinski

Central Washington University 2015 Cultural Resource Management Archaeological Field School on Washington Department of Fish and Wildlife Lands

Davis, John M.

A Statistical and Managerial Analysis of Testing Projects on the US Army Yakima Training Center, WA

Frierson, Andrew and David Rice

Revisiting Rock Creek Shelter: Results from the 2015 Summer Fieldwork

Gilmour, Daniel M., Thomas J. Brown, Paul S. Solimano, and Kenneth M. Ames

Site Types and Assemblage Structure within Radiocarbon Dated Windust Assemblages

Goodwin, Matthew, Breanne Taylor, and Paul Solimano

Interpreting Site Data at the Bruce's Eddy Site (10CW1)

Harris, Megan and Mike Rousseau

Mega Cache Pits of EfQw-26

Thursday- March 24, 2016

Meet the Authors
1:20 PM- 2:20 PM

Maroney, Kendra L. and Sharon Boswell

The Kalispel Tribe and SWCA Dive into the History at Beaver Lake and Gamlin Lake

Group D- *Archaeology of the Coastal Northwest: Methods and Results*

Cascella, Melissa, Shane M. Sparks, and Tait J. Elder

Testing the Reliability and Precision of Two Archaeological Site Sensitivity Models on the Puget Sound Coast

Clark, Jorie

Sea Level Rise Past, Present, and Future: Implications for Cultural Resources in the Pacific Northwest

Daily, Phillip

Conditioning and Predicting Technological Variability in Coastal Oregon: Utilizing Dr. Lewis Binford's Hunter Gatherer Database

Kirkpatrick, Molly

Probing into the Past: Revisiting the Tahkenitch Landing Site (35DO130) and Surrounding Area

Lewis, Ian

Mermaid Tears and Midden: A Possible Protohistoric Artifact from 45SJ50

Rinck, Brandy, Josh Wisniewski, and Robert Kopperl

Archaeological Investigations at the Point Julia Shell Midden (45KP21), Port Gamble Bay, Washington

Meeting Room A

Session 16: Environmental Anthropology (Invited Symposium)

Organizer and Chair: Thomas W. Murphy

- 8:40 AM **dídahalqíd** (Michael Evans), Sam Barr, and Adam Lorio
Welcome from Tribal Canoe Families
Blue Heron, Samish, and Stillaguamish Canoe Families
- 9:00 AM Barr, Sam and Adam Lorio
Cross-Cultural Understanding on Tribal Canoe Journeys with the LEAF School
- 9:20 AM Hundley, James
The Role of the Border in Tribal Journeys: Lessons for Environmental Anthropology
- 9:40 AM Van, Kalliane, Chris Walker, Melissa Buckley, Megan McDermott, Skyler Elmstrom, and Taymor Abou-Zaki
Tribal Youth Pull to Muckleshoot: Student Perspectives
- 10:00 AM Break**
- 10:20 AM **lákʷəlás** (Tom Speer)
The Spirituality of Flowing Waters
- 10:40 AM **cəlálakəm** (Pamela Bond)
stəlǰxʷáli (Place-of-Medicine) Ethnobotanical Garden
- 11:00 AM Olson, Dee and Tom Ficca
qʷəldʹali (Place-of-the-Cooking-Fire) Cultural Kitchen
- 11:20 AM McDermott, Megan
Powwow: A Cultural Celebration and a Gathering Full of Life
- 11:40 AM Ward, David
The Role of Anthropology in Conservation: A Perspective from a State Agency
- 12:00 PM Lunch**
- 1:20 PM Murphy, Thomas W.
Green Infrastructure in Puget Sound Municipalities: An Ethnographic Inquiry
- 1:40 PM Ryan-Peñuela, Erin
Climate Change Adaptation and Resilience in our Built Environment
- 2:00 PM Pickard, Ashley
From Goldilocks to Google: Mapping Human Perception of Bear's Space
- 2:20 PM Break**
- 2:40 PM Elmstrom, Skyler
A Spatial Perspective of the Fish and Wildlife of Mukilteo Gulch
- 3:00 PM Murphy, Thomas W.
All the Wrong Plants and Animals: Grave-robbery and the Book of Mormon

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- 3:20 PM Murphy, Kerrie S.
The Making of a Mormon Sacagawea: Decolonizing Representation and Identity
- 3:40 PM Baca, Angelo
Rejecting Racism in All its Forms: Religion, Rhetoric, and Repatriation

Meeting Room B

Session 17: Society Outreach: Lessons in Engagement with Membership and the Public *(Invited Symposium)*
Organizer: Christopher Noll, *Moderator:* Tabitha Burgess

- 8:40 AM Panel Discussion: Idaho Archaeological Society, Association for Washington Archaeology (AWA), Maritime Archaeological Society (MAS), Northwest Anthropological Association (NWAA), Association of Oregon Archaeologists (AOA), and Oregon Archaeological Society (OAS)

10:00 AM Break

Session 18: Research in a Nutshell- Powered by Pecha Kucha *(Invited Symposium)*
Organizers and Chairs: Mary Pietrich-Guy and Molly Swords

- 10:20 AM Forum

12:00 PM Lunch

Session 19: Maritime and Underwater Archaeology *(Invited Symposium)*
Organizer and Chair: Christopher Dewey

- 1:20 PM Davis, Loren
Searching for Submerged Precontact Archaeological Sites on Oregon's Continental Shelf: A Preview of Upcoming Research
- 1:40 PM Beasley, Tom
The Underwater Archaeological Society of British Columbia: Forty Years of exploring and protecting underwater heritage
- 2:00 PM Hunt, Peter and Dan Warter
The Lost Intruder
- 2:20 PM Break**
- 2:40 PM Rogers, Richard
European Contacts in "Pre-Contact" Hawaii
- 3:00 PM Stokeld, Rachel
The Boards Aren't Boring: The Hidden History of a Columbia River Gillnet Boat
- 3:20 PM Dewey, Christopher
The Maritime Archaeological Society: Our First Year
- 3:40 PM Panel Discussion

Meeting Room C

Session 20: Lithic Analysis

Chair: Roger Kiers

- 8:40 AM Rorabaugh, Adam
Style, Function, and Skill: Some Thoughts on a Fundamental Continuum
- 9:00 AM Brown, James W. and James C. Chatters
A Lithic Analysis of the Marymoor Site (45KI9): Development of a Seriation Using a Limited Stratified Sample
- 9:20 AM Chatters, James C. and James W. Brown
The Age of Marymoor and its Place in the Cultural Chronology of Puget Sound
- 9:40 AM Gouette, Nicholas
Sandstone Saws of Site 45WH05: Implications for Nephrite Tool Production
- 10:00 AM Break**
- 10:20 AM Harris, Megan
Spatial and Temporal Distributions of Ground Stone Disk Beads in the Salish Sea
- 10:40 AM Hamilton, Stephen C. and Bradley Bowden
35DS412: A Pre-Mazama Lithic Manufacturing Station on the Southwestern Flank of Newberry Caldera
- 11:00 AM Lancaster, JD L. and Loren G. Davis
Initial Results of Test Excavation at Silvies Cave, Grant County, Oregon

Session 21: Pre Contact Archaeology of the Northwest Coast - Part II

Chair: Shari Silverman

- 11:20 AM Brown, Thomas J.
Demographic Fluctuations on the Northern Northwest Coast Between 11,000 and 5,000 cal BP and Their Relationship to Environmental and Mobility Pattern Change
- 11:40 AM Wessen, Gary
Western Washington Shell Midden Chronology: An Introduction and Overview
- 12:00 PM Lunch**
- 1:20 PM Curteman, Jessica A.
Geoarchaeological Investigations at the Devils Kitchen Site (35CS9) Southern Oregon Coast
- 1:40 PM Silverman, Shari Maria
Co-Seismic Activity and Archaeology in Southern Birch Bay, Washington
- 2:00 PM Safi, Kristin, Patrick Dolan, and Devin A. White
A Marine –centric, Geospatial Approach to Understanding Travel Networks across the Salish Sea
- 2:20 PM Break**

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- 2:40 PM Smith, Erin M. and Mikael Fauvelle
The Pacific Rim of the North American Oikoumene: Interactions between California, the Southwest, and the Pacific Northwest
- 3:00 PM Nakonechny, Lyle
Prehistoric Occupation at the Forks Creek Site, Willapa River Valley, Southwest Washington
- 3:20 PM Dolan, Patrick
Economics and Integration in a Marpole Period Plankhouse Community: Evidence From the Dionisio Point (DgRv-003) Site

Meeting Room D

Session 22: The Ancient One: The 20 Year Anniversary of the Discovery of Kennewick Man (Invited Symposium)
Organizer and Chair: Allyson Brooks, Ph.D.

- 8:40 AM Brooks, Allyson, Ph.D.
Introduction
- 9:00 AM Whitlam, Rob, Ph.D.
Retro-Reflective Review of the Ancient One Case
- 9:20 AM Ames, Kenneth M.
Reflections on Cultural Continuity (and Discontinuity)
- 9:40 AM Lape, Peter and Laura Phillips
Reflections on the Burke Museum's Role in the Ancient One Case
- 10:00 AM Break**
- 10:20 AM Tasa, Guy L., Ph.D. and Juliette Vogel
The Use of the Howells' Dataset in Determining Ethnicity in Pacific Northwest Crania: Implications for Kennewick Man
- 10:40 AM Tasa, Guy L., Ph.D. and Juliette Vogel
A Comparison of Kennewick Man Cranial Morphometrics with Pacific Northwest Native Crania
- 11:00 AM Neller, Angela, Kate Valdez, and Jacqueline Cook
Repatriation of the Ancient One – A Tribal View: Then, Now, and In-Between
- 11:20 AM Buck, Rex
A Tribal Perspective on the Ancient One
- 11:40 AM Brooks, Allyson, Ph.D. and Kate Valdez
Where Do We Go from Here? Solutions and Parallel Paths Forward
- 12:00 PM Lunch**
- 1:20 PM Panel Discussion
- 2:20 PM Break**

Friday- March 25, 2016

Session 23: Topics in Physical Anthropology *(Invited Symposium)*

Organizer: Guy L. Tasa Ph.D. *Chair:* Juliette Vogel

- 2:40 PM Henebry-DeLeon, Lourdes
Do Old Measurements Measure Up? Southern Columbia Plateau Osteometrics
- 3:00 PM Hill, Alexander, Drew Bailey, Robert Walker, and David Puts
Sexual Selection on Primate Vocalizations: The Evolution of Sex Differences in Pitch
- 3:20 PM Ostrander, Thomas, Charlotte Roberts, Janet Montgomery, and Chris Otley
Irresistible Corruption: Osteological Evidence of Endemic Lead Poisoning in an Industrial Period Population
- 3:40 PM Sheeran, Lori K., R. Steven Wagner, Lixing Sun, Jinhua Li, and Dongpo Xia
Human-Monkey Interactions: 12 Years of Fieldwork on Tibetan Macaques at The Valley of the Wild Monkeys, Mt. Huangshan, China
- 4:00 PM Voight, Brianna, Lori K. Sheeran, Xi Wang, R. Steven Wagner, Jinhua Li, and Lixing Sun
A comparison of proximity of Tibetan macaques (Macaca thibetana) near provisioned food sources and natural food sources at Mt. Huangshan, China

Meeting Room E

Session 24: Historical Archaeology

Chairs: Jenny Dellert and Sara E. Palmer

- 8:40 AM Gossen, Candace
Sasquatch, Pirates and the Blue Pearl: Garbage Archaeology at Deadman's Bay, San Juan Island
- 9:00 AM Kleer-Larson, Corey
Our Lady of the Woodland: The Faith and Devotion of Pierce, Idaho
- 9:20 AM Anderson, Rachel, Danielle Saurette, and Ray von Wandruszka
Chemical Sleuthing Among Artifacts Recovered From a Chinese Quarter
- 9:40 AM Campbell, Renae J.
Connections and Distinctions: A comparative analysis of Japanese Ceramics Recovered from Three Issei Communities in the American West, 1880-1940
- 10:00 AM Break**
- 10:20 AM Dellert, Jenny
Celluloid, Bakelite, Catalin, and Lucite: Plastics in Early 20th Century Jewelry
- 10:40 AM Evenson, Lindsey
Pre-1900's Chinese Placer Mining in Northeastern Washington State
- 11:00 AM Gray-Jeffries, Cassie, Cody W. Schwendiman, and Stephanie Gunkle
A Historical Archaeology of the Mount Emily Lumber Company "Jap Camp" during the Internment Period

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- 11:20 AM Simmons, Stephanie C.
Investigation of the 1930s Cle Elum Dam Construction Camp
- 11:40 AM Valentino, Alicia, Katie Wilson, and Thomas Ostrander
The Archaeology of a Seattle City Block from 1880s Squatters, Great Northern Railroad Workers and the Establishment of Pike Place Market
- 12:00 PM Lunch**
- 1:20 PM Grier, Colin and Chris Arnett
Archaeology, History and Colonial-Indigenous Conflict at Lamalchi Bay, British Columbia
- 1:40 PM Zentgraf, Diane
Clay Tobacco Pipes of Fort Hoskins and Fort Yamhill, Oregon
- 2:00 PM Wessler, Kim
A Preliminary Analysis and Examination of the Hospital at Fort Yamhill, Oregon
- 2:20 PM Break**
- 2:40 PM Smits, Nicholas
Fighting over Tlithlow Station: The Puget's Sound Agricultural Company and the Aftermath of the Oregon Boundary Dispute
- 3:00 PM Ames, Kenneth M. and Thomas J. Brown.
Radiocarbon Dating the Fur Trade II: A Bayesian Analysis of Radiocarbon Dates from the Cathlapotle Site, Lower Columbia River

Session 25: Ethnographic Research with Northwest Tribes (Invited Symposium)

Organizer and Moderator: Donald Shannon

- 3:20 PM Panel Discussion

Meeting Room F

Session 26: Looting- An Inside Perspective to the Legal Process, Damage Assessment, and Mitigation (Invited Symposium) *Organizer and Moderator:* Katherine Kelly

- 8:40 AM Panel Discussion: Katherine Kelly, Lance Wollwage, Aaron Naumann, Randy Lewis, and Stephenie Kramer

10:00 AM Break

Session 27: General Anthropology- Perspectives on Health, Nutrition and Death

Chair: Heather Youckton

- 10:20 AM Ochoa, Jessica R.
"¡Según el doctor!..": Mexican and Mexican-American mothers' perceptions and attitudes towards dominant views of food, health, and childhood "obesity" in Yakima, Washington

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- 10:40 AM Keller, Sarah
Food aversion: From Revulsion Response to Childhood Ickyness
- 11:00 AM Packwood, Kirk
Speaking the Words That Need to be Said: Quartz Crystal Channeling and Societal Healing in an Extraterrestrial-focused Spiritual Group
- 11:20 AM Ziegler, Amber
Science, Culture, and Corpses: How does Science Influence American Cultural Norms surrounding the dead and dying?

Session 28: General Anthropology- Language, Identities and Social Norms

Chair: Edwin Battistella

- 11:40 AM Battistella, Edwin
From Here to There: Preliminary Results of the I-5 Speech Survey from Southern Oregon to Northwest Washington

12:00 PM Lunch

Session 29: Little Gems: Three-Minute Papers on People, Artifacts, and Ideas Picked Up Along the Way (Invited Symposium) Organizer and Moderator: Paula Johnson

- 1:20 PM Panel Discussion: Paula Johnson, Brandy Rinck, Jason Cooper, Robert Kopperl, Jenny Dellert, Garth Baldwin, Genavie Thomas, and Lorelea Hudson

2:20 PM Break

Session 30: Can't See the Features for the FMR? (Invited Symposium)

Organizer and Chair: Kate Shantry

- 2:40 PM Shantry, Kate
FMR field recording and analysis at 45KI1176, an upland logistical camp on the Issaquah- Fall City Trail, King County, Washington
- 3:00 PM Schalk, Randall
Experimental Approaches To Understanding Variability In Cooking Stone
- 3:20 PM Iversen, Dave
Fire Modified Rock Analysis from a Damage Assessment of 45WH525
- 3:40 PM Punke, Michele
Fire-Modified Rock (FMR) Feature Analysis Using Multiple Lines of Inquiry from Archaeological Site 45LE611 in Western Washington
- 4:00 PM Solimano, Paul
Examining Land-use Intensification in the Portland Basin through Cooking and Processing Features

Friday- March 25, 2016

Murano Hotel Ballroom

Poster Session II
9:00 AM- 2:20 PM

Meet the Authors Group E- *Archaeological Methods*

10:20 AM- 11:20 AM

Desrosiers, Ryan and Josh Heflin

Using Crystallographic Texture of Bivalve Shells to Confirm Taxon: A Case Study from the Tse-whit-zen Village Site (45-CA-523)

Ellison, Leigh Anne, Adam Brin, and Jodi Reeves-Flores

Curating and Preserving Digital Archaeological Data: A Guide to Good Practice

Gonzalez, Sarah and Ian Kretzler

Field Methods in Indigenous Archaeology: Community-Based Research on the Grand Ronde Reservation

Gonzalez, Sarah, Ian Kretzler, Scott Adams, Karl Bloomberg, Daisy Jaime, Kandice Joyner, and Allie Terjeson

Field Methods in Indigenous Archaeology: A Low-Impact Approach to the Study of Grand Ronde History

Johnson Humphries, Sarah and Michelle N. North

Landscape Modification and the Importance of Historic Research in CRM.

Moret-Ferguson, Celia

Artifact Illustration: Bringing the Past to Life

Palmer, Sara E.

LiDAR Applications in Cultural Resource Assessment

Robison-Mathes, Anna

Data Collection and ArcGIS Collector

Saunders, Anthony and Steven Hackenberger

Modeling Prehistoric Land Use on the Frank Church River of No Return Wilderness

Thompson, Jordan

Portable X-Ray Florescence: From the Laboratory to the Field

Meet the Authors Group F- *Lithic Technology*

10:20 AM- 11:20 AM

Hanson, Marsha R.

Investigating the Middle Paleoindian Lithic Industry: The Woodhaven Phase

Johnson, Meghan, Marci Monaco, and Kelley Prince Martinez

Portland Basin Projectile Point Technology

Martinez, Kelley Prince

Laying the Groundwork: A Preliminary Examination of Ground Stone Distribution and Analysis in the Lower Columbia River Valley

Mastrangelo, Elizabeth and Alexander Gall

Recording Hobbyist Knapping Sites in Washington State

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Sparaga, Joseph

Choice and Design: An Analysis of Lithics from Block A4 from the Tse-Whit-Zen Village site

Williams-Larson, Alexandra

Up, Up, and Away: Examining Site 35WN93's Role in the Northward Trade of Obsidian Cliffs Obsidian

Yamasaki, Yuumi

The Contributions and influences of Don E. Crabtree to Lithic Technology

Meet the Authors Group G- Geoarchaeology

1:20 PM- 2:20 PM

Damitio, William, Emily Whistler, Kevin Lyons, and Melissa Goodman Elgar

Small scale sediment sampling as a method for identifying anthropogenic features: A case study from Pend Oreille County, Washington

Diaz, Nickolas

Itrax based chemostratigraphic analysis at Woodburn High School in Woodburn, Oregon.

Kearns, Michelle and Patrick Pringle

Do oral histories of Puget Lowland tribes preserve a cultural memory of catastrophic volcanic floods from Mount Rainier in the Puyallup and White Rivers from more than 1100 years ago?

Lockwood, Chris and Thomas Ostrander

A Lahar Runs Through It: Archaeological Implications of Post-Glacial Geomorphology of the Duwamish River Valley

Meet the Authors Group H- Zooarchaeology

1:20 PM- 2:20 PM

Johnson, Matthew

A Proposed Faunal Analysis of Two Columbia River House Feature Sites: Hole-in-the-Wall-Canyon (45KT12) and French Rapids (45KT13)

Palmer, Erica, Shannon Tushingham, and Brian M. Kemp

Ancient Smelt Fish DNA Species Identification from Northern California Region Archaeological Projects

Paton, Courtney J.

Investigating the Hunting Dog of the Coast Salish

Williams, Laura A.

An Examination of Avifaunal Remains Recovered from Birch Bay Archeological Site

Meet the Authors Group I- General Anthropology

1:20 PM- 2:20 PM

Fulkerson, Tiffany J.

Gender, Task Differentiation, and Power in Prehistory: Engendering the Archaeological Record of the Southern Plateau, Northwestern North America

Gamet, Nambi, Christopher Barrett, and Heather Boswell

Osteological Complexity: Testing Allometric Hypotheses on Pterion - Preliminary Study

Herritt, Caroline, Daniel J. Polito, and Renae J. Campbell

Bar Hopping as Praxis: The Bovill Run as Orality and Folklore

Friday- March 25, 2016

Karson Engum, Jennifer

Places Are Alive as Long as We Remember

Wang, Penglin

Semantic Notes on the Ethnonyms Xiongnu, Loufan, and Tabyač

Wright, Kaitlin, L.K. Sheeran, J.A. Mayhew, R.S. Wagner, L. Sun, and L. Jin-Hua

Play in Immature Tibetan Macaques: Location Preference and Causes of Bout Termination at Mt. Huangshan, China

Saturday- March 26, 2016

Meeting Room B

Session 31: General Anthropology- Language, Identities and Social Norms

Chair: Heather Youckton

- 9:00 AM Krogstad, Tiffany J. and Julia Smith
Language, Ideologies, and Class Among African Americans in Cheney, Washington
- 9:20 AM Bocook, Aaron
Smartphones and Poverty in the United States
- 9:40 AM Lichtenberg, Nicole
No One Has the Emic Perspective (Yet): The Anthropology of New Student Orientation
- 10:00 AM Break**
- 10:20 AM Peck, Alexandra
Ecstatic Order: The Kwakwaka'wakw Hamat'sa as Shaman and Enforcer of Social Norms
- 10:40 AM Seelye, Elizabeth
Working Class Heroes: Punk Subversion and Working Class Solidarity
- 11:00 AM Shannon, Donald
Incorporating traditional place studies and recognizing cultural continuity in "Routine" Cultural Resources Compliance assessments: A case study from Point Defiance.
- 11:20 AM Wegner, Wendy
Conducting Research in the Framework of Indigenous Methodologies

Meeting Room C

Session 32: Emerging Trends in Digital Archaeology, Data Management, and Museums

Chair: Katherine Kelly

- 9:00 AM Calkins, Adam
Creating a Methodology of Unmanned Aerial Vehicle (UAVs) in Historic Archaeology: Case Studies from Virginia City and Aurora, Nevada
- 9:20 AM Henderson, Joshua
Digital Technology and a New Era for Archaeology: Cooper's Ferry, Idaho
- 9:40 AM Wellington, Victoria
Data Preservation in American Archaeology
- 10:00 AM Break**
- 10:20 AM Stein, Julie
Washington's Oldest Museum is Becoming Washington's Newest Museum
- 10:40 PM McLemore, Morgan
An Introduction to Cloud-Based Archaeology Inventory Work Through WISAARD

Saturday- March 26, 2016

Session 33: Archaeo-astronomy

Chair: Candace Gossen

- 11:00 AM Gossen, Candace
Aliens, Akus and Giants: Paleoecological Findings and Cosmic Events in the Muck on Rapa Nui
- 11:20 AM Gossen, Candace
Aliens, Akus and Giants Part Two: Archaeo-astronomy and Timekeepers

Meeting Room F

Session 34: Zooarchaeological Analysis

Chair: Scott Williams

- 9:00 AM Hawthorne, Paige and Colin Grier
Put a bird on it! A Multi-Analytical Approach to Avian Analysis in Southwestern British Columbia
- 9:20 AM Nims, Reno and Virginia L. Butler
*Late Holocene Biogeography of Sablefish (*Anoplopoma fimbria*) in the Salish Sea*
- 9:40 AM Syvertson, Laura and Virginia L. Butler
Sampling a Village: Using Sampling to Redundancy (STR) to Characterize Fish Representation at the Tse-Whit-zen Site, Port Angeles, Washington
- 10:00 AM Williams, Mark
Middle Holocene Shellfish- Harvesting Practices: Evidence from the Labouchere Bay Sites, SE Alaska
- 10:20 AM Break**
- 10:40 AM Hopt, Justin and Colin Grier
Correspondence Analysis and Shell Middens: Exploring Patterns in Faunal Data to Decipher Complex Depositional Environments
- 11:00 AM Kiel, Lindsay
Food and Identity: The Archaeology of Neophyte Diet at Mission Santa Clara de Asis
- 11:20 AM Townsend, Mitchel and G. Mills
Using Forensic Biotic Taphonomy Dentition Signature Analysis to Identify Hominin Mastication Evidence: A Field Application Case Study
- 11:40 AM Fitzpatrick, Justin
A Zooarchaeological Analysis of the Mesa 12 Site: Preliminary Results

Invited Symposia, Panels and Workshops

Archaeology of the Mount Rainier Area: Papers in Honor of Greg Burtchard

Organizer: Bradford W. Andrews (Pacific Lutheran University)

Session 1, Thursday 9:20 AM, Meeting Room A

Greg Burtchard's long career in archaeology began with graduate school at the University of New Mexico in 1968. Since then, he has worked in the Southwest, Hawai'i, and the Pacific Northwest. Doing both research and resource management, Greg has maintained an interest in an ecological/evolutionary approach to archaeology, emphasizing a materialist-processualist perspective. In March of 2000, he became the chief archaeologist and tribal liaison for Mount Rainier National Park. Since then, he has refined an ecologically-based model for explaining changes in Holocene subsistence and settlement in the Pacific Northwest. Moreover, he has supported and facilitated paleo-environmental research, archaeological field schools, internships, and ethno-botanical projects. He has also striven to improve the relationship between the Park and local tribes, realizing that collaborative work by all is essential for learning about the past. This symposium celebrates Greg's legacy with papers by both students and professionals that reflect the results of his efforts and influence.

The Confederated Tribes of the Colville Reservation Utilize a Multi-faceted Approach to Cultural Resource Management

Organizer: Jon Meyer (Confederated Tribes of the Colville Reservation)

Session 2, Thursday 9:00 AM, Meeting Room B

For members of the Confederated Tribes of the Colville Reservation, there is no discontinuity between past traditions and those currently observed. In this symposium, we present evidence of traditional practices still in use as documented by the Colville Tribes' History/Archaeology Program. Additionally, we look at methods employed by the History/Archaeology Program to protect and preserve cultural and natural resources that are important to the Colville Tribes.

Perpetuating Living Cultural Resources

Organizer: Maurice Major (WA State Dept. of Natural Resources)

Session 4, Thursday 3:00 PM, Meeting Room B

Cultural resource management typically focuses on archaeological sites and historic structures, but cultural resources are defined much more broadly by

most tribes. Likewise, most cultural resource protection involves keeping people away or minimizing their impacts on an area, whereas culturally important plants may require "disturbance" to be managed and harvested. This workshop encourages participants to explore issues and solutions related to the ongoing use of cultural resources like camas and cedar, bitterroot and serviceberry, or kelp and clams, resources important to the perpetuation of Northwest tribal cultures, resources which need care beyond static protection. Topics of discussion may include re-introduction of fire as a management tool, the upside of "disturbance," pressures on sustainable gathering, culturally-oriented restoration, and ancient or innovative techniques of sustaining First Foods. Tribal members and staff, agency resource managers, and anyone interested in the perpetuation of living cultural resources are encouraged to participate in this open discussion.

The Archaeology of the Periphery

Organizer: Kevin Lyons (Kalispell Tribe)

Session 5, Thursday 9:00 AM, Meeting Room C

Collected in this symposium is a summary of current research in one of the many peripheral watersheds of the Columbia Plateau. The Pend Oreille Valley, like its many peers, replicates and deviates from the normative expectations derived from the mainstem of the Columbia/Fraiser Basins' archaeological record. In as much as recognizing what is "normal" is important in the scientific definition of the past, so too is the development of knowledge of variation. Center place in this symposium is an exposition of the efforts and the development of young and emergent scholars, the underlying and original purpose of the NWAC. Closing the session shall be an overview discussions from both academic and commercial practitioners on why the periphery as important to our understand of the past as the center is to our collective attention.

Bastions of Identity, Frontier Forts and the Complexities of Colonialism in the Pacific Northwest

Organizer: Doug Wilson (Portland State University and National Park Service)

Session 6, Thursday 1:20 PM, Meeting Room C

The fur trade and American immigrant periods of the 19th century Pacific Northwest was coincident with significant changes in social relations, material culture, and identity formation. Frontier forts and their communities were symbols of the changing

Invited Symposia, Panels and Workshops

socioeconomic, demographic, and cultural change while serving as arenas for the negotiation of identities and power. The papers in this symposium explore how the material culture of northwest forts reveals the lived experiences of the diverse peoples who occupied them and reflect the momentous shifts attending colonialism in the Pacific Northwest.

Archaeology of the Burnett Site (35CL96)

Organizer: Terry Ozbun (AINW)

Session 7, Thursday 8:40 AM, Meeting Room D

For three decades, the Burnett Site (35CL96) in Lake Oswego, Oregon, has been known as one of the oldest archaeological sites in the Portland Basin. The archaeological site was recorded and scientifically excavated in the 1980s by then-resident Robert Burnett. Burnett documented stemmed and lanceolate projectile points in stratified deposits that suggested affinities to the most ancient archaeological complexes in the Pacific Northwest. However, dating of the 35CL96 deposits proved difficult. Recent planning for construction of the Lake Oswego-Tigard Water Partnership project included collection of new archaeological data showing the site was used over much of the Holocene beginning about 11,500 years ago. This symposium presents detailed archaeological information along with Tribal views and a project proponent perspective. Collaboration between project stakeholders was important to balancing infrastructure and community needs with respectful treatment of this significant multicomponent site.

Crossing the Line: State and Tribal Cooperation in the Investigation of Probable Burials at the Indian Shaker Mother Church

Organizers: Guy L. Tasa, Ph.D. (DAHP) and Rhonda Foster (Squaxin Island Tribe)

Session 8, Thursday 1:20 PM, Meeting Room D

In March of 2015, construction workers excavating the foundation of a new home site on property adjacent to the Indian Shaker Mother Church near Mud Bay in Thurston County, Washington unearthed artifacts suggestive of a burial. Subsequent investigation of the site by the Department of Archaeology and Historic Preservation and Interested Affected Tribes with support by representatives of the Indian Shaker Church resulted in the recovery of additional artifacts and the delineation of a feature suggestive of a historic Native burial. Another possible burial was also identified. This symposium gathers tribal and non-

tribal cultural resource managers involved in the project in a presentation/panel format to discuss the project, the adversities and bureaucracies encountered teamwork, and outcome of the project.

Facing the Reality of Misidentified Human Remains and the Sacred Objects in Curated Archaeological Collections: A Collaboration between the Lummi Nation and Western Washington University

Organizer: Guy L. Tasa, Ph.D. (DAHP)

Session 9, Thursday 3:00 PM, Meeting Room D

The Native American Graves Protection and Repatriation Act outlines a process for museums and federal agencies to repatriate human remains, funerary objects, sacred objects and items of cultural patrimony to Native American tribes. In spite of good faith efforts to repatriate known burials and associated funerary objects, it continues to be a reality that human remains and sacred objects remain in collections because they have been misidentified. The Lummi Nation Culture Department and the Western Washington University (WWU) Anthropology Department are working together to remedy these instances in the WWU collections. Using a culturally driven approach we have brought together a team of tribal cultural specialists, a physical anthropologist, professional archaeologists and students to go through all materials in the Semiahmah (45WH17) and Cherry Point (45WH1) Collections. The panel discussion will cover the cultural significance of misidentified remains, the process used, the results in terms of the frequency and kinds of misidentified remains, and recommendations about the importance of training and teamwork.

Yama: A Late 19th and Early 20th Century Japanese Transnational Community

Organizer: Caroline Hartse (Olympic College)

Session 10, Thursday 8:40 AM, Meeting Room E

The historic Yama community, located on Bainbridge Island, Washington, was occupied from the 1880s to the early 1920s. This Japanese village contained approximately 50 homes and 300 people. The inhabitants worked at the Port Blakely Mill along with other neighboring immigrant communities. Yama is of national significance and represents one of the best preserved historic Japanese communities in the Pacific Northwest. In 2015, Olympic College began a three archaeological research project to document, reconstruct, and interpret life at Yama. The following papers discuss research findings from

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2015. Analysis of the archival records and site features, structures, and artifacts reveals a complex and vibrant transnational community.

Pacific Northwest Food Studies

Organizer: Maureen Flanagan Battistella and Edwin Battistella (Southern Oregon University)

Session 11, Thursday 11:20 AM, Meeting Room E

Food provides sustenance to the physical being and over time, food has come to mean much more. Understanding the rituals and meaning of food – finding, preparing, preserving, sharing, eating, and celebrating it – offer insights into the nature and culture of a people, a community, and a family. This symposium presents research and findings on the relationship between food and culture in the Pacific Northwest, ranging from 19th century Chinese faunal archaeological findings, to the culinary and feminist legacy of Portland's Lilian Tingle, to reconstruction of a heritage brewing recipe, and 20th century politics and memoir.

From There to Here: ODOT- WSDOT Annual Transportation Symposium

Organizers: Caroline Holthoff (ODOT) and Scott Williams (WSDOT)

Session 13, Thursday 8:40 AM, Meeting Room F

The construction and maintenance of transportation infrastructure is a monumental and never-ending public undertaking, resulting in a sizable investment in cultural resources management. This session presents a sampling of some of the projects conducted over the past year, both in the Pacific Northwest and beyond.

Environmental Anthropology

Organizer: Thomas W. Murphy (Edmonds Community College)

Session 16, Friday 8:40 AM, Meeting Room A

Environmental anthropology bridges the subdisciplines of the field through the examination of human experience within ecosystems. This session features the community-based work of faculty, students, tribal, and community partners associated with the Learn and Serve Environmental Anthropology Field (LEAF) School at Edmonds Community College (www.edcc.edu/leaf). The LEAF School partners with tribes, nonprofits, municipalities, state, and federal agencies on projects that apply traditional knowledge and anthropological methods to efforts to help make our communities more sustainable. Anchored by a series

of field courses in human ecology and archaeology and supported by service-learning students in classes across the discipline, the LEAF School employs an indigenous pedagogy that includes peer mentoring and community-engagement to facilitate on-going research and activities by college students. Our reciprocal approach to participant observation engages students and faculty in cultural activities through collaboratively designed service-learning and research projects that address community-identified needs.

Society Outreach: Lessons in Engagement with Membership and the Public

Organizer: Christopher Noll and Tabitha Burgess (Idaho Archaeological Society)

Session 17, Friday 8:40 AM, Meeting Room B

State and regional archaeological societies vary by geographic area of interest and sometimes focus on specific sub-disciplines of archaeology. The common threads for all societies include a strong ethic to preserve the archaeological record, a desire to engage and educate the public about archaeology, and a desire to contribute to the scientific study of archaeological resources. This panel brings together representatives of archaeological societies from the northwestern United States to discuss their approaches to achieving their society mission, successes in programming, changes they have seen in their society over time, and challenges they have faced. Discussion topics include membership, public education, society activities, social media, and the future roles of archaeological societies.

Research in a Nutshell- Powered by Pecha Kucha

Organizers: Mary Pietrich-Guy (CH2M Hill) and Molly Swords (University of Idaho)

Session 18: Friday 10:20 AM, Meeting Room B

Students and professionals present work and ideas in this unique and fun format powered by Pecha Kucha. Participants have less than seven minutes to present an idea, methodology, results, or introduce a project. Work can be at any stage of development. The format is simple: 20 slides -- images only -- each shown for 20 seconds. Images advance automatically as presenters share and discuss their work. Audience members then participate in informal discussions about contributions. For this collaborative event, participants are encouraged to take this as an opportunity to practice and receive feedback. This symposium is offered as an opportunity for gaining

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input and expanding presentation skills in an innovative way.

Maritime and Underwater Archaeology

Organizer: Christopher Dewey (MAS)

Session 19, Friday 1:20 PM, Meeting Room B

This symposium covers a wide range of subjects related to submerged and non-submerged, historic and pre-historic heritage, preservation, and history projects. Focus areas include underwater paleocoastal archaeology, and how volunteer maritime archaeological organizations can cooperate to share resources, information, and expertise. The session will conclude with a panel discussion by presenters and other guests on all topics related to maritime and underwater archaeology.

The Ancient One: The 20 Year Anniversary of the Discovery of Kennewick Man

Organizer: Allyson Brooks, Ph.D. (DAHP)

Session 22, Friday 8:40 AM, Meeting Room D

Twenty years ago this July, a nearly complete set of skeletal remains referred to as Kennewick Man or the Ancient One were discovered near Kennewick in eastern Washington State. Kennewick Man carried a stone projectile point embedded in his right hip and was dated at around 8,500 years old, making him one of the oldest sets of human remains ever found in North America. Since its discovery, Kennewick Man has become a national and international news sensation and a focal point in the battle between scientific and Native American interests. Recent major developments have included the publishing of a book describing the results of numerous exhaustive studies on the remains indicating Kennewick Man's dissimilarity to modern Native Americans and, for the first time, DNA results indicating the contrary. The papers in this symposium present a local perspective on the controversy surrounding the Ancient One, as well as thoughts on the appropriate resolution and perspectives from twenty years later.

Topics in Physical Anthropology

Organizers: Guy L. Tasa, Ph.D. (DAHP) and Juliette Vogel (DAHP)

Session 23, Friday 2:40 PM, Meeting Room D

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.

Ethnographic Research with Northwest Tribes

Organizer: Donald Shannon (Willamette Cultural Resources Associates)

Session 25, Friday 8:40 AM, Meeting Room F

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 represent Federal Agencies who fund ethnographic research, academicians who work with regional Tribes, staff from Tribal cultural resource programs, and private sector cultural resource consultants. 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.

Looting- An Inside Perspective to the Legal Process, Damage Assessment, and Mitigation

Organizer: Katherine Kelly (WA State Dept. of Fish and Wildlife)

Session 26, Friday 8:40 AM, Meeting Room F

Looting has long been a major concern for Cultural Resource Managers, Tribes and archaeologists. The panel will open discussion with a review of a recent looting case on WDFW land, following the events from identification and arrest, through (semi)successful prosecution, issuance of civil penalties and into hearings. The case study will serve as a lens through which we can examine the legal process of prosecuting looters criminally versus civilly, and explore ideas for insuring damage assessment, restoration and mitigation are achieved, as well as termination of actual looting. Participants will describe the case and their observations during the civil penalty hearing.

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Little Gems: Three Minute Papers on People, Artifacts, and Ideas Picked Up Along the Way

Organizer: Paula Johnson (Environmental Science Associates)

Session 29, Friday 1:20 PM, Meeting Room F

Working on cultural resources projects often leads to curious discoveries—stories from a landowner, factoids during research, curious artifacts, patterns seen over multiple projects in the same area. While these little gems do not merit a full 20 minute paper, they are worth sharing. This series of 3-5 minute talks shares what we've learned along the way.

Can't See the Features for the FMR?

Organizer: Kate Shantry (SWCA)

Session 30, Friday 2:40 PM, Meeting Room F

The archaeological record on FMR is spotty. When measured against the study of making tools, the study of cooking food and other heating technologies is lacking. There are few conclusive results without modern laboratory analyses, which make comparative analyses across 50 years of archaeological studies in the region challenging. Contracted archaeological studies have produced ample data in terms of raw metrics however in this case of a seemingly relatively straight-forward technology, combustion features and their contents in both primary and secondary site contexts remain minimally understood in terms of larger scale patterns and anomalies. Recent paleobotanical and ethnobotanical studies offer reliable data in terms of supplementary analyses whereas paradigmatic feature classification and experimental studies of fracture mechanics have been overlooked. This session offers current approaches to thermal feature and FMR analyses in Washington and Oregon.

Abrams, Georgia (Pacific Lutheran University)

Difficulties with Dating: The Use of Tephrochronology at Mount Rainier National Park

Thursday 11:20 AM-11:40 AM, Meeting Room A

Much of Mount Rainier is covered by multiple, stratified layers of volcanic ash (tephra) associated with eruptions from Mount Mazama and Mount Saint Helens, as well as Mount Rainier itself. Because these tephra layers have been dated, they can be useful for determining the relative age of archaeological deposits. In many cases, each tephra layer can be traced to a specific event based on stratigraphic position, texture, color, and location on the mountain. In other cases, identification based upon these qualities alone can provide ambiguous results. This paper uses tephra samples recovered at Riverbend Site 45LE00921 in the Ohanapecosh Campground to illustrate a straightforward laboratory method to quantitatively identify distinct tephra by mineral content. This technique can confirm tephra identification, or identify depositional mixing, without the need for more complex analytical procedures.

Adolph, Lewis III (Confederated Tribes of the Colville Reservation)

Developing a Relational Database for the Colville Tribe's Traditional Cultural Plant Project

Thursday 11:00 AM-11:20 AM, Meeting Room B

The information gathered and databased for the Traditional Cultural Plant Project since 2013 includes inventory sheets describing locations and habitat conditions for important traditional plants. Parameters include GPS coordinates and elevation, along with general location information such as roads, stream crossings and other landmarks. Details of associated plant communities are included, consisting of dominant species first, followed by the less common natives. Aspect, slope, general soil characteristics and signs of impact from fire, grazing, logging or other disturbances are also tracked during inventories. Information on health and size of the target populations and the presence of pollinators are noted. Specimens and accompanying photographs are also collected during surveys. A photo gallery will be linked to the database, and GIS layers will be generated from the GPS coordinates for each species so they can be mapped.

Allen, Jennifer and Emily Pritchard

Protocol for Field Going Archaeologists: How and When to Speak to the Public

Thursday 2:00 PM-2:20 PM, Meeting Room B

More often than not, archaeological fieldwork is completed under the watchful eye of the ever-curious American Public. While these interactions are potentially important educational opportunities, there are times when disclosure is inappropriate or even detrimental to archaeological sites. How do we, as archaeologists, talk to the public about the

cultural resources that we work to protect –both for the public and, at times, from the public? Are there protocols for field going archaeologists, particularly young archaeological technicians, within the federal, state, and private sectors? Should we adopt a more educational stance or should we avoid the topic, especially in light of recent Oregon events? Join us as we discuss how, as field going archaeologists, we can be more effective at connecting with the public about our work without compromising the protection of cultural resources.

Allen, Zachary R. (Olympic College)

Feature Analysis of Yama, an Early Japanese Immigrant Village in the Pacific Northwest

Thursday 10:40 AM -11:00 AM, Meeting Room E

By the beginning of the 20th century the village of Yama on Bainbridge Island, Washington was a flourishing community of Japanese immigrants working in the Port Blakely Lumber Mill. In Olympic College's 2015 Field School we worked within the constraints of surface collection and early lab techniques. This study attempts to identify aspects of Feature 1015; specifically a terrace centrally located within the village containing a crowded but very diverse scatter of materials indicating a communal work site. The paper will illustrate procedures taken to unearth the feature, collect the materials and interpret the data and will provide a tentative hypothesis and conclusion based on the evidence as it stands now. Geographic placement of the feature and artifact examination will also be discussed. These procedures span from initial quadrant survey to final lab analysis and include digitalized mapping techniques used to illustrate artifact distribution on the terrace.

Ames, Kenneth M. (Portland State University)

Reflections on Cultural Continuity (and Discontinuity)

Friday 9:20 AM -9:40 AM, Meeting Room D

My task in the Kennewick affiliation study was to use the archaeological record to determine whether cultural continuity could be established between the cultures in the area in his lifetime and the cultures in the area in 1805. I had not done such a study before and quickly found there was no available methodology or theoretical framework for recognizing and demonstrating continuity or discontinuity over many millennia. Consequently, I became involved in a long-term archaeological project in north coastal British Columbia, investigating culture continuity by testing Northern Tsimshian oral traditions (adawx) using multiple and disparate lines of evidence. Our project focuses on a major war and occupational hiatus in the harbor described in the adawx. We have found evidence for the major events described in the adawx, demonstrating the historicity of Northern Tsimshian oral traditions and the range of evidence required to rigorously test for continuity.

Ames, Kenneth M. and Thomas J. Brown (Portland State University)

Radiocarbon Dating the Fur Trade II: A Bayesian Analysis of Radiocarbon Dates from the Cathlapotle site, Lower Columbia River

Friday 3:00 PM-3:20 PM, Meeting Room E

The fur trade era is difficult to radiocarbon date. Chronologies rest on ethnohistoric accounts and Euroamerican trade goods. Bayesian statistical methods offer an opportunity to radiocarbon date sites lacking these data and for refining chronologies of well-dated sites. Cathlapotle, with its large suite of radiocarbon dates, historic trade goods and rich ethnohistoric record, is an ideal fur-trade era test of Bayesian techniques. Our Bayesian models indicate the site was founded ca AD 1350, rather than AD 1450 as previously thought; it was continuously occupied for ca 500 years and abandoned in the mid-1830s, when dating based on beads, ceramics, and the documentary record indicate the site was abandoned. We also modeled the relative sequence in which the excavated houses at Cathlapotle and the Meier site were founded and abandoned. These results and their consistency with other chronological evidence shows these techniques can be productively applied to fur trade sites.

Anderson, Rachel, Danielle Saurette, and Ray von Wandruszka (University of Idaho, Dept. of Chemistry)
Chemical Sleuthing Among Artifacts Recovered from a Chinese Quarter

Friday 9:20 AM-9:40 AM, Meeting Room E

Excavations in the Chinese Quarter of Jacksonville, OR, have yielded a plethora of late 19th and early 20th century artifacts whose identification poses significant challenges. The objects in question range from typical Chinese articles, such as traditional medicines, to common household items that originated in the surrounding American society. Chemical analyses were carried out on a variety of artifacts, including bottles with unknown contents and parts of mechanical assemblies that were difficult to identify. In an interesting extension to this analysis of man-made objects, a number of animal bones were also investigated in order to determine whether they were remnants of fresh local foods, or possibly preserved supplies imported from China.

Andrews, Bradford W. (Pacific Lutheran University), Kipp O. Godfrey, and Greg C. Burtchard (Mount Rainier National Park Service)

Lithic Tales: Specifying the Late Prehistoric Use and Utility of the Berkeley Rockshelter

Thursday 9:40 AM- 10:00 AM, Meeting Room A

Berkeley Rockshelter is a Late Prehistoric period (2500 BP to contact) shelter located in the northeast quadrant of Mount Rainier National Park. This paper applies the site-type

classification used in Binford's (1980) forager/collector model to infer the function of Berkeley Rockshelter. The debitage and projectile points support the inference that late-stage flaking for shaping and reworking projectile points and preforms was a prominent activity at the site. Evidence also indicates the reduction of a local, poor quality source of Jasper, which made the site an even more attractive stop for mobile hunter-gatherers. These interpretations suggest that, consistent with Binford's model, this site functioned primarily as a hunting field camp.

Aranyosi, Floyd (Olympic College)
Archaeology at Yama

Thursday 8:40 AM -9:00 AM, Meeting Room E

This presentation provides an overview of the Yama Project. Yama, located on Bainbridge Island, Washington, was occupied by Japanese immigrants beginning in the 1880s. Most of the residents of Yama worked at the Port Blakely saw mill. Yama also was home to The Washington Hotel and restaurant, which provided guests and villagers with access to "Furo" baths. The village also had a general store where Yama residents and visitors could purchase imported goods from Japan, as well as US-made goods, a photography studio, and an informal tea garden. A Buddhist temple and Baptist mission completed the civic architecture. Residences were built on terraces on the hillside, and as many as 300 people lived in the village, at its peak. Abandoned in the 1920s, Yama remained undisturbed by subsequent construction, making it the best preserved Japanese immigrant village site in the Pacific Northwest. In 2015 Olympic College began a three year research project to document Yama.

Armstrong, Elizabeth and Eric Oosahwee-Voss (Confederated Tribes of the Colville Reservation)
Confederated Tribes of the Colville Reservation Perspectives on the 2014 Wanapum Reservoir Emergency Drawdown

Thursday 9:20 AM- 9:40 AM, Meeting Room B

Grant County Public Utility District (GCPUD) employees observed a crack in Wanapum Dam on February 24, 2014. GCPUD dropped the level of the water impounded behind the dam approximately 20 ft. causing an emergency drawdown lasting approximately ten months. By December 2014, GCPUD had completed the repairs to the dam and refill of the reservoir began. In coordination with the GCPUD Cultural Resources Department, the CCT History/Archaeology [H/A] Program designated crews tasked primarily with monitoring burial sites for potential exposure with the ultimate goal of protecting ancestral human remains. From March through August 2014, the CCT H/A crews spent eight sessions on the reservoir. This presentation details the work conducted by these crews.

Arndt Anderson, Heather

Keep Everlastingly At It: The Culinary and Feminist Legacy of Lilian Tingle

Thursday 1:20 PM -1:40 PM, Meeting Room E

In the early 1900s, a cooking teacher in Portland, Oregon changed the way the entire nation shops for groceries. Lilian Tingle came to Portland, Oregon in 1905, after being hired as the new director of the Portland School of Domestic Science. She soon began a weekly column on cooking and housekeeping for *The Oregonian*, answering queries from the public, especially on foreign cookery. The same year, Tingle inspired Portland women to take charge of their kitchens and everything that entered them when she led—and won—the crusade for clean, sanitary markets. She was appointed the nation's first market inspector. Her mission went national three years later when *Good Housekeeping* spotlighted her efforts to women across the country, and soon chilled meat cases and fly screens were the American norm. Her adventurous spirit had sent her traveling several times around the globe—unescorted by a man—and in the 1930s, Tingle resumed her solo travels to Eastern Europe and Central Asia, writing a column from abroad about foreign cooking.

Baca, Angelo (New York University)

Rejecting Racism in All its Forms: Religion, Rhetoric, and Repatriation

Friday 3:40 PM- 4:00 PM, Meeting Room A

The Church of Jesus Christ of Latter-day Saints issued a statement in February 2012 rejecting racism, in any form. The statement followed nearly two centuries of racism promulgated by church leaders, instituted in everyday practices, and integrated into Latter-day Saint scriptures. This paper examines what it would take to end racism that began with settler colonial grave robbery, loot from which was used in the production of Mormon scriptures advocating white privilege. Violence against cultural resources continues today, as illustrated by the occupation of Malheur Wildlife Refuge by Mormon militiamen, extensive trade networks in antiquities in Mormon communities, unethical uses of Native American DNA, and efforts by Utah legislators to undermine tribal sovereignty. Current rhetoric condemning racism appears to serve as a mask for the continued imbalance of power in a land-rich institution in which the highest positions of authority remain exclusively in the hands of white men.

Bajdek, Brennan (Archaeological Investigations Northwest, Inc.)

After the Floods: Oswego Lake during the Early Holocene

Thursday 8:40 AM- 9:00 AM, Meeting Room D

The Burnett Site (35CL96) in Lake Oswego, Oregon, yields important information about settlement, subsistence, and

lithic technology in the Portland Basin during the Early Holocene. The lithic assemblage is dominated by Cascade-style projectile points, but also contains a high percentage of bifaces and expedient flake technology. Analyses completed for the Lake Oswego-Tigard Water Partnership project focused on the chronology of the site and site formation, settlement and subsistence patterns, procurement strategies of lithic raw materials, production of flake tools, and comparisons with other Early Holocene sites in the Portland Basin.

Baldwin, Garth (Drayton Archaeology)

A Possible Indicator of Ship to Shore Artillery Use on Native Americans of the Salish Sea

Friday 1:20 PM Panel Discussion, Meeting Room F

A discussion of an 8-inch mortar shell collected at 45WH17 (Si'ke Village, Semiahmoo Spit). The artifact was recovered from Mound 3, the last remaining backfill pile of soil from the original construction excavation (ca 1999). The recovered portion retained an easily identifiable portion of the threaded fuse well. Its dimensions measured approximately 5 inches long by 4 inches wide by 1.5 inches thick. It weighed 8 lbs. The irregular breakage patterning of the shell fragment indicated that it had detonated. It is an 8-inch mortar fragment commonly used in the mid-1800s. Examples are recovered all across the American south; notable on display at the Shiloh National Military Park. Artifacts of its type are found in museums, on Ebay, and sites that profit from the "relic" market. Whether it was fired at the village or curated then transported is unknown. There are no lasting stories of the village being shelled.

Barr, Sam (Stillaguamish Tribe of Indians) and Adam Lorio (Samish Indian Nation)

Cross-Cultural Understanding on Tribal Canoe Journeys with the LEAF School

Friday 9:00 AM- 9:20 AM, Meeting Room A

In the summers of 2013 and 2015, the Samish Canoe Family partnered with the Learn and Serve Environmental Anthropology Field School on the Paddle to Quinalt and the Youth Pull to Muckleshoot. Students supported the canoe family during a hosting event at Fidalgo Bay Resort, with ground crew, on the support vessel, in the canoe, and at protocol. In 2013 students joined for just a few days of the journey but in 2015 they participated from the start to the finish. The Samish Tribe views this partnership as an extension of their cultural practices of giving and sharing, also in the honoring of "witnesses" and the importance that they play in cultural practices. This will be a short talk and discussion given by the two Samish skippers, describing their positive experience with the journey as well as challenges and opportunities for continued partnerships with institutions of higher education.

Battistella, Edwin (Southern Oregon University)

From Here to There: Preliminary results of the I-5 Speech Survey from Southern Oregon to Northwest Washington
Friday 11:40 AM- 12:00 PM, Meeting Room F

Residents of the Pacific Northwest are often surprised to learn that they have a dialect. One of the ways to drive this home to students, colleagues, and the public is through surveys of speech such as the Harvard Dialect study or the New York Times dialect quiz. Taking Ashland, Oregon, and Bellingham, Washington, as end points, linguists at two universities piloted a survey of about 200 students during the academic year 2014-2015. In this presentation, I outline some key results, focusing on variation and change in pronunciation, grammar, and word usage (the don/dawn merger, the pronunciation of items like coupon, often and thank; the spread of your guyses, dude, legitly, on accident, and hella). I also offer observations of the survey methods and techniques and technology, and identify some next steps for taking the survey on the road (I5) in the Pacific Northwest.

Battistella, Maureen Flanagan (Southern Oregon University)

Mrs. Mark O. Hatfield: The Cookbooks of Antoinette Kuzmanich Hatfield and How They Reveal Her Public and Private Lives: A Cultural Study of Food and Politics
Thursday 1:40 PM-2:00 PM, Meeting Room E

This paper examines the relationship between food and 20th century American politics – the intersection of food, political ambition, and political position – through the lens of Antoinette Kuzmanich Hatfield's five cookbooks and related works. The 1950-1970 decades saw the transition of American culinary practices, significant changes in the role of women in society, and the emergence of a new political liberalism. Antoinette's cookbooks were an example of how the wives of politicians, and sometimes politicians too, used food to promote political position and served as a form of social media. Antoinette's cookbooks were archetypal works of feminine politics, giving her voice, position, and recognition far beyond the convention of the day, all to the advantage of her husband, Mark O. Hatfield.

Beasley, Tom (The Underwater Archaeological Society of British Columbia)

The Underwater Archaeological Society of British Columbia: Forty years of exploring and protecting underwater heritage

Friday 1:40 PM- 2:00 PM, Meeting Room B

The Underwater Archaeological Society of British Columbia (UASBC) was formed following a university continuing education course in 1976. Since then, the UASBC has grown into one of the largest and most active avocational underwater archaeological organizations in the world with

chapters in Victoria, Vancouver and the Okanagan. The UASBC has completed and published about a dozen regional shipwreck inventories; taught dozens of Nautical Archaeological Society training programs; lobbied successfully for protection of all shipwrecks older than 2 years; and is continually researching, exploring and documenting maritime heritage sites, including first nations sites, in British Columbia.

Belding, Samantha Nemecek (US Air Force Academy, Colorado Springs, CO)

New research indicates rise in importance of Mount Rainier as a repository of natural resources to historically associated Tribes

Thursday 3:20 PM-3:40 PM, Meeting Room A

In 1998, a Memorandum of Understanding was finalized between the Nisqually Indian Tribe and the park reinitiated the harvest of certain culturally relevant plants. Newly completed anthropological research indicates that unsustainable plant harvesting by non-indigenous groups outside of Mount Rainier National Park has contributed to a rise in the importance of the park as a sustainable repository of important traditional cultural and natural resources. Samantha Nemecek Belding's recent study of the increasing importance of Mount Rainier to the Nisqually and other affiliated tribes suggests a growing sense of urgency for tribal involvement in management decisions regarding terrestrial resources. This presentation will address historical and current sustainable indigenous resource use of Mount Rainier National Park, unsustainable resource use outside the park boundary, and the potential for tribal involvement in the management of terrestrial resources.

Blaser, Andrea and Nicholas Smits (AINW)

Iron and Old Town: Interpreting Lake Oswego's Industrial Past through Historical Research and Archaeological Evidence from the Burnett Site (35CL96)

Thursday 10:40 AM - 11:00 AM, Meeting Room D

Although the Burnett Site is best known for its ancient pre-contact archaeological deposits, the site overlaps the 1867 townsite of Oswego and includes lands that were used in association with the 1866 Oregon Iron Company furnace at George Rogers Park. Recent archaeological excavations at site 35CL96 for the Lake Oswego-Tigard Water Partnership Project provide an opportunity to explore the rich industrial and residential history of "Old Town" Lake Oswego. A re-examination of artifact collections from prior excavations in the 1980s and 1990s allow for a comparative analysis of historic-period materials found in different parts of the site. This presentation will review the historical context of site 35CL96 and discuss the site's relationship to nearby residential and industrial developments.

Bocook, Aaron (Eastern Washington University)
Smartphones and Poverty in the United States

Saturday 9:20 AM- 9:40 AM, Meeting Room B

For people living in poverty in the United States, communication and access to new technology is a critical problem. While relatively wealthy and educated smartphone users have email, social networks, and the ability to look for jobs at their fingertips, poor Americans have much more limited access to these services. Much like traditional landlines, cell phones, and the internet, smartphones are becoming a basic tool needed to navigate modern society. Access to a basic smartphone with a data plan or Wi-Fi connection could help eliminate some of the damaging symptoms of poverty, by allowing them to search for health and social services, apply for jobs online, and connect to support groups, and friends and family. Further research on how people use their smartphones as a tool to improve their lives could inform a plan to provide smartphones for free or at a discounted rate to Americans living in poverty.

Brooks, Allyson (DAHP) and Kate Valdez (Yakama Nation)
Where Do We Go from Here? Solutions and Parallel Paths Forward

Friday 11:40 AM- 12:00 PM, Meeting Room D

On August 30th 2002 the Ninth Circuit Court of Appeals concluded that the Ancient One was not subject to the Native American Graves and Repatriation Act as there was no evidence he was related or culturally affiliated to an existing tribe, but instead fell under the administrative procedures of the Archaeological Resources Protection Act (ARPA). Essentially, instead of recognizing the Ancient One as a set of human remains the Court designated him as an archaeological artifact. By doing so, they made the ongoing repatriation requests of the Pacific Northwest Tribes unattainable as the Secretary of Interior had not promulgated rules for the deaccessioning of artifacts from the federal government to another entity under ARPA. And so, the Ancient One remained in the Burke Museum subject to the study of the scientific community that had originated the litigation. Since that time DNA studies have reopened discussions of repatriation due to a clear genetic affiliation between the Ancient One and present day North American tribes. The issue of repatriation is once again in the forefront of discussions under a multitude of pathways from Congressional action to the reinitiation and conclusion of the NAGPRA process.

Brown, James W. (Central Washington University) and James C. Chatters (Applied Paleoscience)

A Lithic Analysis of the Marymoor Site (45KI9): Development of a Seriation Using a Limited Stratified Sample

Friday 9:00 AM- 9:20 AM, Meeting Room C

The Marymoor Site (45-KI-9), excavated in the mid-1960s, was one of the first intensively investigated archaeological sites in Western Washington. The assemblage is heavily mixed, however, and never reached its full research potential. As a Burke Museum research effort, we reanalyzed the collection to determine if chronological sense could be teased out. We found that a portion of the assemblage derives from a geologically stratified area of the site and focused our efforts on that artifact subset. Two hundred-eighty of the >800 lithic artifacts derived from this area. By applying an analytical method that examined the stylistic and functional characteristics of formed tools, we could place the assemblage into a chronological sequence of three units. Three projectile point styles neatly seriate across these units showing the regionally consistent sequence of leaf-shaped, side-notched and stemmed/corner-notched forms. When the assemblage was not treated as a single unit, it made sense.

Brown, James W., Caitlin P. Limberg, Anne B. Parfitt, Patrick C. Lewis, and Patrick T. McCutcheon (Central Washington University)

A Statistical Analysis of the Spatial and Temporal Components of the Sunrise Ridge Borrow Pit Site (45PI408), Mt. Rainier, Washington

Thursday 1:20 PM- 1:40 PM, Meeting Room A

Understanding the change of artifact frequencies through time and across space at the Sunrise Ridge Borrow Pit site is essential to testing hypotheses about settlement and subsistence in the Pacific Northwest. Problems associated with intra-site time-averaging were controlled with intensive chronological analysis and volumetric control of artifact bearing sediments. Initial differences in analyzed artifact frequencies reveal a decrease in technological diversity and an increase in functional diversity through time. The effects of time-averaging are obvious as each temporal component is not comparable in duration. The upper component dates to 2000-1000 cal. years B.P. and the lower component dates to 4000-2500 cal. years B.P. The greater technological diversity earlier in time and more functional diversity later in time are a function of significant changes in the duration of land use between the two components.

Brown, Thomas J. (Portland State University) *Demographic Fluctuations on the Northern Northwest Coast Between 11,000 and 5,000 cal BP and Their Relationship to Environmental and Mobility Pattern Change*

Friday 11:20 AM- 11:40 AM, Meeting Room C

I use a large suite of ^{14}C data from the northern Northwest Coast to construct summed probability distributions (SPDs) to examine demographic trends and their relationship to mobility changes on the ween ~11,000 and 5,000 cal BP. The significant findings are: 1) that no trend in overall

population growth or decline in populations during the study period was observed 2) a massive and hitherto undocumented region-wide population collapse and rapid recovery of populations occurred between ~9,000 and 8,000 years ago and 3) a statistically significant stabilization of population followed this population collapse. Possible relationships between these demographic signals, well documented world-wide climate cooling events are discussed, as are the implications of this research on understanding early Holocene mobility changes among coastal hunter-gatherers.

Buchholz, Terry (Integrated Water Solutions, LLC)

A Project Sponsor's Perspective – What are the Implications of Finding Significant Resources for My Project?

Thursday 11:20 AM- 11:40 AM, Meeting Room D

A Project Sponsor can have a completely different perspective than an archeologist when highly significant cultural resources are found within their capital improvement project site. There are a lot of questions and consternation about how this discovery will impact the project schedule and budget. For the Lake Oswego – Tigard Water Partnership Program, a \$250 million capital project, the schedule and budget implications were huge. This presentation will talk about how the project sponsor, project archeologists, SHPO, Grand Ronde Tribe and the U.S. Army Corps of Engineers worked collaboratively to make this significant discovery a win-win.

Buck, Rex Jr. (Wanapum Tribe)

A Tribal Perspective on the Ancient One

Friday 11:20 AM- 11:40 AM, Meeting Room D

The Colville, Nez Perce, Umatilla, Wanapum, and Yakama have an inherent responsibility to care for our ancestors. Religious beliefs and practices necessitate their return to the earth to continue their journey. For the past twenty years we, as claimant tribes, have stood by our knowledge and traditions which told us the Ancient One is our Ancestor. The resulting court cases with final judgment made at the 9th District level allowed for scientific study and placed the tribes in the status of “interested party” in the minds of the federal agency and the public. In accordance with our spiritual and cultural practices we have conducted annual ceremonies with the Ancient One letting him know that he is not forgotten. The goal to repatriate and rebury the Ancient One has never changed. We are currently moving on multiple fronts to ensure that he can continue his journey to the Creator.

Bush, Kelly (Equinox Research and Consulting International, Inc.)

More than just “It’s the Law”

Thursday 1:40 PM- 2:00 PM, Meeting Room B

This talk is for people working in Cultural Resource Management who want to go from good to great, who want to be part of a science- and ethics-based business, who want to wake up every morning excited about what they do. Do you spend even part of your time justifying your work to hostile or ambivalent clients or land owners and wish you could say more than “because you are required to?” If you want to make sure that cultural deposits, features, objects and buildings have a chance to get older because you and your clients protected them, then step right up. Consider the thousand small moments that through insight and hard work you line up in the right direction to inspire people to protect something that they might not have known existed. Help your clients to get excited about your work and be happy when they write that check. This paper is about finding ways to get agencies, clients, taxpayers—anyone—excited about heritage preservation, and for everyone who wants to take action every day to make this industry better.

Bush, Kelly (Equinox Research and Consulting International, Inc.)

Risk Management Tools

Thursday 2:40 PM- 3:00 PM, Meeting Room B

Come hear about the tactics for risk reduction that we have been implementing on projects, large and small, in Northern Puget Sound—ideas developed in planning and used in the field, how they worked, what we would change, and how to identify opportunities and synergies. We work with a wide range of stakeholders and listen to tribes and agencies to understand what are their critical issues. In particular, project engineers and project managers know their projects better than anyone; we have had real success asking for what we need and then listening to the great ideas they come up with, and most importantly working with them on implementation to avoid, minimize or mitigate the impact to cultural resources. This talk will provide concrete examples of what we have tried and why. We can show you how vetting great plans and getting everyone in the room saves money and resources. There is no reason not to do it, and frankly if we want to stay relevant and funded we had better work harder at becoming great, flexible, cutting-edge risk-takers and risk managers.

Calkins, Adam T. (University of Nevada, Reno)

Creating a Methodology for Unmanned Aerial Vehicles (UAVs) in Historic Archaeology: Case Studies from Virginia City, and Aurora, Nevada

Saturday 9:00 AM- 9:20 AM, Meeting Room C

Unmanned Aerial Vehicles (UAVs) or ‘drones’ are an emerging technology for use in archaeological investigation. With UAVs, it is possible to capture a series of high-resolution images capable of creating photogrammetric 3D models at a very low cost. Recently, I have undertaken two

projects in Nevada that demonstrate the usefulness of UAV technology in Historic Archaeology. Using a UAV, I collected sequences of images from both Virginia City and Aurora, Nevada. Using photogrammetric software, the compiled data was turned into a series of 3D models. Both projects were created to test different applications of UAV technology in archaeology. In both cases, we found that UAVs can provide a low cost alternative to gather data for archaeological investigation. These case studies provide an example for how this important technology can be employed in future archaeological research.

Campbell, Lola J. (Confederated Tribes of the Colville Reservation)

Where Tradition meets Science: The Colville Tribal Herbarium

Thursday 11:20 AM- 11:40 AM, Meeting Room B

The Colville Reservation covers 1.3 million acres and includes habitat types ranging from sagebrush-steppe to subalpine, where many native plants are still gathered today. Field surveys for the Traditional Cultural Plant Project began in late spring of 2013. Initial survey sites were locations commonly visited by traditional practitioners, where foods, medicines and other resources have long been gathered. The surveys focus on plant populations of cultural importance, but the plant team collects other species as well because we would like voucher specimens for every species on the reservation, as well as plants off reservation, within the Colville Tribes' traditional territories. Our goal is to consolidate information for each species in order to protect, manage and, when necessary, restore populations. Collected specimens are stored in the Colville Tribal Herbarium, which presently holds approximately 700 specimens representing around 400 species.

Campbell, Renae J. (University of Idaho)

Connections and Distinctions: A Comparative Analysis of Japanese Ceramics Recovered from Three Issei Communities in the American West, 1880–1940

Friday 9:40 AM- 10:00 AM, Meeting Room E

Japanese-manufactured ceramics from the late nineteenth and early twentieth centuries have been recovered from a variety of archaeological sites throughout Western North America, but large collections and in-depth analyses of pre-World War II contexts are still relatively rare. As a result, standardized formal, temporal, and functional typologies are only just emerging and site comparisons are often difficult. This paper presents the preliminary results of a synthesis of ceramic data from three west coast sites occupied by first-generation Japanese immigrants (Issei) between the late 1880s and early 1940s. Through a comparison of the historical and archaeological records of these communities, this research aims to identify commonly-found ceramic

forms and wares, and to provide a better understanding of the regional availability, distribution, and use of these materials by Issei communities across the American West.

Carney, Molly (Washington State University)

To Throw into the Fire: Paleoethnobotanical and Geoarchaeological Analyses at the Flying Goose Site 45PO435

Thursday 9:40 AM - 10:00 AM, Meeting Room C

The Flying Goose Site (45PO435), located along the Pend Oreille River in northeastern Washington, offers an opportunity to examine a Columbia Plateau culture area burnt structure in greater detail. Paleoethnobotanical and geoarchaeological analyses indicate that this small late prehistoric structure was likely purposefully burned and subsequently buried under relatively sterile silts. The unusually well preserved structural remains at 45PO435 provide an excellent chance to examine Plateau architecture, use of space, and both nutritional and technological use of plants. The presence of plant food remains, the lack of artifacts or zooarchaeological data, and comparison to regional and continental ethnographic knowledge allow us to take a closer look at commonly established notions of gender and seasonality on the Columbia Plateau. This archaeological oddity offers a unique opportunity to bring theoretical discussions of both gender and depositional histories into regional archaeology.

Carriere, Ed (Suquamish Master Basket Maker and Elder) and Dale Croes (PNWAS and Washington State University)
Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition: Master Salish Basketmaker and Wet Site Archaeologist Explore 100 Generations of Cultural Knowledge

Thursday 3:20 PM-3:40 PM, Meeting Room F

I often invited Ed Carriere, Suquamish Master Basketmaker and Elder, to help us recover 700 year old cedar bough pack baskets while excavating the Qwu?gwes wet/waterlogged site, Olympia, Washington. He is the last known Salish Sea weaver still making these cedar clam baskets. While preparing to analyze 2,000 year old Biderbost wet site pack baskets at the U.W. Burke Museum in Seattle, I called Ed and suggested he try to replicate these baskets, fully 100 generations back through his line of teachers. He loved the idea and we got expense funds to do the project through his Tribe's Suquamish Appendix X grants. We met several times at the U.W. Burke and we recognized two main types of large pack baskets, one open twined and one checker plaited. Kathleen Hawes, a cellular ID expert, determined most of these ancient baskets were made from split cedar root. Ed has now replicated seven of the fine gauge open twine pack baskets, contributing a huge amount to our analysis in the process. Ed guided me through the process of

making three of the checker weave examples. Together we will present what we have learned through this experimental archaeology and cultural experiment.

Chatters, James C. (Applied Paleoscience) and James W. Brown (Central Washington University)

The Age of Marymoor and Its Place in the Cultural Chronology of Puget Sound

Friday 9:20 AM- 9:40 AM, Meeting Room C

Since its excavation in the mid-1960s, the Marymoor Site (45-KI-9) has been an enigma. Researchers from Charles Nelson to Dale Croes have given it a pivotal position in their regional chronologies, but the lack of a radiometric age and an apparently mixed assemblage left the site and the chronologies afloat in time. By viewing the Marymoor assemblage stratigraphically and obtaining radiocarbon ages from calcined bone from two of the strata, we have been able to isolate chronologically distinct assemblages, one dating 5400-5600 and the other 5900-7200 rcyBP. Regional comparison shows occupations resembling the younger assemblage to be spatially limited in the land west of the Cascades, raising the possibility that the cultural geography of the Puget Lowland changed significantly between the middle Holocene and European contact. Our findings demonstrate the importance of re-investigating museum collections and the value of deconstructing whole assemblages to find the order in apparent chaos.

Chatters, James C. (Applied Paleoscience), David Sheldon (CH2M Hill), Bruce Gustafson (OAS), and Steven Hackenberger (Central Washington University)

The Bray Site: a Locarno Beach-Aged Plant-Processing Field Camp in Southern Puget Sound

Thursday 4:00 PM- 4:20 PM, Meeting Room F

Although the highly logistically organized economic system of the Contact-Period Northwest Coast is thought to have begun 3800 years ago with the Locarno Beach Phase, field camps for non-aquatic resources are rare. Residential bases and shellfish/fish/bird gathering camps of the lowlands dominate the record. Plant processing camps, although common in the nearby Plateau and southern Puget-Willamette Lowland, are elusive. The Bray Site (45-PI-1276) is the first such camp to be documented in the Salish Sea region. Amateur and professional investigations conducted 1993 to 2012 enable a clear understanding of the site's purpose. Consisting of numerous, interconnecting earth ovens built against a sand ridge on glacial terrain, it contains relatively few lithics or bone. It was clearly of special purpose and oven cooking was the focus. Narrow, stemmed dart points place the Bray Site within Locarno Beach; radiocarbon ages from charcoal and calcined bone pinpoint occupation between 2578±27 and 2823±25 rcyBP.

Christensen, Anne (Olympic College)

Designs and Motifs

Thursday 10:20 AM - 10:40 AM, Meeting Room E

My research focuses on ceramics at Yama, a late 19th and early 20th century Japanese immigrant village on Bainbridge Island. The ceramics are decorated with many interesting designs and motifs. After sorting and dividing the artifacts from the photographic catalog into groups based on color, I subdivided the categories into types of designs. Many of the ceramic designs were cobalt blue so I analyzed the percentage of that color compared to other colors. Predominantly, I looked at the decorations and the detail of the designs themselves. I was interested in whether or not one type of design is common to one color or if all decorations are found in all colors. Thus far I have found several correlations between decorations and colors. What I found most interesting is the strong correlation between how detailed a design is and the color of that design.

Connolly, Tom (University of Oregon), Nick Jew (U of O), Mark ("Jack") Swisher (Fort Rock Valley Historical Society), Bill Cannon (BLM, Lakeview District), Michel Waller (Central Oregon Community College), and Kelsey Sullivan (U of O)

Picking Up the Pieces: Analysis of a Looted Collection of Lithic and Perishable Artifacts from Rattlesnake Cave, South-Central Oregon

Thursday 1:40 PM- 2:00 PM, Meeting Room F

Rattlesnake Cave is a shallow cavity in a tufa dome, formed during the terminal Pleistocene on the west shore of Lake Abert in south-central Oregon. The site, occupied mainly during late Holocene, was visited by artifact collectors and effectively cleaned out during the 1940s and '50s. A generation later, materials from the site—primarily fiber and leather artifacts—were donated to museums. We report on the available materials from the site, as well as radiocarbon dating and obsidian sourcing studies, and consider the site's place in the context of broader cultural patterns in the Northern Great Basin.

Cowan, Jason (AINW)

Modeling obsidian effective hydration temperature in the Willamette Valley to date the Burnett Site (35CL96)

Thursday 9:00 AM- 9:20 AM, Meeting Room D

Controlling for variation in factors that alter the speed at which obsidian hydrates is needed for acquiring accurate chronological data from hydration measurements. Some factors can be mitigated by restricting rate estimates to individual obsidian sources, but other factors like micro-environmental variation are unique to each artifact's provenience. By interpolating 30-year normal temperature data from regional weather stations in the greater Willamette Valley and adjusting this data for elevation

differences using air temperature lapse rates, a high-resolution spatial map of Effective Hydration Temperature (EHT) has been created using algebraic best-fit equations based on diffusion theory. Dates for obsidian found at the Burnett site are then calculated by adjusting published hydration rates with the modeled EHT. Results from the model indicate that obsidian at the Burnett site dates to between 16,350 and 275 years B.P., a range that may include outliers but is generally consistent with other chronological data.

Coyote, Arrow (Confederated Tribes of the Colville Reservation)

Combining Archaeology and Traditional Cultural Knowledge: Eagle Rock Case Study

Thursday 9:00 AM- 9:20 AM, Meeting Room B

A landscape approach encompasses the natural and cultural features that connect people to their land. Each cultural object/feature, each natural feature/resource, and each story add to the understanding of the whole landscape. Therefore, archaeological and Traditional Cultural Knowledge elements need to be considered together within the landscape in order to be properly evaluated. This presentation provides an example of how archaeology, geography, and traditional cultural knowledge help tell the story of Eagle Rock.

Curteman, Jessica A. (Oregon State University)

Geoarchaeological Investigations at the Devils Kitchen Site (35CS9), Southern Oregon Coast

Friday 1:20 PM- 1:40 PM, Meeting Room C

A geoarchaeological investigation was conducted at the Devils Kitchen site. Through pairing previous and recent excavated stratigraphy profiles, culturally significant deposits were identified and defined further geochemically using a multivariate statistical analysis from data gathered by portable x-ray fluorescence. Radiocarbon dates from excavated charcoal samples associated with cultural artifacts show an intact deposit dating from 10,638±35 to 11,596±37 RCYBP. A textural analysis from Ro-Tap sieve shaker data and Munsell color identification extracted from 33 bucket auger units were used in order to subsurface test the Devils Kitchen State Park area, portraying an uplifted aeolian landscape once influenced by alluvial deposition, commonly observed along coastal environments altered by rising sea levels. Applying geoarchaeological methods to identify deposits of the right age (DORA) that have the potential to contain intact, early evidence of prehistoric people can serve as a marker for future coastal research searching for intact paleolandscapes and archaeological deposits.

cəlálakəm (Pamela Bond) (Snohomish Tribe)

stəljx^wáli (Place-of-Medicine) Ethnobotanical Garden

Friday 10:40 AM- 11:00 AM, Meeting Room A

In 2009 the Snohomish Tribe partnered with the LEAF School and the City of Lynnwood to create stəljx^wáli (Place-of-Medicine) Ethnobotanical Garden in Gold Park a block from the college campus. The garden illustrates various kinds of medicine. It served historically as an upland medicine gathering place near a travel route from Edmonds beach to Halls Lake. After the arrival of the Boston man it became a place of medicine known as the Lynnwood Clinic and here thousands of women gave birth and received medical care. Today it is a place of plant and heart medicine, an outdoor classroom where all of the community can become one. Elementary school children tour the garden and the college hosts quarterly service-learning projects. While colonization has changed the people, the same plants live there today as in the past. The medicine and plants that have served us for millennia are still serving us now.

Davis, David R., Patrick C. Lewis, and Patrick T. McCutcheon (Central Washington University)

Significant Variation on the Organization of Technology Revealed Through Analysis of

< 0.635 cm Mesh Size Lithics at the Sunrise Ridge Borrow Pit Site (45PI408), Mt. Rainier National Park, Washington
Thursday 2:40 PM- 3:00 PM, Meeting Room A

Excavations at the Sunrise Ridge Borrow Pit site (45PI408) produced a large chipped stone assemblage (n = 17,418). Recent attribute analysis of all lithic artifacts > 0.635 cm mesh size (n = 3,681) demonstrates that substantial technological variation is present, but the results of an analysis of lithic artifacts < 0.635 cm mesh size (n = 8,714) reveals meaningful frequency changes across multiple dimensions suggesting that significant intra-site variation resides in the < 0.635 cm mesh size lithics. Lithic dimensions affected diachronically and synchronically include fragment type, cortex, wear, raw material type, platform type, thermal alteration, and reduction class. Although the sampling of lithic assemblages by size class is performed for a variety of reasons, where changes, or lack thereof, in stone tool manufacture and use are inferred from the archaeological record, small size lithics must be analyzed to obtain an accurate understanding of past stone tool manufacture and use.

Davis, Loren G. (Oregon State University)

Searching for Submerged Precontact Archaeological Sites on Oregon's Continental Shelf: A Preview of Upcoming Research

Friday 1:20 PM- 1:40 PM, Meeting Room B

Beginning in 2015, the Bureau of Ocean Energy Management and San Diego State University developed a

cooperative agreement entitled “Archaeological and Biological Assessment of Submerged Landforms”. This project aims to conduct survey and seafloor sampling in key areas along the Northern Channel Islands of southern California and along Oregon’s central coast in order to improve identification of submerged cultural and natural resources on the Pacific outer continental shelf. The Oregon portion will involve a series of interlocking activities: outreach with Native American tribal groups; GIS predictive modeling of high probability landforms; identification of target areas for high resolution data collection; geophysical surveys of submerged landscapes along target areas; seafloor coring of each target area for archaeological and biological indicators and analysis of cored sediments; as well as outreach describing methods, analysis and results of non-sensitive data. This presentation will provide an overview and preview of research to be conducted in Oregon’s offshore waters.

Davis, Mary Anne (Idaho SHPO, Idaho State Historical Society)

Meeting with an Old Friend: Dry Sailing to Rock Art Sites in Southern Idaho

Thursday 1:20 PM- 1:40 PM, Meeting Room F

John Curtis was a retired NASA engineer and Idaho rancher and needed something to do. He set an aggressive task to record all of the rock art sites in southern Idaho. His collection – site forms, photographs, VHS tapes, and ideas – provides a look at the vast array of rock art in southern Idaho and how these sites fit into the greater prehistory of Idaho. Taking another look at these types of legacy collections, whether archaeological collections or site documentations, can open up new enquiries for research and give new meaning to the importance of such collections.

Dellert, Jenny (Historical Research Associates, Inc.)

Celluloid, Bakelite, Catalin, and Lucite: Plastics in Early 20th Century Jewelry

Friday 10:20 AM- 10:40 AM, Meeting Room E

Advances in chemistry in the early 20th century led to the manufacture and use of plastics in many common items such as jewelry. The term Bakelite is typically used as a catch-all for any early plastic, however, that is a misnomer. Celluloid, Bakelite, Catalin, Lucite...all are forms of early plastic and yet there are distinct differences. A timeline and history of manufacture, chemical components, and methods to distinguish vintage jewelry types will be discussed.

Dewey, Christopher (Maritime Archaeological Society)

The Maritime Archaeological Society: Our First Year

Friday 3:20 PM- 3:40 PM, Meeting Room B

The newly formed Maritime Archaeological Society (MAS) has been developing educational programs and pursuing

field projects in the Pacific Northwest since incorporation in early 2015. This paper will review the MAS accomplishments to date, and discuss the projects being planned for 2016.

Diaz, Ben and Melody Chester (National Park Service, Mount Rainier National Park)

Mount Rainier Ice Patch Archaeology and Monitoring
Thursday 3:00 PM- 3:20 PM, Meeting Room A

Ice Patch Archaeology has grown as a climate change driven research subject in northern latitudes, and mountain environments. Many of these alpine areas occur in remote, rugged terrain that has seen little archaeological investigation. This paper explores the viability of survey methods, pre-contact material preservation, and evidence of human-use in Mount Rainier’s alpine environments. Ice patch surveys at Mount Rainier for the 2015 field season consisted of a collaboration between archaeologists and geoscientists identifying and investigating stable ice patches conducive to preserving archaeological as well as paleo-biological materials. Initial work took advantage of an anecdotally “very low” snow accumulation year. Results included baseline survey data and the identification of one potential ethno-historical artifact.

didahalqid (Michael Evans), Sam Barr (Stillaguamish Tribe of Indians) and Adam Lorio (Samish Indian Nation)

Welcome from Tribal Canoe Families

Blue Heron, Samish, and Stillaguamish Canoe Families

Friday 8:40 AM- 9:00 AM, Meeting Room A

The Paddle to Seattle in 1998 revived a traditional means of transportation on the Salish Sea and the cultural protocols and ceremonies that go with it. Now, Tribal Journeys are an annual event that can attract one hundred canoe families or more and thousands of participants. Different tribes take turns hosting an annual paddle that takes participants from one tribal community to another as they converge on a common destination where a potlatch of up to a weeklong is held. The LEAF School has been supporting Tribal Journeys with service-learning students for the past five years. Students become participant observers as they help local canoe families with gift-making, ground crew, hosting, support vessels, pulling in the canoe, and at protocol. Three canoe families will collaborate to open this session in a good way with song and words of welcome.

Dolan, Patrick (Independent Researcher)

Economics and Integration in a Marpole Period Plankhouse Community: Evidence from the Dionisio Point (DgRv-003) Site

Friday 3:20 PM- 3:40 PM, Meeting Room C

This paper examines the role of inter-household interaction in the economic organization of a Marpole Period plankhouse community at the Dionisio Point site (DgRv-003)

on Galiano Island in southwestern British Columbia. This settlement was composed of five large, multi-family corporate households for several generations, raising the possibility of sustained economic interaction and inter-dependency. Over three field seasons, faunal and artifact samples were collected from discrete household refuse middens. These assemblages allow reconstruction of the patterns of household subsistence production and consumption and evaluation of the degree and kinds of household interaction. Results support the hypothesis that Dionisio's households were economically autonomous. These are consistent with previously excavated evidence for intra-household economic differentiation. Households' surpluses may have been used to fund local ceremonies or cement long-distance social networks, but they did not regularly form part of the subsistence fund of others within the community.

Edmunson-Morton, Tiah (Oregon Hops & Brewing Archives, Oregon State University)

Recreating a legacy lager: Connecting Past, Present, and Community through Historic Beer

Thursday 11:40 AM- 12:00 PM, Meeting Room E

Oregon is a special place where cities are surrounded by the rural landscape of agricultural farmland and forests. Oregonians like to know who grows their food, who brews their beer, and how they might do it all themselves. This talk will detail a 2015 project to recreate a pre-Prohibition lager beer for an Archaeology Roadshow on Portland State University's campus, but will delve deeper into how we approach the "re-creation" of history through ingredients and recipes. Areas of investigation include searching for company recipes of commercial brewers; home brewing instructions in household management books; and educational textbooks that focused on science, operations, and technology. The talk will also explore ways to learn about where brewers sourced ingredients through analysis of advertisements in local papers and journals. Finally, beyond ingredients and recipes, this collaboration between a brewery and an archivist offers a unique opportunity for exploring public engagement.

Elmstrom, Skyler (Whatcom Community College)

A Spatial Perspective of the Fish and Wildlife of Mukilteo Gulches

Friday 2:40 PM- 3:00 PM, Meeting Room A

For 4 years, the Learn-and-Serve Environmental Anthropology Field (LEAF) School has been monitoring fish and wildlife at both Big Gulch and Japanese Gulch in Mukilteo, Washington following a joint partnership between the City of Mukilteo and Snohomish County Airport to restore each streams salmon-bearing capacity. 222 students, faculty, staff, and community members have placed camera

traps, conducted wildlife tracking, conducted salmon monitoring surveys, monitored water quality, and/or provided services that have fostered an invaluable connection between citizen science, civic engagement, and education. In 2015, we enlisted the help of geography and more thorough water quality analysis. The additional capabilities of a geographic information system have allowed us to organize our data in new and enlightening ways that alter the way we ask questions as well as how we explore answers. Instead of only asking if the efforts undertaken are working, we can now ask and answer "how" and perhaps most importantly, "where."

Evans, Etsuko (Olympic College)

A Closer Look at Religious Life within the Yama Community
Thursday 9:00 AM- 9:20 AM, Meeting Room E

Yama, a Japanese immigrant village located on Bainbridge Island, Washington, was occupied from the 1880s to 1920s. Historical photos and records show that almost certainly there was a Baptist Church and Buddhist Temple at Yama. However, no evidence of Shinto being practiced in Yama has been found to date. This is of particular interest because religion in Japan is described as syncretistic, with Buddhism and Shinto coexisting in Japan for over fifteen hundred years. Analysis of Buddhism and Shinto can help clarify details about the daily life within Yama; therefore, it is important to find evidence of Shinto being practiced, or an explanation of why Shinto wasn't practiced at Yama.

Evenson, Lindsey (Eastern Washington University)

Pre-1900's Chinese Placer Mining in Northeastern Washington State

Friday 10:40 AM- 11:00 AM, Meeting Room E

Despite the desperate attempts by the U.S. government to repress the industrious Chinese laborers entering the country during the mid-nineteenth century, many succeeded in making a fortune, placer mining the sand and gravel bars of the Columbia River, and its tributaries, in northeastern Washington State. Documentation of their activities in the region is poor, at best, and the scars they left on the landscape are inundated by the damming of the region's main waterways. Using the fragmented archaeological site records and the scattered historical accounts, this project will analyze the limited material available to create a comprehensible narrative of the pre-1900's Chinese mining industry in northeastern Washington State, in an attempt to develop a more accurate record.

Ferry, Joy D., Patrick McCutcheon, and Kevin Vaughn (Central Washington University)

Technological and Functional Variation in Four Lithic Assemblages on Mount Rainier, Washington

Thursday 2:00 PM- 2:20 PM, Meeting Room A

The importance of montane environments in the subsistence and settlement strategies of pre-contact Pacific Northwest peoples is recognized by archaeologists. However, little is understood about functional and technological variation between montane sites in comparable environmental settings. In this study, four lithic assemblages (45PI406, 45PI408, 45PI429, and 45PI438) from sites in the upper maritime forest and subalpine zone of Mount Rainier were compared. An evolutionary archaeology model was applied to define and measure variables relevant to stone tool manufacture and use. Findings were contextualized within the known environmental constraints and available regional land use models of upland subsistence and settlement strategies in the southern Washington Cascades. The results indicate that the assemblages are consistent with debitage produced as a result of tool manufacture at limited activity sites, and that local microenvironments influenced stone tool manufacture and use. Variation consisted of differences in raw material and in the intensity of tool manufacture between assemblages, while the application of heat treatment was consistent across three of the four assemblages.

Fitzpatrick, Justin (Central Washington University)

A Zooarchaeological Analysis of the Mesa 12 Site: Preliminary Results

Saturday 11:40 AM- 12:00 PM, Meeting Room F

From 1973-1975, Dr. William C. Smith of Central Washington State College led the "Mesa Project" excavating four sites on the Columbia Plateau in Grant County, Washington. These mesas are small isolated basalt buttes, 100 or more feet above the surrounding landscape. Faunal material recovered from these sites has been in storage unanalyzed for over 40 years. The largest excavation was at Mesa 12 where 33 units were excavated. Six radiocarbon dates indicate a Cayuse Phase (2070±90 B.P. until 565±80 B.P.) occupation. In Fall 2015, I conducted a pilot study of 545 faunal specimens which compose about 12% of the total faunal assemblage. Preliminary results indicate the presence of suckers/minnows, rodents, and artiodactyls including pronghorn. The majority of faunal material analyzed (86%) consisted of unidentifiable large mammal fragment, and many (54%) of the bones are burned. This pilot study represents a small sample of a larger thesis project I am currently developing.

Fliger, Donna (Olympic College)

Bottle Analysis at Yama

Thursday 9:40 AM- 10:00 AM, Meeting Room E

During the 2015 Olympic College Field School at Yama, a Japanese immigrant village on Bainbridge Island, I analyzed differences in the quantity and type of bottles and bottle glass found between the two distinct sections of the site: Yama (where the families resided) and Nagaya (the area where the bachelors lived). My hypothesis is that bachelors at that time (like those now) had more money to spend on extras such as soda, beer, and other alcohol. This presentation will discuss the bottle glass that was collected during the first season of the Yama Project. At the time of my research, I had approximately 1,800 artifact samples to work with, and of those 705 were bottle glass fragments. I analyzed the samples by color, type, and quadrant which they were collected in. The results of the analysis support my initial hypothesis.

Gahr, D. Ann (Southern Illinois University Carbondale), Patrick Rennaker, and Patrick McCutcheon (Central Washington University)

Methodological Issues in Paleoethnobotanical Analyses at MORA

Thursday 1:40 PM- 2:00 PM, Meeting Room A

Charcoal remains from archaeological contexts have the potential to reveal past vegetation communities as well as human use of landscapes. However, the quality of those insights rests on robust methodology. Previous archaeobotanical research at MORA has been sporadic and limited in scope. Our work aspired to build a systematic methodology allowing comparison between sites and strata, and thereby yielding a finer-grained view of human use of montane environments. Paleoethnobotanical investigations at six archaeological deposits located on the east-facing slopes of Mount Rainier included the comparison of field recovery methods and the effects on laboratory processing, in addition to, progress in identification of geophytes, use of functional/ecological variation in wood anatomy, together with simple statistical tools (e.g., species area curves, key ratios). Addressing methodological issues was a significant step forward in understanding the important role plant use played in the history of human use and environmental dynamics at Mount Rainier.

Gleason, Eric B. and Jacqueline Y. Cheung

Finding Buried Sites: Constant Volume Sampling at the Ohanapecosh Campground, Mount Rainier National Park
Thursday 11:00 AM-11:20 AM, Meeting Room A

Finding archaeological sites in a forested environment is a challenge; dense vegetation and duff layers often completely obscure surface visibility, and at Mt Rainier National Park, thick tephra layers simply add to the

challenge. Constant Volume Sampling (CVS), using posthole diggers to excavate 30-centimeter diameter probes in 10-liter increments to a depth of up to 1.5 meters, proved to be an efficient and effective technique for the subsurface survey and testing of a large area at the Ohanapecosh Campground. The use of this technique was critical in determining site distribution and internal site patterning in the campground. Speed and efficiency is often paramount in archaeological fieldwork, and the CVS technique has proven to be a smart way to economically locate buried sites, assess a site's extent, stratigraphic sequence, and condition, and to direct the placement of subsequent larger excavation units.

Goodman Elgar, Melissa, Ph.D (Washington State University), Molly Carney (WSU), Elizabeth Truman (WSU), and Kevin Lyons (Kalispel Tribe of Indians)

Up in Flames: Reconstructing Firing Conditions from a Burnt Prehistoric Depression a 45PO435, Pend Oreille Valley, WA
Thursday 10:20 AM- 10:40 AM, Meeting Room C

Excavations at 45PO435 recovered well-preserved charcoal remains overlain by oxidized sediment, and further charcoal layers. As charcoal is produced below 450°C and burns off over 500°C, we hypothesized that these deposits were produced by distinct burning events: 1) an in situ fire, 2) a higher temperature off-site fire that produced the oxidized sediments, and 3) subsequent low temperature burning events. This was assessed by heating experiments, assessment of ethnographic earth ovens, and archaeological thin sections. Experiments confirmed sediments oxidize at ≥500°C. Earth oven sediments demonstrated oxidized sediments on the fire surface and heating fronts. Thin sections documented in situ charred remains, and probable dumping of the oxidized sediments. We concluded that our hypotheses were correct. The burnt structure at 45PO435 represents a unique depositional sequence for the Plateau. Our investigations indicate the features were a special use structure memorialized by adding burnt earth and plants after its initial use.

Gossen, Candace, Ph.D. (Skagit Valley College)
Sasquatch, Pirates and the Blue Pearl: Garbage Archaeology at Deadman's Bay, San Juan Island
Friday 8:40 AM- 9:00 AM, Meeting Room E

There is an abundance of story in the San Juan Islands, both living and left behind. It seems a place of misfits and debauchery no matter what temporal period you chose, even the geology is chaotic having been smashed, split, torn and compressed by planetary forces long ago. Focusing on the very recent past however, we have collected beach trash from a very special place called Deadman's Bay. Daily collections over a one year period have been sorted, counted, analyzed and tracked using

archaeological field methods to figure out where all this stuff is coming from? Beginning in the spring of 2015, Dr. Candace Gossen taught an Archaeology class at Skagit Valley College and introduced the students to field work and garbage. What has been uncovered includes their work, stories of an invisible Sasquatch, remnants of Pirates and the living they threw overboard and a blue pearl?

Gossen, Candace, Ph.D. (Skagit Valley College)
Aliens, Akus and Giants: Paleoecological findings and cosmic events in the muck on Rapa Nui
Saturday 11:00 AM- 11:20 AM, Meeting Room C

Not all aliens are little green men, sometimes they are plants that catch a ride with the wind and make their way across the Pacific Ocean. A crater lake known as Rano Kao on Rapa Nui has been the object of research over the last 13 years. Digging thirty meters deep into the sediments below the tannin rich black water with a floating mat of alien plants, lie fossil pollen, oxygen isotopes and a colorful 15,000 year history. Uncovering trendlines, cyclic climate events as well as VEI+5 volcanic events felt around the world, the cores from Rano Kao have much to tell about the adaptation of the Rapa Nui, the ancient Mayan and the desert dwellers of the SW as we trace the disappearance of the giant palm trees, understand the importance of the timekeeper like Huri A Urenga and the spirits that protect these magical places.

Gossen, Candace, Ph.D. (Skagit Valley College)
Aliens, Akus and Giants Part Two: Archaeo-astronomy and Timekeepers
Saturday 11:20 AM-11:40 AM, Meeting Room C

Avian alHuri A Urenga is the time keeper, a solar observatory on Rapa Nui. Pau, "the red star" is carved onto a rongo-rongo tablet, but was it Halley's comet or Sirius which imploded some 2,000 years ago causing the celestial marker of the Southern Hemisphere to turn from blue to red. Two Supernova explosions 1006 and 1054 (crab nebula), is drawn on the walls at Chaco Canyon. These sky watching people based their symbols, monoliths and culture upon more than 200 eclipses, comets, and sky sightings during one of the most active astronomical periods between 1000-1100AD. Astronomical lore as written by Liller marks places and names on the island used as sky markers, mirrored in the stones and sculptures left behind. This presentation focuses on overlaying the climate events discussed in Part One and putting them onto an archaeo-astronomical timeline of these sky-earth cultures.

Gouette, Nicholas (Western Washington University)
Sandstone Saws of Site 45-WH-05: Implications for Nephrite Tool Production

Friday 9:40 AM- 10:00 AM, Meeting Room C

Nephrite was an important raw material used to form woodworking tools on the Northwest Coast of North America. Archaeologists have often assumed that sandstone saws were used by the prehistoric peoples of the coast to fashion tools out of this stone. In this study, a white, powdery residue, present on 15 sandstone saws from site 45-WH-05, was examined using the energy-dispersive x-ray spectroscopy attachment of Western Washington University's scanning electron microscope. The goal of this study was to identify the presence of nephrite in the residue and empirically link sandstone saws to the production of ground nephrite tools. The analysis revealed that the residue of the archaeological saws contains high concentrations of magnesium, silicon, and calcium. These three elements are the primary elements found in nephrite, and the presence of ground nephrite debris strengthens the connection between sandstone saws and the production of nephrite stone tools.

Graham, Tyler (WA State Dept. of Transportation)
Digitizing the Paper Trail: Replacing Paper Forms with Mobile GIS

Thursday 10:20 AM- 10:40 AM, Meeting Room F

Advances in mobile technology have reached a point where archaeologists now have the option of switching from paper forms to smartphones/tablets linked to a spatial database for data collection in the field. WSDOT Megaprojects has replaced paper archaeological monitoring forms with a mobile GIS, specifically ArcGIS Online, for data collection. Instead of reading through a file cabinet of paper forms, databases can be queried to find information quickly. Collecting data via mobile devices allows the use of built-in GPS and camera to directly link spatial location and photos with the data. Accessibility to data in the field is much easier; data that has been uploaded is viewable by all users. The time invested in initial database setup is quickly recuperated, and a well-planned database creates a standard for data collection that can be quickly implemented for future projects; small or mega.

Gray-Jeffries, Cassie, Cody W. Schwendiman, and Stephanie Gunkle (Eastern Oregon University)
A Historical Archaeology of the Mount Emily Lumber Company "Jap Camp" during the Internment Period
Friday 11:00 AM-11:20 AM, Meeting Room E

Following the Japanese attack on Pearl Harbor in 1941, the United States government ordered the evacuation and internment of over 120,000 people of Japanese heritage. The wartime imprisonment of these men, women, and

children; many of them U.S. citizens is a widely known fact amongst both scholars and the general public. What most do not know, however, is that there existed select groups of Japanese Americans who were able to escape this fate through various means. In one such instance, historical records and oral histories have revealed that a small number of Japanese Americans avoided internment by laboring in Eastern Oregon. This study focuses on the identification of one potential labor site in Union County Oregon through the analysis of material culture and historic documents.

Grier, Colin (Washington State University) and Chris Arnett (University of British Columbia)

Archaeology, History and Colonial-Indigenous Conflict at Lamalchi Bay, British Columbia

Friday 1:20 PM-1:40 PM, Meeting Room E

Lamalchi Bay on Penelakut Island in southwestern British Columbia was the site of a dramatic conflict between Salish villagers and the British Colonial government on April 20, 1863. A British gunboat attacked the village and was repulsed after an intense exchange of fire. Two weeks later the village was burned to the ground by Colonial troops. The site was pre-empted and has remained in private hands since. The battle has been historically documented, but until recently almost no archaeological research had been conducted at the site. We report on recent archaeological investigations that focus both on the historic battle and the long record of precontact Salish village life in the bay. Metal detection equipment has located shrapnel from the April 20 naval bombardment, corroborating historical reconstructions of the event. Archaeological evidence from surface survey, percussion coring and radiocarbon dating suggests a plankhouse village had existed in this location since at least Marpole times. We highlight the community-based collaboration behind this project, and how archaeological and historical documentation can provide a strong basis for redressing colonial actions against sovereign First Nations.

Griffin, Dennis (Oregon SHPO)

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

Thursday 3:00 PM-3:20 PM, Meeting Room C

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

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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.

Hackenberger, Steven D. and Sarah M.H. Steinkraus (Central Washington University, CWAS) *Archaeological Context for Reservoir Archaeology in the Cascade Region of Washington State*

Thursday 2:40 PM-3:00 PM, Meeting Room F

Over the course of 2015 a hybrid document was developed for the Bureau of Reclamation to be used in archaeological projects taking place within/near reservoirs in the Cascade Mountains of Washington State. The document includes: 1) strategies for linking research and management, 2) outlines for research domains and scales of investigation, 3) regional research contexts and a literature review with examples of research methods, and 4) a supporting appendix with summaries of key projects on both the west and east sides of the Cascades.

Haller, Jonathan M. (Stateline GIS) and Ashley M. Morton (Fort Walla Walla Museum)

Mapping the Memory of Walla Walla's Chinatown, Collaboration in Digital Public Archaeology

Thursday 3:20 PM- 3:40 PM, Meeting Room E

In 2015, Fort Walla Walla Museum collaborated with the Walla Walla Chapter of the American Institute of Archaeology (AIA), Whitman College Maxey Museum, and Stateline GIS, to give a walking tour of Walla Walla's Chinatown in participation of AIA's International Archaeology Day. While the ultimate goal of the walking tour was to highlight the contributions Chinese made to the growth and development of Walla Walla, an underlying purpose was to share the lived experience of Walla Walla's Chinese with the public at a global scale. To that end a virtual tour was designed as part of the event. In this presentation, we discuss the design of a digital public archaeology platform.

Hamilton, Stephen C. and Bradley Bowden (Historical Research Associates, Inc.)

35DS412: A Pre-Mazama Lithic Manufacturing Station on the Southwestern Flank of Newberry Caldera

Friday 10:40 AM- 11:00 AM, Meeting Room C

Site 35DS412 is a widely dispersed lithic scatter near La Pine, Oregon. Limited subsurface investigations revealed 7000 pieces of debitage and tools in just five 50 by 50 centimeter units. The majority of these artifacts were identified immediately underlying a significant Mazama ash deposit. All of the projectile points were classified as Cascade style

foliates, also known as Connolly's Foliate Variety A, a point type commonly associated with the early Cascade subphase. Most obsidian artifacts were geochemically associated with McKay Butte and West McKay, sources that appear restricted to pre-Mazama components of nearby sites. The site appears to have functioned primarily as a manufacturing station, and the assemblage supports regional analyses showing that the Newberry Crater area was well utilized for lithic procurement throughout the Holocene.

Hannah, Jean (Tacoma Community College)

Small Brick Structure Remains at Yama and Nagaya Port Blakely, Bainbridge Island, Washington

Thursday 11:00 AM- 11:20 AM, Meeting Room E

In the early 1900s, Japanese immigrants living in Yama (site 45KP105) hauled bricks up the hillside from the Port Blakely Mill to their village and built small brick and mortar structures, some of which remain standing today. They also built one cement structure. These physical structures are the only ones that have been found at the site to date. The cement structure has been interpreted as part of a water tank, and one brick structure may be part of the Washington Hotel. The purpose of the others is unknown. This paper examines and analyzes three of these brick structures and offers possible interpretations for their uses, within this once lively Japanese settlement.

Harrelson, David (THPO Grand Ronde Tribes)

Tribal Art as Outreach for Phase 3 Data Recovery within 35CL96

Thursday 11:00 AM- 11:20 AM, Meeting Room D

The focus of this presentation will be on collaborative approaches and problem solving as a component of large infrastructure projects. The Confederated Tribes of Grand Ronde Community of Oregon proposed the installation of art and interpretation as an outreach component to Phase 3 data recovery work planned within the Burnett archaeological site (35CL96) in Lake Oswego, Oregon. When avoidance options are limited, alternatives costly or impacts unavoidable; creative solutions are needed. Successful Tribal inclusion with all partners early on allowed for success as well as unanticipated positive outcomes.

Harris, Megan (Simon Fraser University)

Spatial and Temporal Distributions of Ground Stone Disk Beads in the Salish Sea

Friday 10:20 AM- 10:40 AM, Meeting Room C

Ground stone disk beads represent an abundant artifact class with a rich temporal depths and a vast spatial range within the Salish Sea region. These beads appear in large frequencies at a number of different archaeological site types (e.g. burials, villages, middens, subsurface lithic scatters). However, studies surrounding these beads have

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been limited to singular instances of site-specific frequencies without consideration to regional and temporal patterns.

This presentation compiles a spatial distribution of archaeological sites with these beads present in their assemblages and initial interpretations of spatio-temporal trends based on the recovered context of these beads from pre-4500 BP to post-500 BP.

Harrison III, James Burr (Spokane Tribe of Indians)

Consultation, Consent, or Circumvention: The Endangered Mount Spokane (čq'wulsum) TCP

Thursday 1:20 PM- 1:40 PM, Meeting Room B

Mount Spokane is an important heritage resource area for the Spokane Tribe of Indians, traditionally known as the *snx'mene*. The mountain is a creation site, as recounted in the story *tu'sp'er't*, as well as a vision quest and pilgrimage location. Mount Spokane is a critical hunting and gathering destination, and remains important for huckleberries and other plants. This paper provides an overview of the Tribal history and use of Mount Spokane. It highlights our ongoing efforts to preserve intact portions of this site from encroachment by a proposed ski area expansion. This is a part larger goal to record and preserve important TCPs and traditional plant patches across the Tribe's ceded territory for the benefit of present and future Tribal members.

Hawes, Kathleen L. (Pacific Northwest Archaeological Services)

Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition: Cellular Analysis and Identification of the Biderbost Wet-Site Basketry Collection

Thursday 3:40 PM-4:00 PM, Meeting Room F

Microscopic identification by cellular analysis of the 2,000 year old Biderbost wet-site pack baskets, currently located at the U.W. Burke Museum in Seattle, reveals the materials used in the construction of this collection of beautiful ancient weaving technology. I worked with Suquamish Master Basketmaker and Elder Ed Carriere, and Dr. Dale Croes, Wet-Site archaeologist and an expert in the analysis of ancient Northwest Coast basketry, to understand the qualities, stylistic similarities and differences, and uses of the traditional materials found in basketry from this time period and areal region. I will discuss the dilemmas in identifying the collection, including (1) the preservation techniques that were used in stabilizing the baskets following WAS's first ever Northwest Coast wet site excavation in early 1960s, (2) obtaining samples that correctly corresponded with warps and wefts of each basket fragment, and (3) the process of cellular analysis involving plant and plant parts (root, limb, and bark) used at this ancient site.

Hawthorne, Paige and Colin Grier (Washington State University)

Put a bird on it! A multi-analytical approach to avian analysis in Southwestern British Columbia

Saturday 9:00 AM- 9:20 AM, Meeting Room F

Zooarchaeological identifications provide important data related to subsistence changes and the exploitation of past environments. Previous faunal analyses at Shingle Point (DgRv-2), Dionisio Point (DgRv-3), and the Coon Bay/Perry Lagoon (DgRv-6) sites have indicated multiple occupations with important variation in archaeofaunal representation. These locales exhibit a variety of avian fauna, which are not frequently explored in detail in zooarchaeological analyses. We present new osteological data to understand the exploitation of avian species at these sites, which include plankhouse and midden contexts that span the Marpole and Late periods. Through analyzing the avian faunal assemblage, we can understand change over time in resource exploitation across a variety of microenvironments. The results also illustrate how settlement patterns and food acquisition in the southern Gulf Islands involved aspects of landscape construction and modification to enhance resource diversity and abundance.

Henderson, Joshua (Western Oregon University Anthropology Club)

Digital Technology and a New Era for Archaeology: Cooper's Ferry, Idaho

Saturday 9:20 AM-9:40 AM, Meeting Room C

The field of archaeology has a longstanding set of traditional research methods. I argue in favor of implementing a new series of digital and three dimensional methods that will not only change how archaeology is conducted, but will open the door to invaluable new information that was previously inaccessible. This project draws on my experience at the 2015 Cooper's Ferry field school conducted by Oregon State University. OSU is on the cutting edge of these new digital technologies, as they aim to discover new information about Western Stemmed Tradition peoples that thrived in the Great Basin. The responsibility of our discipline is to tell the whole story of these early Americans. I argue that this can only be done with the use of digital and three dimensional technologies, as this will expose new information and further preserve the integrity of the sites we study.

Henebry-DeLeon, Lourdes (Central Washington University)
Do Old Measurements Measure Up? Southern Columbia Plateau Osteometrics

Friday 2:40 PM- 3:00 PM, Meeting Room D

Evaluating the consistency of osteometric measurements by previous researchers can determine the comparability and accuracy of their measurements. This paper assesses osteometric measurements taken on Native American

human remains excavated from the southern Columbia Plateau from the 1930s through the 1980s. Cranial and postcranial osteometric measurements of the same remains taken by several researchers were compiled and metric values for each element that had comparable data were evaluated. Conclusions about which measurements can be used with confidence and which should be used with caution are discussed.

Hill, Alexander K. (University of Washington), Drew H. Bailey (University of California, Irvine), Robert S. Walker (University of Missouri) and David A. Puts (Pennsylvania State University)

Sexual Selection on Primate Vocalizations: The Evolution of Sex Differences in Pitch

Friday 3:00 PM- 3:20 PM, Meeting Room D

Some anthropoid primates exhibit conspicuous sex differences in call frequencies. Although such sexual dimorphisms in secondary sex traits are often the products of past sexual selection, no systematic test of this hypothesis has yet been conducted regarding sex differences in anthropoid vocalizations. We therefore measured fundamental frequency (F0), the acoustic correlate of pitch, in 1723 calls from 34 species representing 24 anthropoid genera, obtaining data on mating system and body mass from the literature. We found that (1) among apes, humans exhibit the greatest sexual dimorphism in F0, (2) across species, body mass negatively predicts F0 in both sexes, and (3) with sexual dimorphism in body size controlled, and males exhibit lower F0 relative to females in polygynous species than they do in monogamous species. In addition, phylogenetically independent contrast analysis revealed increases in F0 sexual dimorphism during evolutionary transitions toward polygyny and decreases during transitions toward monogamy. The results of the present study thus support the hypothesis that sexual selection favors lower F0 among male anthropoids.

Hoke, Amanda S. (Eastern Washington University, Kalispel Tribe of Indians)

The Story of Coyote, Salmon, Trout and the Pend Oreille

Thursday 10:40 AM- 11:00 AM, Meeting Room C

There is a long and rich oral history of the use of native fish in the Pend Oreille river valley by the Kalispel people. Because of a lack of reliable methods, the archaeological record has been frustratingly vague as to exact species that were utilized. Salmon are the most recognizable fish in the Columbia Plateau, yet these fish are not supported in several of the tributaries in the Pacific Northwest, including the Pend Oreille. Questions arise as to which species of fish are found in archaeological sites and how they were utilized compared to other Columbia Plateau tribes. With newly developed research methods and tools, it is now possible to

taxonomically identify and inventory the faunal remains of fishes from an archaeological dated context that may corroborate the oral traditions of the native peoples of the Pend Oreille.

Holm, Emma (Pacific Lutheran University) *Inferences about Land Use using Lithic Tools and Debitage: A Comparison of Four Archaeological Sites in the Mount Rainier Area*
Thursday 10:20 AM- 10:40 AM, Meeting Room A

Beginning in the Early Holocene, the Mount Rainier area was a focus of prehistoric seasonal exploitation. In this region, geographic and resource variation resulted in differential land use and subsistence patterns. Theoretically, shifting resource availability and increasing population density also caused temporal variation in systems of settlement. Archaeological assemblages recovered from mountainous locations in this area can be used to investigate inferences pertaining to these temporal trends. Particularly, the presence of specific tool and flake types in the assemblages reflect the activities that took place at these locations. The following paper offers a comparison of the lithic tools anddebitage from four temporally varied sites to refine inferences about the prehistoric use of the Mount Rainier area.

Holter, Russell (DAHP)

Developmental Pressures on Linear Historic Resources (a case study on the Hawaiian Railway Society)

Thursday 11:00 AM- 11:20 AM, Meeting Room F

Historic resources face complicated regulatory issues that can only compound when the resource covers an area in square miles. Learn about the significance of the last remaining operational railway in the State of Hawaii. Development pressures, vague agreement language, ownership issues, and the outside pressure of enormous real estate developers wielding political influence create dynamic forces that collide in a chain reaction of events that affect a National Register listed property. Do the small-time, stuck in the past, ma-and-pa tourist operator stand a chance?

Hooper, David (University of Montana, Mount Rainier National Park)

Traditional plant collection within Mount Rainier National Park and its Ecology

Thursday 3:40 PM- 4:00 PM, Meeting Room A

The United States' National Park Service purposed a rule change, which if accepted, would clarify park superintendents' authority to permit Native Americans to collect limited quantities of plant and mineral resources in parks for traditional uses. If these rule changes go through, the establishment of collecting agreements requires both an understanding of cultural and biological factors that

influence traditional harvesting practices. Since 2006, I, with cooperation of the Nisqually Native American Tribe, and Mount Rainier National Park, have studied the ecology of traditional plant harvesting. The mechanisms for the sustainable harvest of beargrass (*Xerophyllum tenax*), pipsissewa (*Chimaphila umbellata*), and peeling bark of western redcedar (*Thuja plicata*) are cultural practices, which works within the plants tolerance to damage, or maintains its ability to reproduce. The approach used in conducting this research is one possible set of methods for collecting data needed in establishing collecting agreements.

Hopt, Justin and Colin Grier (Washington State University)
Correspondence Analysis and Shell Middens: Exploring Patterns in Faunal Data to Decipher Complex Depositional Environments

Saturday 10:40 AM- 11:00 AM, Meeting Room F
Shell middens are perhaps the most ubiquitous and studied archaeological site type in the Northwest Coast culture area. Despite this, they are still not well-understood from a depositional and functional viewpoint. This is due to their depositional complexity, but also to the analytical complexity of controlling large amounts of disparate excavation information. Because of this, shell middens on the Northwest Coast have largely been treated as primarily mounds of subsistence refuse, despite evidence for additional purposes and functions. Using faunal data from site DgRv-006, a late Holocene shell midden located on Galiano Island, British Columbia, we present a multivariate exploratory data analysis focusing on the applications of correspondence analysis to shell midden data. Our goal is to illustrate how multivariate techniques can be used to both identify discrete areas of the midden and summarize overall variability, providing the potential for deciphering the different uses of middens through time.

Horton, Beth (National Park Service)
Run It Up the Flagpole: Traditionally-Flaked Tools and Military Power Relationships at mid-19th century Vancouver Barracks, Washington

Thursday 2:40 PM- 3:00 PM, Meeting Room C
Vancouver Barracks in southwest Washington served as the administrative headquarters for the U.S. Army in the Pacific Northwest, and played an important role in supporting troop mobilization for the 19th century Indian Wars. Simultaneously, military records document Native Americans hired as paid day laborers at this post. The central parade ground formed the primary ceremonial space for military and civilian personnel, with its most important structure being the central flagstaff, upon which the American Colors flew. This symbol of government authority featured prominently in American ceremonial celebrations as an expression of unity and strength. In 2014, test

excavations were undertaken at the historical ca. 1854 to 1879 main flagstaff at Fort Vancouver National Historic Site. Recovery of intentionally flaked lithic and glass tools with other historical artifacts raises questions on intercommunity power relationships and construction of identities during a time of increasing tension and hostility in the region.

Hotze, Karla (AINW)
Exploring Relationships between Stacked Rock Features and Rock Art within the Traditional Territory of the Klamath Tribes

Thursday 2:00 PM- 2:20 PM, Meeting Room F
During cultural resource studies for the Ruby Pipeline project, petroglyphs were identified in close proximity to stacked rock features along the East Branch Lost River in the southeast corner of Klamath County, Oregon, in the traditional territory of the Klamath Tribes. This spatial association inspired an investigation into what relationship there might be between stacked rock features and rock art in the traditional territory of the Klamath Tribes and what insight might be gained from exploring this potential relationship. This preliminary research reviews existing records and literature to examine where and how often stacked rock features and rock art co-occur; summarizes existing ideas about the potential relationship between these features; and presents future opportunities for research.

Hulse, Eva, Ph.D. (AINW)
Chronology and Geoarchaeology of the Burnett Site (35CL96)

Thursday 9:20 AM- 9:40 AM, Meeting Room D
The sediments of the Burnett Site contain evidence for site formation processes, past environmental conditions, and chronological data which can be used to estimate the timing and duration of human settlement in the area. Recently-obtained optically-stimulated luminescence and radiocarbon dates confirm that the earliest sediments at the Burnett Site date to the terminal Missoula Floods, while human settlement likely began shortly thereafter and intensified along with the growth of mid-Holocene conifer woodland. Despite evidence for post-depositional disturbance, important chronological information has been preserved.

Hundley, James (Binghamton University, SUNY)
The Role of the Border in Tribal Journeys: Lessons for Environmental Anthropology

Friday 9:20 AM- 9:40 AM, Meeting Room A
A leader from the Squamish Nation described Tribal Journeys as “the best thing happening in “Indian Country.” There is a cultural revitalization occurring among the Coast Salish; they are using nationalist rhetoric to strengthen their environmental politics as they fight against energy and

development projects on both sides of the border. While Tribal Journeys has much to offer environmental anthropology this paper argues that it is crucial to also include border studies when examining the annual canoe journey. I argue that understanding Coast Salish environmental politics necessitates engagement with the international border that artificially separates the Coast Salish. This ethnographically based paper presents data from participation with the canoe journey from 2013-2015 to demonstrate how the border itself has been an active player in the strengthening of the Coast Salish Nation, individual Coast Salish nations, and how the border currently shapes environmental politics.

Hunt, Peter and Dan Warter (Maritime Documentation Society)

The Lost Intruder

Friday 2:00 PM- 2:20 PM, Meeting Room B

On November 6, 1989, a U.S. Navy A-6 Intruder suffered a catastrophic mechanical failure and crashed off Whidbey Island. The crew ejected safely. Despite a three-month effort involving four ships, the Navy's search for the missing jet was unsuccessful and the cause of the accident was never positively determined. In 2014, twenty-five years after the crash, former A-6 pilot Peter Hunt decided to find the lost aircraft, knowing that it might be his final opportunity. Hunt was diagnosed with Parkinson's disease in 2005. With the assistance of Maritime Documentation Society explorers and technical divers, the lost Intruder team researched, searched, and conducted deep water identification dives. After nearly two years of effort, the team was successful. This is the story of the discovery of the lost Intruder.

Iversen, Dave (ASM Affiliates)

Fire Modified Rock Analysis from a Damage Assessment of 45WH525

Friday 3:20 PM- 3:40 PM, Meeting Room F

Fire modified rock (FMR) analyses have the potential to provide important information concerning past human behaviors, but relatively little emphasis has been placed on these studies. While archaeologists tend to utilize relatively uniform methods for the collection, analysis, and curation of most cultural materials, no such standards exist for FMR. Further complicating FMR studies in the realm of cultural resource management (CRM) is the fact that many CRM projects represent limited scope and scale excavations, often dealing with only a small portion of a site and resulting in the recovery of relatively small FMR samples from dispersed, non-feature contexts. This presentation provides the results of an FMR analysis conducted on such a sample collected during a damage assessment of a shell midden site (45WH525) on Point Roberts, Washington, and posits questions on the usefulness of such studies.

Johnson, Jeffrey Cortlund (Eastern Washington University, Dept. of Anthropology and Geography)

Projectile Point Variation in the Pend Oreille River Valley
Thursday 9:20 AM- 9:40 AM, Meeting Room C

This paper examines projectile point variation within the middle Pend Oreille River Valley, between Newport and Lake Pend Oreille, by means of a large donated projectile point collection, currently curated by the Cultural Resource Program of the Kalispel Natural Resource Department. This collection consists of 462 projectile point/knives with site provenience. Other collections from this region have been utilized for comparative purposes by CRM professionals (Miss and Hudson 1987; Thoms et.al. 1986). While projectile point variations and typologies have been established for other watersheds within the Columbia Plateau (Lohse 1984a; 1984b; Rice 1972; Swanson 1972; Leonhardy & Rice 1970; Nelson 1969; Daugherty 1956), there remains a need for a systematic examination of projectile point variation for this region. The attribute analysis of this collection using a combination of Binford 1963 and Lohse 1984a methods will provide insight into the identification of the attributes that combine to constitute useful projectile point types found in the region.

Johnson, Katie and Chelsea Rose (Southern Oregon University)

What's For Dinner? Interpreting the Faunal Assemblage from the Jacksonville Chinese Quarter

Thursday 11:20 AM- 11:40 AM, Meeting Room E

Archaeological excavations into a dwelling in the Jacksonville Chinese Quarter resulted in the recovery of more than 50 pounds of faunal material. Unlike many Chinese immigrant assemblages, the material reflects the consumer choices of a single household, thus providing a rare window into the individual Chinese experiences on the early American Frontier. As such, this assemblage will not only provide insight into what residents were eating, but also how their cultural identity, the availability of traditional foods, and interactions with populations of differing cultural identities influenced food choices. This paper will illustrate the different avenues that we are using to explore these research questions.

Keller, Sarah (Eastern Washington University)

Food aversion: From Revulsion Response to Childhood Ickyness

Friday 10:40 AM- 11:00 AM, Meeting Room F

Whether a person likes or dislikes a specific food's taste is the result of factors that may be biological, social and/or idiosyncratic. The larger study of which this paper is a part, investigates the causes of strong aversion in some individuals to certain foods that are otherwise accepted in American culture. This particular paper focuses on some

aversions that appear to be situational, traumatic, or associated with an individual's life history. Behavioral causes also appear to be at work when initial food aversions are reversed to become enjoyed foods as a result of subsequent positive associations. Three groups of participants were surveyed: professional chefs/sous chefs and cooks; gourmets/gourmands/foodies; and a convenience sample of students and adults who did not identify with either of the other two groups. A small convenience sample of the latter two groups was also interviewed.

Kiel, Lindsay (University of Idaho)

Food and Identity: the Archaeology of Neophyte Diet at Mission Santa Clara de Asís

Saturday 11:00 AM- 11:20 AM, Meeting Room F

The neophyte housing complex of Mission Santa Clara de Asís, one of the five Spanish missions established in the San Francisco Bay region during the California Mission Period, was excavated between 2012 and 2014. Excavations unearthed numerous refuse pits that contained a variety of faunal remains. Feature 157 was made up of three distinct multi-use pit sub-features that contained the remains of a variety of fauna. The assemblage dates to approximately 1777-1837 and contains several thousand bones. The fauna recovered from this feature highlights the complexity of feeding the mission's residents, illustrating consumption of both domesticated animals (provided by the Spanish Padres) and wild fauna gathered by Mission Indians.

Kleer-Larson, Corey (University of Idaho)

Our Lady of the Woodland: The Faith and Devotion of Pierce, Idaho

Friday 9:00 AM- 9:20 AM, Meeting Room E

Our Lady of the Woodland Catholic Church in Pierce, Idaho now sits shuttered. No longer do faithful parishioners sit in its pews, instead it rests quietly among the timber surrounding Pierce. Our Lady of the Woodland was a church built by a community, through the organization of a single Priest. Its facade, unlike other catholic churches of its age, is but one clue that this particular church is unique. It stands now as relic of all those faithful who helped to build it, move it, and care for it. Our Lady of the Woodland Catholic Church is not only a house of God, but a fixture in the life stories of many.

Krogstad, Tiffany J. and Julia Smith (Eastern Washington University)

Language ideologies and class among African Americans in Cheney, Washington

Saturday 9:00 AM- 9:20 AM, Meeting Room B

Individuals use language in the context of race and class. This research examines the ideologies associated with

African American Vernacular English (AAVE). It argues that language ideologies and class identity interact and affect how individual African Americans shift between AAVE and Standard English in the diverse and interracial communities of Washington State. I conducted interviews with African Americans and others in the Cheney area in order to access the local language ideologies of both populations and explore how their language use changes in different social contexts. I also use my own observations and experiences as a female speaker of both languages. Through this data, I can explore whether African Americans in a class setting with potential mobility are more likely to resist the use of AAVE and express ideologies more consistent with their non-African American counterparts than other African Americans.

l̥akʷə́l̥ás (Tom Speer) (Duwamish Tribe)

The Spirituality of Flowing Waters

Friday 10:20 AM- 10:40 AM, Meeting Room A

The stewardship of the ʔálʔaltəd (Duwamish Ancestral Homeland) is an important cultural and ecological priority for the Duwamish Tribe. This presentation introduces cultural concepts, places, and people underlying traditional Duwamish Tribe protection and management of waterways and natural resources. All waters are part of a female spirit-being; dʷákʷay ("Dzaqay") is her name. Disrespect for water spirit-being dʷákway, for her "trembling", and for her life-giving Waters can cause misfortune, injury, and death. The village tuwʷxʷúbəd (That-Which-Gleams) was located where Thornton Creek meets hikw xáčuʷ (Big-Lake, Duwamish Lake, "Lake Washington"). Historically families owned specific fishing sites on streams, creeks, and rivers, and built fish-traps and salmon weirs with "escapement" engineered into them. Pollution of and damage to sacred springs, streams, creeks, and rivers was an anti-social act that violates the sacred relationship between human beings and spirit-beings risking the lives of individuals and communities.

Lancaster, JD L. and Loren G. Davis (Oregon State University)

Initial Results of Test Excavation at Silvies Cave, Grant County, Oregon

Friday 11:00 AM- 11:20 AM, Meeting Room C

Test excavations conducted in 2015 at the Silvies Cave site (35GR2581) revealed a stratified record of cultural occupation that may extend back into the late Pleistocene. A 1 × 6 m test trench excavated to a maximum depth of 100 cm spans a portion of the cave's interior and extends past the dripline onto the colluvial apron below. Excavations recovered 7,164 pieces of debitage and 89 stone tools, including 32 projectile points. The site's upper deposits produced Archaic projectile point varieties while lower deposits contained fragments of multiple Western Stemmed

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Tradition projectile points. Lower deposits also produced a fluted point base from sediments infilling a rodent burrow. Excavations planned for the summer of 2016 aim to evaluate whether a buried Western Fluted cultural occupation exists in the lower deposits of Silvies Cave and will test multiple hypotheses about the nature of early Great Basin cultural traditions.

Lape, Peter and Laura Phillips (University of Washington, Burke Museum)

Reflections on the Burke Museum's Role in the Ancient One Case

Friday 9:40 AM- 10:00 AM, Meeting Room D

The Burke Museum was selected to provide safe and respectful storage of the human remains known as the Ancient One or Kennewick Man in 1998, two years after they were collected from the banks of the Columbia River. The remains continue to be stored at the Burke to this day. In this paper, we provide an overview of the history and challenges of the Burke Museum's involvement with these remains. We will discuss storage conditions, conservation, data tracking, service to tribes, government agencies, researchers and the general public and the unique responsibilities that museums like the Burke have in these situations.

Lebo, Kate (Author)

All Tomorrow's Pie Ladies: Baking as Metaphor, Self Help, and Big Business in Modern Fiction and Memoir

Thursday 2:00 PM- 2:20 PM, Meeting Room E

Women who bake deal in metaphor as much as they deal in dough. Especially pie ladies, for pie has long been the American pinnacle of feminine competence. This paper will examine how heroines in modern American fiction and memoir (like James M. Cain's novel *Mildred Pierce*, Beth Howard's memoir *Making Piece*, or Adrienne Shelly's movie *Waitress*) use pie as a vehicle for ambition and self-expression. It will illustrate how pie is key to their transformation into small businesswomen, investigate how these pie(business)ladies court success by appealing to and exploiting the traditional gender norms associated with pie, and meditate on how their dance between succumbing to and subverting feminine stereotypes denies us easy conclusions about love, family, identity, and success.

Lichtenberg, Nicole (University of Idaho)

No One Has the Emic Perspective (Yet): The Anthropology of New Student Orientation

Saturday 9:40 AM- 10:00 AM, Meeting Room B

Recruiting and retaining new students are areas of concern for most public universities, with significant emphasis placed on New Student Orientation programs to function in aiding new students and families in their transition to higher

education. While there is much written about best practices in orientation, transition, and retention (OTR), few, if any, scholars have approached orientation from an anthropological perspective. Through analysis of accepted best practices for OTR and of survey feedback from incoming students at a public land-grant university who participated in New Student Orientation, orientation programs can be studied as rites of passage. Viewing orientation through an anthropological lens sheds light on how and why orientation functions. Viewing orientation as a rite of passage contributes valuable insight to the field of OTR by highlighting ways that rites of passage can facilitate group membership, transition from one status to the next and impart necessary information to incoming students.

Lyons, Kevin (Cultural Resources Program Manager Kalispel Tribe of Indians)

A Story about Much Loved and Often Poorly Understood Numbers: An Emerging Zeitgeist of Archaeology as Database

Thursday 9:00 AM- 9:20 AM, Meeting Room C

There is an emerging zeitgeist in Pacific Northwest archaeology as database rather than narrative that echoes trends already ongoing in more matured archaeological regions of the world. Presently no less than four independent and parallel efforts are known to the author that are embarked in partial, regional, or international accumulations of radiocarbon data sets. Although each is dimly aware of the other; none affirm absolute centrality and authority on the topic. Laudable as these efforts are there is, however, the potential of viewing this data horizon from a foxhole perspective rather than from an elevated ridgeline. To attenuate the potential for errors of omission or lack of inter-component comparability of data, the Kalispel Tribe of Indians shares its summary of investigation along these lines of inquiry and with a perspective that emphasizes the need for sustainability and accountability.

Maroney, Kendra L. (Kalispel Tribe of Indians)

What lurks below... deep analysis of three GPR projects near the Pend Oreille River

Thursday 11:00 AM- 11:20 AM, Meeting Room C

Ground penetrating radar (GPR) is a non-invasive tool used in archaeology to conduct subsurface inventory. The Kalispel CRM program completed three GPR projects in 2015 in Pend Oreille County, WA and Bonner County, ID. These projects took place in different seasons, on different landforms, and are associated with three different archaeological sites. These experiences shed light on the capabilities and limitations of the technology. Differences were observed in three areas: 1) GPR data collection and processing for seasonal conditions, 2) methods for data collection and processing for variable landscapes, and 3) characteristics of

previously documented historic and prehistoric sites. To illustrate these differences, we present the methods and results of these projects using 2D and 3D modeling in GSSI Radan 7, as well as Golden Software Surfer 12 and Voxler 3. Through these and future GPR projects, we will build a local atlas of archaeological signatures and feature types.

McClure, Rick and Cheryl Mack (Headwaters Historical Services)

Late pre-contact land use on the lower Ohanapecosh River: the archaeology of Awxanapak-ash (45LE220)

Thursday 11:40 AM- 12:00 PM, Meeting Room A

Salvage excavations were conducted in 1997 at Awxanapak-ash (45LE220), a multi-component archaeological site located near the mouth of the Ohanapecosh River, south of Mount Rainier. A major flood event in 1996 caused severe erosion, exposing artifacts and features along the collapsing riverbank. Evidence of salmon fishing in the form of harpoon points and burned and calcined salmonid bone was recovered from a fire hearth, which also contained charred hazelnut shells. Radiocarbon dates indicate the hearth was used ca. AD 1650. Obsidian sourcing and blood protein residue analysis further connect the site to montane hunting and gathering activities within the broader landscape. The excavation results are discussed in terms of Burtchard's land-use model for the Mount Rainier area, relationship to other sites in the Ohanapecosh watershed, and historic period Taytnapam use of the site.

McDermott, Megan (Edmonds Community College)

Powwow: A Cultural Celebration and a Gathering Full of Life

Friday 11:20 AM- 11:40 AM, Meeting Room A

Many aspects of colonialism cause inter-generational trauma for Indigenous peoples. The American Indian Religious Freedom Act of 1978 helped protect the practice of once-banned ceremonies, traditional beliefs, and access to sacred sites. Colleges began hosting powwows to support students by bringing families to campus. The Edmonds CC powwow began over thirty years ago and provides a safe place for good medicine that is drug and alcohol free. College powwows celebrate cultural heritage, ecological knowledge, and an Indigenous way of life. Powwows are full of vibrant colors, powerful singing voices surrounding drum circles, and dancers of different styles covered in beautiful handmade regalia. People are an integral part of powwows, whether they spectate, dance, sing, sell their crafts, or are a part of the committee. In this presentation I summarize my healing experiences as a student leader on the Edmonds CC powwow committee. Our next powwow is May 6-8, 2016.

McLemore, Morgan (DAHP)

An Introduction to Cloud-Based Archaeology Inventory Work through WISAARD

Saturday 10:40 AM- 11:00 AM, Meeting Room C

The Washington State Department of Archaeology and Historic Preservation (DAHP) is bringing archaeological inventory work into a new age of cloud-based technology for all of its stakeholders. Through seamless integration into DAHP's existing WISAARD web portal, this platform will streamline data entry, mapping, review, compliance, eligibility concurrences, maintain real-time transparency amongst applicable project stakeholders, as well as alleviate some of the expensive burden placed on archaeological consultants to maintain their own desktop cultural resource management systems. This will be the community's first introduction to DAHP's Online Archaeological Site Inventory form scheduled for release in the Spring of 2016.

Meyer, Jon (Confederated Tribes of the Colville Reservation)

The Aftermath of the 2015 Fire Season on the Colville Reservation

Thursday 10:20 AM- 10:40, Meeting Room B

The fires of 2015 represent the greatest natural ecological catastrophe to hit the Colville Reservation since, perhaps, the eruption of Mt. Mazama. The Tunk Block and North Star fires burned approximately 250,000 acres, affecting nearly 300 cultural sites. This presentation reviews fire effects at several sites, including pictographs, historic structures, and other site types. We then comment on the treatment options available for stabilizing and protecting damaged sites. Using examples of similar sites, we discuss the effectiveness of various site protection measures and explore proactive site protection options for use against future fires.

Moran, Chelsea (Olympic College)

Identifying and Comparing the Residential Areas of Yama and Nagaya

Thursday 9:20 AM- 9:40 AM, Meeting Room E

The Japanese village of Yama, located on Bainbridge Island, Washington, is a late 19th century immigrant village that housed approximately two hundred Japanese Americans and their families. In the summer of 2015, the Olympic College field school began surveying the site to discover the layout of the village and further define the boundaries of the two housing areas at the site: Yama (family residences) and Nagaya (bachelor residences). In order to better understand how the village functioned as an entire unit and help identify how single immigrants and families interacted with each other, further surveying and excavation is planned. This presentation combines what is known from archival data with the analysis of the 2015 field survey to suggest the

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surveying of areas that have potential to help define the housing area locations, their structures, and the differences between them. I conclude that we have a good indication as to where the residential area of Yama is but that more surveying and research needs to be done to find the location of Nagaya.

Murphy, Kerrie S. (University of Washington)
The Making of a Mormon Sacagawea: Decolonizing Representation and Identity

Friday 3:20 PM- 3:40 PM, Meeting Room A

Descendants of Peninah Schropshire Cotton Wood, a Cherokee servant accompanying Mormons on the trek from Illinois to Utah in the 1840s, reimagined her as a Mormon Sacagawea a century later. Central to this making of a Mormon Sacagawea were narratives combining her hard work, as a testament of her contributions to colonization rather than acknowledging her traditional ecological knowledge as part of her indigeneity. This presentation seeks to decolonize Peninah's memory by unmasking the settler colonial and gender assumptions underlying the making of a Mormon Sacagawea. This image, like the myth that grew around Sacagawea, remembers Peninah for the services she provided to white men while failing to understand the complexities of her life and her Cherokee identity.

Murphy, Thomas W. (Edmonds Community College)
Green Infrastructure in Puget Sound Municipalities: An Ethnographic Inquiry

Friday 1:20 PM- 1:40 PM, Meeting Room A

Mixed methods of participant observation, document analysis, interviews, focus groups, and an online survey have yielded insights into barriers faced by municipal employees as they implement green infrastructure in the Puget Sound region. Maintenance, especially when public agencies need to ensure that it is occurring on private property, appears as the most persistent barrier. Uncertainties in cost and performance increase risk and liability and drive up project costs. The challenge of retrofitting legacy infrastructure appears persistently. Communication across municipal divisions, especially those dividing public works from planning and community development, can be difficult. Potential solutions include: Reduction of risk and uncertainty with cost, benefit, and performance analyses, making developers responsible for environmental damage through better enforcement, more effective internal and external communication, grants and other financial assistance for retrofitting legacy infrastructure and for staff, training, and green infrastructure projects, and an ecosystems services approach to municipal and project accounting.

Murphy, Thomas W. (Edmonds Community College)
All the Wrong Plants and Animals: Grave-robbing and the Book of Mormon

Friday 3:00 PM -3:20 PM, Meeting Room A

Joseph Smith presented the Book of Mormon in 1830 as a history of American Indians. His account drew criticism for its anachronistic placement of European plants, animals, and technology in pre-Columbian America. While most scholars recognize this scripture as a product of the nineteenth-century, some Mormon scholars have advocated an ancient origin for the book. Anthropologist John Sorenson has proposed that ancient authors used familiar plants and animals from the Old World as names for the unfamiliar ones they encountered here. This paper proposes, instead, that Joseph Smith's early career as a money-digger looting the burial mounds and ruins of the Haudenosaunee Confederacy provided him with experience of European plants, animals, and technology in Native cemeteries. Rather than recognizing these items as products of recent trade with European colonists, Smith projected their history back into pre-Columbian times and credited them to an ancient white race of Mound Builders.

Nakonechny, Lyle (Transect Archaeology)
Prehistoric Occupation at the Forks Creek Site, Willapa River Valley, Southwest Washington

Friday 3:00 PM -3:20 PM, Meeting Room C

Excavation at the Willapa River Valley Forks Creek site identified 2700 year old archaeological deposits associated with the seasonal utilization of a fire maintained "prairie garden", and the Willapa River. This presentation addresses site formation processes, resource utilization, and lithic technology at the Late Holocene near coastal Willapa River alluvial terrace site. The occupants of the Forks Creek site harvested summer hazelnut and bitter cherry, processed elk, deer, and salmon, and manufactured and maintained scrapers, leaf-shaped knives, and projectile points made from locally available fossilized clams, indurated siltstone, and CCS pebbles and cobbles. Exotic trade obsidian is well represented at the seasonal "prairie garden" site in the form of micro-debitage from tool maintenance. At Forks Creek, microblades were manufactured for their technological qualities, illustrating similarities to "Locarno Beach" assemblages in the Strait of Juan de Fuca and Salish Sea.

Neller, Angela (Wanapum Heritage Center), Kate Valdez (Yakama Nation), and Jacqueline Cook (Confederated Tribes of the Colville Reservation)

Repatriation of the Ancient One – A Tribal View: Then, Now, and In-Between

Friday 11:00 AM -11:20 AM, Meeting Room D

The Ancient One's (Kennewick Man) nine thousand year old human remains were claimed by Native American Tribes as

their ancestor after the inadvertent discovery along the banks of the Columbia River in 1996. What simply began as an Inadvertent Discovery, as defined by the Native American Graves Protection and Repatriation Act (NAGPRA), turned out to be a 20 year challenge to the Act, tribal culture, oral traditions and religious beliefs. In 2004, the Ninth Circuit Court of Appeals upheld a lower court ruling allowing scientific study of the Ancient One, as the courts determined this individual was not Native American, and therefore not subject to NAGPRA. Since the individual was not Native American he could not be affiliated with Columbia Plateau tribes. Despite court rulings, the Confederated Tribes of the Colville Reservation, Confederated Tribes and Bands of the Yakama Nation, Confederated Tribes of the Umatilla Indian Reservation, the Nez Perce Tribe of Idaho, and the Wanapum Band have stood by their knowledge and traditions. These tribal teachings were substantiated by DNA studies. The Ancient One is Native American and related to the claimant tribes. This presentation will discuss the journey the Claimant Tribes made in their effort to repatriate the Ancient One, the effects on NAGPRA, and the relationships between the Claimant Tribes and Agencies.

Nims, Reno and Virginia Butler (Portland State University)
Late Holocene biogeography of sablefish (*Anoplopoma fimbria*) in the Salish Sea

Saturday 9:20 AM -9:40 AM, Meeting Room F

Sablefish (*Anoplopoma fimbria*) is a commercially important deep water groundfish that inhabits nearly every habitat of the North Pacific coast over the course of its life history. This species is rarely observed in the Salish Sea today, but new evidence from Tse-whit-zen – a Lower Elwha Klallam Village on the Washington shore of the Strait of Juan de Fuca – shows that sablefish was abundant in this region for the past 2,000 years. Using body-size regression analysis, we show that sablefish at Tse-whit-zen are entirely represented by juveniles that were captured from relatively shallow, near shore waters. The abundance of juveniles at Tse-whit-zen, and the occurrence of sablefish in other Salish Sea archaeological sites, indicates this species occupied a broader geographical range in the past.

Ochoa, Jessica R. (Eastern Washington University)
"¡Según el doctor!..": Mexican and Mexican-American mothers' perceptions and attitudes towards dominant views of food, health, and childhood "obesity" in Yakima, Washington

Friday 10:20 AM -10:40 AM, Meeting Room F

This research project examines Mexican and Mexican-American mothers' (mothers) perceptions and attitudes to childhood obesity. The purpose of this study is to identify mothers' perspectives on food and health systems in the U.S., allowing for an analysis of the material conditions

surrounding food and health consumption, production, and distribution. The study uses information from published sources while incorporating interviews with mothers to identify how they expose, negotiate, and resist the limits of dominant culture knowledge and information on food and health. Results indicated that mothers experienced possible contradictions between institutionalized food and health recommendations and their own approaches to food and health. Overall, mothers expressed a critical attitude to exhibit spaces that function outside of the limited, dominant view of food and health. Insights from this study can help Mexican, Mexican-American descent families and health professionals redesign their outreach, curricula, and policy recommendations around food and health consciousness.

Olson, Dee (Edmonds Community College) and Tom Ficca (Colville Confederated Tribes)

q'wəld'ali (Place-of-the-Cooking-Fire) Cultural Kitchen
Friday 11:00 AM -11:20 AM, Meeting Room A

In 2012 in response to the request of the Native American Student Association, the Anthropology Department, in collaboration with the Samish, Snoqualmie, and Snohomish Nations, began design and construction of a Cultural Kitchen adjacent to the Campus Community Farm on the Edmonds Community College campus. Now named *q'wəld'ali* (Place-of-the-Cooking-Fire), the Cultural Kitchen features a Coast Salish pit oven, a fire-pit for salmon bakes, and an earthen cob oven for cooking demonstrations from a variety of cultural traditions. Financial support from The Green Fund from the Associated Students of Edmonds Community College has allowed activities in the Cultural Kitchen to continue and expand. Cooking demonstrations are now a regular part of the curriculum in Engineering, Anthropology, Art, EdCap, and English classes. Community events are hosted quarterly by Indian and Hispanic/Latino Education Programs of the Edmonds School District, and annually as part of the college Pow-Wow.

O'Neill, Brian (University of Oregon)
Anticipating Historic Features on a Dynamic Urban Landscape

Thursday 9:00 AM -9:20 AM, Meeting Room F

During the past decade, finds of historic consequence have been investigated in some of southern Oregon's early communities. These finds remind us that urban settings are dynamic. Inadvertent discoveries uncovered during recent construction activities in Roseburg, Oregon, provide additional case studies.

Orsen, Aren (Confederated Tribes of the Colville Reservation)

Ball and Dodd Funeral Home Grand Coulee Dam Reservoir Burial Removals: An Analysis of Archival Maps

Thursday 9:40 AM -10:00 AM, Meeting Room B

As a result of the construction of the Grand Coulee Dam and the creation of Lake Roosevelt, the Ball and Dodd Funeral Home in Spokane, WA received and executed a contract to remove and reinter over 1,000 burials that were to be inundated. In 1939, tribal and non-tribal cemeteries within the traditional territories of the Confederated Tribes of the Colville Reservation were hastily exhumed. Among the associated archives of the Ball and Dodd Funeral Home are 33 maps from 1938 that show the locations of many of the removals. Burial locations are of extreme importance and significance culturally and spiritually to tribal and local communities. The creation of a database in ArcGIS based upon these maps has influenced interpretations of known archaeological sites, allowed for an analysis of these areas regarding their exposure during reservoir drawdowns, and allowed for an assessment of their current designation and level of protection.

Ostrander, Thomas, Charlotte Roberts, Janet Montgomery, and Chris Otley (ESA, Durham University)

Irresistible Corruption: Osteological Evidence of Endemic Lead Poisoning in an Industrial Period Population

Friday 3:20 PM-3:40 PM, Meeting Room D

This study examined the prevalence, degree and effect of lead poisoning amongst 246 Individuals buried at the Quaker cemetery of Coach Lane, Newcastle-upon-Tyne (1711-1857). Traditional osteological analysis was combined with ICP-MS in order to compare osteologically observed pathologies to in-vivo lead levels. Toxicological and clinical sources were used to identify skeletally observable pathologies, anemia, rickets and scurvy, whose etiology is shared by lead poisoning. 96% of sampled individuals had clinically defined lead poisoning as non-adults, and the mortality profile appears to have been shaped by this exposure. Statistically significant relationships were found between severe lead poisoning, rickets and scurvy; this relationship has been suggested in toxicological studies, but has not yet been identified clinically. The correlations found between severe lead poisoning, juvenile mortality and metabolic disease bear consideration when examining health in industrial period contexts, and in modern public health efforts in the developing world.

Ozbun, Terry (AINW)

Cascade Lithic Reduction Technology at the Burnett Site (35CL96)

Thursday 9:40 AM- 10:00 AM, Meeting Room D

In the Pacific Northwest, Cascade, Cascadia, Olcott, or Old Cordilleran lithic reduction technology is characterized by use of basalt or other crystalline volcanic rocks for flaked-stone tools, split cobble and multidirectional core reduction, lanceolate spear points (some with faceted bases), scrapers, and flake tools. Archaeological data recovery investigations conducted in support of the Lake Oswego-Tigard Water Partnership project reveal that this lithic technological repertoire is represented during both the early Holocene and the late Holocene at the Burnett Site, 35CL96. The lithic assemblage lacks good evidence for blade core reduction, Levallois-like reduction, and other technologies sometimes said to be hallmarks of the Cascade Tradition. Other technologies more characteristic of the Pacific Period, such as bow and arrow weaponry and groundstone milling equipment, are also lacking.

Packwood, Kirk (People's Health Alternatives, University of Montana)

Speaking the Words That Need to be Said: Quartz Crystal Channeling and Societal Healing in an Extraterrestrial-focused Spiritual Group

Friday 11:00 AM-11:20 AM, Meeting Room F

Potentially valuable idiosyncratic health beliefs and healing practices reside at the fringes of mainstream society and culture, in part because conventional norms, standards, practices, and social controls tend to block the formation of sociocultural “frames” necessary for the establishment of a suitable “stage” upon which transmission of beliefs highly critical of dominant societal, sociocultural, and political-economic formations can occur. A participant-observational ethnographic study of a small extraterrestrial-focused spiritual/religious channeling group offers insight on the particular conditions needed for highly idiosyncratic health beliefs and practices to manifest, survive, and reproduce in an often-hostile sociocultural-ideological battleground of ideas that is part of the superstructure of any society. In addition, health-related beliefs, practices, and the ideology of the group are examined under the “social medicine” banner, which seeks to understand how socioeconomic conditions impact health, disease, and medical practice.

Peck, Alexandra (Brown University)

Ecstatic Order: The Kwakwaka'wakw Hamat'sa as Shaman and Enforcer of Social Norms

Saturday 10:20 AM-10:40 AM, Meeting Room B

This paper describes the roles of the sacred winter Hamat'sa dance society of the Kwakwaka'wakw. Misinformed ethnographies regarding Hamat'sa initiation ceremonies have led outsiders to believe that the Hamat'sa functions as a form of actual cannibalism. However, perceived Hamat'sa “cannibalism” is a unique form of social control and shamanic possession. Like other Kwakwaka'wakw winter

ceremonies, the Hamat'sa's dual roles illustrate Turner's ideological and sensory poles (similar to Nietzsche's Apollonian/Dionysian dichotomy), in which dramatic and violent rituals are interpreted as a "symbolic fusion of ethos and world view, models 'of' what people believe and... 'for' believing it" (Padfield 1991:14). While symbolically structural, the Hamat'sa functions as an initiation ceremony, through the implementation of vision quests, bodily destruction, altered states of consciousness, and communal "taming" of the Hamat'sa. Not only does the Hamat'sa prescribe and maintain Kwakwaka'wakw social norms through intense rituals, but the Hamat'sa also fosters healing through vigorous ceremonial activity.

Pettit, Daniel Jr. (Oregon Dept. of Transportation)
Opportunities for 3D Scanning and Historic Properties: A Demonstration Project of Two Bridges

Thursday 9:20 AM- 9:40 AM, Meeting Room F

In 2015 the Oregon Department of Transportation conducted 3D scans of the historic Elk Park Road Truss Bridge and Pass Creek Covered Wooden Bridge under ODOT and FHWA grants. Recordation and post-processing of the data addressed the feasibility of 3D documentation of historic properties as well as the opportunities of the technology. This paper explores the benefits, drawbacks, and the potential that 3D scanning provides for public interpretation and outreach.

Pickard, Ashley (Western Wildlife Outreach)
From Goldilocks to Google: Mapping Human Perception of Bear's Space

Friday 2:00 PM- 2:20 PM, Meeting Room A

The ongoing encroachment of human populations into wildlife habitat has repercussions. Spatial analysis tools, including GIS, have allowed wildlife biologists to track the growing number of human-wildlife conflict incidents. Recently, in Washington State, GIS has allowed wildlife managers to influence the risk perceptions of municipal managers regarding the need for human behavior change around food attractants along the urban/wildland interface. In June 2015 Western Wildlife Outreach (WWO) participated with Washington Department of Fish & Wildlife (WDFW) in research to understand the increasing frequency of and reason for reported human-black bear incidents in Eastside King County, WA. Spatially projected, these incidents inform researcher about the range of human perceptions regarding the role of bears on the human landscape.

Pritchard, Emily, Jacqueline Y. Cheung, and Eric Gleason
Layered Landscapes: Historic Archaeology at Ohanapecosh Campground, Mount Rainier National Park
Thursday 4:00 PM- 4:20 PM, Meeting Room A

During the 2014 field season, an extensive survey was completed to record and evaluate the historic archaeological resources within the Ohanapecosh Campground and nearby hot springs. With the help of archival records and maps, the archaeological signatures of four distinct eras of development (Forest Service, National Park Service, Hot Springs Resort, and Civilian Conservation Corps) were identified. As archaeological features were identified and recorded, these layered landscapes were unraveled to tell the story of how the campground came to be the recreational hotspot it is today.

Punke, Michele (Historical Research Associates, Inc.)
Fire-Modified Rock (FMR) Feature Analysis Using Multiple Lines of Inquiry from Archaeological Site 45LE611 in Western Washington

Friday 3:40 PM- 4:00 PM, Meeting Room F

Analysis of fire-modified rock (FMR) features from archaeological site 45LE611 along the Chehalis River in Centralia, Washington, included consideration of multiple lines of inquiry to arrive at a common interpretation of feature function. Feature attributes such as distribution within the site, feature morphology and assemblage characteristics, the appearance of individual pieces of FMR, and the types and amounts of materials associated with the features all aided in understanding feature use. While the analysis of the features from 45LE611 was greatly aided by their well-preserved and extensively excavated nature, the methodological approaches used in the analysis are also applicable in more ephemeral or nebulous FRM feature assemblages.

Reid, Kenneth C. (Idaho State Historical Society), Joel L. Pederson (Utah State University), Kenneth P. Cannon (Utah State University Archaeological Services), and Houston L. Martin (Utah State University Archaeological Services)
Sometimes the Map is the Territory: Using Historic Maps and Geomorphic Fieldwork to Understand 153 years of Change at the Bear River Massacre National Historic Landmark in Southeastern Idaho

Thursday 4:00 PM- 4:20 PM, Meeting Room E

While mapping boundaries and evaluating archaeological integrity of the Bear River Massacre National Historic Landmark, we examined historic maps for clues to the rapidly changing landscape of an historic battlefield formed in northern Cache Valley's deltaic sediments. Two recently discovered sketches drawn by soldiers immediately after the 1863 engagement were meant to show who was where and when at the beginning (Sergeant Beach) or conclusion (Captain Price) of the attack. In 1873 and 1877, more context was provided by General Land Office and Corps of Engineers maps. However, the most helpful map was drafted in 1926 by a county surveyor for a local

commemorative initiative. Information from these historic sources, coupled with geomorphic mapping of 17 units within the Landmark, provides a terrace sequence and channel meander history that allows us to hypothesize where the slaughter of several hundred Shoshone culminated near the confluence of Battle Creek and Bear River.

Rice, David G. (Tkwinat Twati Anthropological Services)
The Beginnings of Archaeological Research in the Mountains of Washington at Mount Rainier National Park
Thursday 9:20 AM- 9:40 AM, Meeting Room A

Archaeological research in the mountainous regions of Washington began in the south central Cascades and adjacent Mount Rainier. The earliest work started in 1963 as a general archaeological reconnaissance of Mount Rainier National Park by Washington State University. The discovery of Fryingpan Rockshelter led to limited site testing in 1964, establishing for the first time in the state the existence of stratified archaeological sites in the mountainous Alpine zone. A single lanceolate projectile point was also found in a stratified deposit of volcanic pyroclastic sediments. In 2000 the National Park Service hired an archaeologist, Greg Burtchard, at Mount Rainier, and through interscholastic agreements with Central Washington University, and an ecologically-based survey approach, many new finds resulted under this active research program. In addition, archaeological research by Forest Service archaeologists, working with tribal participation, and other Washington National Parks, has complimented this knowledge. The combined research now shows that different prehistoric peoples used the higher mountainous areas of this region, seasonally, but widely, using many kinds of natural resources over at least 8,000 years.

Rinck, Brandy (SWCA)
Replacement Project and Mitigation at Dugualla Bay, Island and Snohomish Counties, Washington
Thursday 11:20 AM- 11:40 AM, Meeting Room F

WSDOT is constructing a new bridge across Davis Slough on State Route (SR) 532 to improve access to Camano Island during flooding and SWCA completed an assessment of the project. Historic sites 45SN425, 45SN426, 45SN429, and 45SN468 were revisited. Auger probe data was used to illustrate the project area stratigraphy and make recommendations for targeted monitoring during construction in areas with buried surfaces. As part of project mitigation, the shoreline of Whidbey Island at the Dugualla Bay Preserve was also surveyed. Two shell middens, 45IS38 and 45IS39, were previously mapped in the wetland vicinity by early archaeologists. An historical dike and associated pilings, a yarder, roads, ditches, and 45IS38

were identified. Additional testing defined the boundary of 45IS38, which was not recommended eligible for the NRHP due to lack of integrity. A buried sand spit was also found below modern wetland sediment and fill, but 45IS39 was not relocated.

Robson, Kali (Confederated Tribes of the Colville Reservation)
Monitoring Traditional Cultural Plants on the Colville Reservation
Thursday 10:40 AM- 11:00 AM, Meeting Room B

Colville members worry about the health of plants central to their culture – huckleberries, bitterroot, camas, and many others. How are these species impacted by climate change, drought and fire? What can be done to keep them vigorous? The Traditional Cultural Plant Team is conducting monitoring to answer these questions. For plants in open shrub-steppe and meadow habitats, we will run transects through populations of interest, randomly select plots and estimate the percent cover of all plant species, plus abiotic variables. We will also track reproduction for the focus species. With these data, we can illustrate simple frequencies, and conduct more complex multivariate analyses. For woodland shrubs, including huckleberry, we will establish larger plots, similar to those used in forestry. A few years of monitoring will give us information on how changing environments affects cultural plants.

Rogers, Richard W., Captain (Maritime Archaeological Society)
European Contacts in “Pre-Contact” Hawaii
Friday 2:40 PM- 3:00 PM, Meeting Room B
The journals of Captain Cook’s officers and crewmen note iron being found on every island they visited. Early charts and maps of the Pacific, including those carried by and developed after the third voyage of Captain Cook, clearly show a series of discoveries of the Hawaiian Islands. Hawaiian mythology flows with an undercurrent of foreigners visiting the shores and specifically mentions two shipwrecks. Authors of 19th century Hawaiian History books speculated as to the dates of those shipwrecks. A more thorough examination of Spanish, Dutch and English activities in the Pacific has revealed which ships visited Hawaiian shores and when. This talk will examine the evidence of those early European contacts, contemplate their influence on Hawaiian culture and explain how cross referencing European records with Hawaiian legend and myth is enabling us to place dates on certain events in “pre-contact” Hawaii.

Rorabaugh, Adam, Ph.D

Style, Function, and Skill: Some Thoughts on a Fundamental Continuum

Friday 8:40 AM- 9:00 AM, Meeting Room C

There has been considerable archaeological literature on the nature of artifact style and function since the beginning of the discipline. In recent years, both evolutionary and more interpretive approaches have attempted a number of ways to operationalize artifact style and function. I propose an approach expanding on recent efforts to view aspects of style and function as a continuum by adding socially learned skill as an additional dimension. This moves beyond some of the dichotomous thinking about artifact style, function, and how artifacts were used and interpreted by people. The utility of this approach is illustrated by examining various aspects of precontact Coast Salish material culture.

Rose, Chelsea (Southern Oregon University, Laboratory of Anthropology)

Rising from the Ashes: A New Look into Jacksonville's 19th Century Chinese Quarter

Thursday 10:40 AM- 11:00 AM, Meeting Room F

The Southern Oregon University Laboratory of Anthropology (SOULA), created a short video about recent project at the Jacksonville Chinese Quarter site as part of the national Making Archaeology Public Project (MAPP) in honor of the 50th anniversary of the National Historic Preservation Act (NHPA). The video was created in partnership with Southern Oregon University and the Oregon Department of Transportation, and highlights the importance of NHPA in the preservation of archaeological resources in our state. The video also highlights the important discoveries made in the Chinese Quarter site, as a result of the Section 106 process.

Rudnicki, Larissa (Historic Resources Specialist, Oregon Dept. of Transportation)

Tree Trucks: The Story of Logging and Oregon's Highways

Thursday 9:40 AM-10:00 AM, Meeting Room F

One of the most challenging aspects in the field of historic roads is the identification and preservation of road traces, or "paths," traversed by long ago travelers or which were influenced by long-ago industries. What remains today are mere traces that often prove difficult not only to find, but also difficult to protect. Often described as "cultural landscapes," the importance of these road sites continues to become more prevalent in cultural resource circles, we, as public servants, must grapple with appropriate ways to identify, document, and determine the significance of these routes, especially in reference to our larger transportation systems in Oregon. This presentation offers a unique view into road traces throughout Oregon. It highlights the stories

of how some of the highways in Oregon came to be formed and their preservation through their continued use.

Ryan-Peñuela, Erin (University of Washington)

Climate Change Adaptation and Resilience in our Built Environment

Friday 1:40 PM- 2:00 PM, Meeting Room A

Cities and counties are at the forefront of addressing climate change resilience. Green infrastructure builds resiliency and can be an adaptive response to climate change impacts that threaten current infrastructure, water quality, and human health. Infrastructure like rain gardens, vegetated shorelines, green roofs and pervious surfaces, can reduce flooding, urban heat, coastal erosion, coastal damage, and slow down and clean stormwater, among other benefits. Local and national policy is in the midst of changing to encourage and even require green technologies for new development in our cities and counties. Municipalities face serious barriers related to public and private buy-in, design, construction and maintenance of these new technologies. An ethnographic research project led by the Anthropology Department at Edmonds CC on behalf of the Puget Sound Partnership sheds light on the depth, spectrum, and patterns of green infrastructure barriers across a twelve county region in Western Washington.

Safi, Kristin, Ph.D, Patrick Dolan, and Devin A. White (Oak Ridge National Lab)

A Marine-centric, Geospatial Approach to Understanding Travel Networks across the Salish Sea

Friday 2:00 PM- 2:20 PM, Meeting Room C

This project uses a novel geospatial approach to evaluate marine travel networks across the Salish Sea from the Locarno Beach Period through the Late Period. We first evaluate natural movement corridors across the study region by generating combined terrestrial and marine travel costs using a many origins-to-many destinations least cost accumulation approach. The many-to-many analysis is performed again using all recorded sites with secure dates to construct an aggregate, landscape view of marine travel networks across space and through time. We then evaluate the interplay between site location, longevity, and visual proximity to high-traffic travel routes to examine hypotheses for "route monitoring" and increased site defensiveness through time. This approach grounds traditional least cost calculation in a more realistic framework for movement across water ways while also generating a landscape scale understanding of marine travel connectivity and site placement across the Salish Sea through time.

Schalk, Randall (Cascadia Archaeology)

Experimental Approaches to Understanding Variability in Cooking Stone

Friday 3:00 PM- 3:20 PM, Meeting Room F

Archaeologists have frequently conducted "backyard" rock firing experiments to better understand different fracture patterns in fire-modified rock but these experiments have generally produced mixed results. This paper considers why this is the case and suggests that rock fracture involves the interaction of too many variables to achieve unambiguous results without better experimental controls. Results of a series of experiments using a ceramic kiln to specifically examine how different cooling rates produce different fracture patterns are discussed.

Seelye, Elizabeth (Central Washington University)

Working Class Heroes: Punk Subversion and Working Class Solidarity

Saturday 10:40 AM- 11:00 AM, Meeting Room B

Since the late 1970s, punks have expressed alienation from a Western mainstream society that emphasizes upward mobility and the increased commodification of all aspects of life. Like the bricoleur, punks 'make do' by subverting symbols that are associated with the working class identity and overt patriotism—such as the American flag—in order to spotlight the growing alienation of marginalized populations: the poor, racial minorities, and the LGBTQ community. Owing to the punk work ethic of do-it-yourself (DIY) they tactically deploy these subverted symbols through music lyrics and album cover art. United by the working-class struggle and disdain for a government they feel only serves the upper class of society, punks overcome a lack of economic capital by leveraging cultural capital to its fullest potential. Based upon semiotic analysis of cover art and lyrics, this paper examines how punk tactics empower and inform marginalized individuals.

Senn, Amy (Confederated Tribes of the Umatilla Indian Reservation, San Jose State University)

Enhance Your CRM Reports: Conduct Historical Research Online... For FREE!

Thursday 3:40 PM- 4:00 PM, Meeting Room E

Cultural resources professionals often find themselves needing to conduct basic historical research, from searching for background information to evaluating cultural resources for eligibility for inclusion on the National Register of Historic Places. Often, however, CRM reports are lacking in historical research. Because research in physical repositories is often outside the scope and budget of a project, and funds for acquiring historical source material can be limited in both agencies and CRM firms, this paper aims to provide a number of free online historic resources that can and should be utilized within the scope of a CRM

project. Historic maps, aerial photographs, county histories, and records of genealogical value will all be covered. A handout with the addresses of the websites mentioned will be provided.

Shannon, Donald (Willamette Cultural Resources Associates, Ltd.)

Incorporating traditional place studies and recognizing cultural continuity in "Routine" Cultural Resources Compliance assessments: A case study from Point Defiance
Saturday 11:00 AM- 11:20 AM, Meeting Room B

This presentation will use a case study involving routine cultural resource compliance from the Puyallup traditional homeland to show an example of conducting ethnographic work using archival texts. This methodology will highlight the importance of "cultural literacy" and a holistic approach (emic/etic), and share a methodology and process for a system that meets compliance goals. Examples of cultural resources and traditional cultural places will be tied to National Register criteria. This presentation will also highlight Tribal Culture and cultural continuity in the Point Defiance area, homeland of the Puyallup Tribe.

Shantry, Kate (SWCA)

FMR field recording and analysis at 45KI1176, an upland logistical camp on the Issaquah-Fall City Trail, King County, Washington
Friday 2:40 PM- 3:00 PM, Meeting Room F

The 1,215 FMR pieces recorded from data recovery excavations at 45KI1176 correspond to a minimum number of 299 whole rocks used at the site. Almost 75% of the excavation units had a ratio of less than or equal to 4:1, indicating moderate breakage. The natural rocks in the A and B soil horizons are pebble-sized; however 39% of the sampled, cultural FMR is cobble-sized. FMR was distributed between 0-80 cmbs, but 75% originated below 20 cmbs, negating natural burns and historic forest fires as causes for breakage.

Sheeran, Lori K., Steven R. Wagner, Lixing Sun (Central Washington University), Jinhua Li, and Dongpo Xia (Anhui University, China)

Human-Monkey Interactions: 12 Years of Fieldwork on Tibetan Macaques at The Valley of the Wild Monkeys, Mt. Huangshan, China

Friday 3:40 PM- 4:00 PM, Meeting Room D

For 30 years, Chinese primatologists have studied Tibetan macaques at the Valley of the Wild Monkeys. These combined data have yielded insights into the species' ecology, behavior, and evolution. This talk highlights findings from the past 12 years of collaborative, international fieldwork focused on human-monkey interactions at this macaque tourism site. Although park staff designed a

program intended to limit visitors' opportunities to interact with monkeys, our data show that their management methods, particularly range restriction and provisioning, are sometimes ineffective with respect to visitor safety and stressful to the monkeys. Opportunities exist to improve what site visitors learn about China's wildlife and to reduce the likelihood of negative encounters with aggressive monkeys. Studies on the monkeys' microbiota are underway and will illuminate the potential for zoonotic disease transmission at the site, with future research focused on points of interaction among monkeys, villagers, tourists, primatologists, and park staff.

Silverman, Shari Maria (WA State Parks and Recreation Commission)

Co-Seismic Activity and Archaeology in southern Birch Bay, Washington

Friday 1:40 PM- 2:00 PM, Meeting Room C

Subsidence and uplift altered southern Birch Bay's landscape three times during the last 1700 years. Sites in the area indicate that people adapted to these changes, sometimes immediately. An upland shell midden by Terrell Creek was dated to approximately 3125 yr BP. The creek subsided next to it between 1390 and 1290 yr BP. Charcoal from the hearth in the resultant beach berm dated to approximately 1285 yr BP. As the berm grew, so did landuse. Berm midden revealed dates between around 900 and 500 yr BP. To the north, uplift occurred twice: (1) between 1710 and 1530 yr BP and (2) between 1280 and 1079 yr BP. Inland upland shell midden in the area predated the uplift at around 3180 yr BP. Archaeological dates by the shore ranged after the land movement: between approximately 1000 and 285 years ago.

Simmons, Stephanie C. (CWAS)

Investigation of the 1930s Cle Elum Dam Construction Camp

Friday 11:20 AM- 11:40 AM, Meeting Room E

In the summer of 2016, Central Washington Anthropological Survey (CWAS) conducted excavations within site 45KT3159. This site is located in Kittitas County, Washington and is associated with the 1931 to 1933 Winston Brother's construction camp, which was built to house workers during the construction of the Cle Elum Dam. CWAS was subcontracted by the Bureau of Reclamation to identify and mitigate any adverse effects to archaeological remains before this area could be potentially impacted during the construction of a fish passage at Cle Elum Dam. Two-hundred and nineteen shovel probes were excavated for this project and 1,821 artifacts were recovered within these probes. Additionally, 52 new above ground features and 74 ground surface artifacts were recorded. This presentation will discuss the history of the Cle Elum Dam Camp, the types of archaeological features and artifacts recovered, as well as

what the archaeology tells us about daily life at the camp and its construction and demolition.

Smith, Erin M. (Washington State University) and Mikael Fauvelle (University of California at San Diego)

The Pacific Rim of the North American Oikoumene: Interactions between California, the Southwest, and the Pacific Northwest

Friday 2:40 PM- 3:00 PM, Meeting Room C

We argue that people along the Pacific Coast of North America were linked into a continental-wide interaction system spanning across North and Central America. Within this system, archaeological evidence exists for the trading of materials goods between southern and central California, the Pacific Northwest, and the Southwest. Based on this evidence, we argue that connections between people were also regularly and actively negotiated and maintained. Material evidence for exchange includes the movement of shell and obsidian along the Pacific Coast and to the Southwest, and the exchange of textiles from the Southwest. This paper attempts to connect people beyond their regions into the North American Oikoumene, or known world. We hope to demonstrate connectivity along the western edge, and demonstrate how connections can lead to parallels in social developments and changes.

Smits, Nicholas (Archaeological Investigations Northwest, Inc.)

Fighting over Tlithlow Station: The Puget's Sound Agricultural Company and the Aftermath of the Oregon Boundary Dispute

Friday 2:40 PM-3:00 PM, Meeting Room E

Archaeological investigations at Joint Base Lewis-McChord in western Washington have confirmed the location of Tlithlow (site 45PI492), a Puget's Sound Agricultural Company (PSAC) outstation that operated between circa 1847 and 1858. As a subsidiary of the Hudson's Bay Company (HBC), the PSAC supplied agricultural products to HBC posts and promoted British settlement of territory that was jointly occupied by Great Britain and the United States until 1846. After the boundary dispute was settled in 1846, conflicts over land ownership continued at Tlithlow and other PSAC stations, which remained in the hands of the PSAC according to terms of the Oregon Treaty. Initiating the conflicts were former PSAC employees who aggressively attempted to claim company lands as their own under new American laws and through threats of violence and destruction of company property.

Solimano, Paul (Willamette Cultural Resources Associates, Ltd.)

Examining Land-use Intensification in the Portland Basin through Cooking and Processing Features

Friday 4:00 PM-4:20 PM, Meeting Room F

Archaeologists generally believe a process of land-use intensification, or increasing energy returns over time within a defined area, occurred in the Portland Basin through the Holocene. This process probably included some combination of technological innovation, changing targeted resources, scheduling, or altering social organization. Previous work on technological innovation compared presumed cooking and processing features from non-residential sites to Thoms' (2009) land-use intensification model. That effort, which focused on feature morphology and structure, showed that while feature reuse increases dramatically throughout the Holocene, feature diversity does not increase and more complex features do not appear. Building on the previous work, this analysis examines the resources targeted by considering feature content. These data suggest plant species richness may decrease through time, while mammal and fish richness are unchanged. Non-standardized sampling strategies and poor reporting render most conclusions tenuous.

Starnes, Kandi Leigh (University of Idaho)

Excavating an Archive: Using Old Oral Histories to Explore the Pasts of Latah County, Idaho

Thursday 2:40 PM- 3:00 PM, Meeting Room E

Local historical societies are almost invariably treasure troves of materials that explore and present detailed histories of people and places throughout their communities. This paper presents one small example of the rich histories yet to be discovered in Latah County, Idaho. Working from previously untranscribed tapes, that consisted of hundreds of hours, these unheard oral histories illustrate frequently forgotten community voices and attitudes, and the people that they represent. It is also a small first step towards making these histories more readily available to the community.

Stein, Julie K. (University of Washington, Burke Museum)
Washington's Oldest Museum is Becoming Washington's Newest Museum

Saturday 10:20 AM-10:40 AM, Meeting Room C

The Burke is Washington State's oldest museum and the Washington State Museum of Natural History and Culture. The Burke's collections connect the past, present, and future. They give us a way to trace history, provide a spark for stories and ideas, and connect us to each other and to our environment. Today, these objects are hidden behind walls; inaccessible to the very people they are intended to serve. The Burke is engaged in a multi-year transformation project that will culminate in a new museum facility on the

University of Washington campus. The New Burke will be a flagship natural history and culture museum that inspires wonder and pride about the Northwest and our place in the world.

Stokeld, Rachel (National Park Service, Lewis and Clark NHP)

The Boards Aren't Boring: The Hidden History of a Columbia River Gillnet Boat

Friday 3:00 PM- 3:20 PM, Meeting Room B

Lewis and Clark National Historical Park staff and Maritime Archaeological Society volunteers teamed up to document a wooden boat frame visible along the park's Netul River trail at low tide. Detailed drawings were created and compared to extant vessels to determine the boat's age and form. This collaboration allowed the park to fulfill its cultural resource stewardship duties while giving MAS volunteers an opportunity for hands-on field documentation and historical research. In addition, an interview with a descendant of the boat's likely former owners provided information on Lower Columbia River settlement, economic development, boat culture, and historic land use.

Syverson, Laura and Virginia L. Butler (Portland State University)

Sampling a Village: Using Sampling to Redundancy (STR) to Characterize Fish Representation at the Tse-whitzen Site, Port Angeles, WA

Saturday 9:40 AM- 10:00 AM, Meeting Room F

Tse-whitzen is one of the largest village excavations on the Northwest Coast; more than 1,400 features were documented and an estimated 234,563 fish bones were recovered from ¼" mesh alone. While the research potential is great, the challenge of sampling such a huge assemblage is daunting. Previous research has focused on the >1/8" mesh matrix, which emphasizes small-bodied fishes. With goals of tracking changing representation of large-bodied fish through time and across space, we devised a method of "sampling to redundancy" (STR), incrementally analyzing matrix collected from ¼" mesh screens from eight excavation units. Analysis ceases when proportional representation of fish families stabilize for a given chronostratigraphic zone within an excavation unit. Preliminary results suggest STR provides accurate estimates with substantial time/labor savings. As STR has seldom been used in zooarchaeology, our project on the remains from this important site may serve as a guide for future projects in the Pacific Northwest and beyond.

Taber, Emily C. (Portland State University, National Park Service), Douglas C. Wilson (PSU, NPS), Robert Cromwell (NPS), Katie Wynia (NPS), and Alice Knowles
Gastroliths and Avifauna at Fort Vancouver's Village

Thursday 1:40 PM-2:00 PM, Meeting Room C

Transferprinted ceramics and other objects ingested by fowl provide unique data on the household production associated with a fur trade center in the Pacific Northwest. Gastroliths are an indicator of the use of avifauna at archaeological sites, specifically of the Order Galliformes. The presence of ceramic and glass gastroliths at house sites within Fort Vancouver's Village provide evidence for the keeping and consumption of domestic fowl including chickens and turkeys. The presence and concentration of these artifacts, combined with documentary and other evidence, provides clues on household economies in a culturally diverse colonial setting. While ethnic backgrounds of the Villagers included Native Hawai'ian, American Indians, French Canadians, English and Americans, the evidence points to shared practices emerging within the Fort Vancouver Village.

Tasa, Guy, Ph.D. and Juliette Vogel (DAHP)
The Use of the Howells' Dataset in Determining Ethnicity in Pacific Northwest Crania: Implications for Kennewick Man
Friday 10:20 AM- 10:40 AM, Meeting Room D

From 1973 to 1989, anthropologist W.W. Howells collected cranial measurement data on 28 recent world-wide human populations including four Native American populations. His data is openly available and has been used extensively by researchers in an attempt to estimate the ancestral origins of populations and individuals from both forensic and bioarchaeological contexts. Cranial measurements of 179 precontact Native American crania from the Pacific Northwest were compared to Howells' 28 groups using the FORDISC 3.1 statistical software. Less than half of the individuals examined were identified as Native American by FORDISC using the Howells' dataset. We argue that, for precontact Native Americans of the Pacific Northwest, the Howells' dataset by itself is inappropriate for determining ancestry. Containing only four Native American groups, his data do not capture the incredible variability among all Native American crania including Natives of the Pacific Northwest. Implications for studies attributing Kennewick Man's affiliation are discussed.

Tasa, Guy, Ph.D. and Juliette Vogel (DAHP)
A Comparison of Kennewick Man Cranial Morphometrics with Pacific Northwest Native Crania
Friday 10:40 AM- 11:00 AM, Meeting Room D

Former and current craniometric analyses have produced views on the affiliation of Kennewick Man that are diametrically opposed to those obtained from Kennewick

Man's mtDNA. This paper critically reexamines these previous craniometric studies and their heavy reliance on the Howells' dataset, a dataset that only includes four Native American samples to represent all of Native American cranial variability, and presents the preliminary results of a craniometric analysis for the first time that utilizes a sizeable comparative Native American sample from the region where Kennewick Man was discovered. This comparative sample includes craniometric data for 306 precontact Native American crania from the Pacific Northwest. Implications of the results of this analysis for the interpretation of Kennewick Man's relationship to modern Native Americans and other populations is reviewed and discussed along with a plea to reexamine Kennewick Man in light of local data.

Thornburg, Aaron (Eastern Oregon University)
La Grande Life: Digital Autoethnography in Rural Oregon
Thursday 3:00 PM- 3:20 PM, Meeting Room E

From the very beginnings of our discipline, a goal of anthropologists has been to show things "from the native's point of view" (Malinowski 1922). The degree to which this is even possible has been debated for some time. This debate has gotten new life with the development of digital audio-visual media production technology. The democratization of digital technologies has put the production of high quality video into the hands of a greater number of people than ever before. The research project described in this presentation attempts to take advantage of these technologies in the creation of youth-produced autoethnographic texts. To this end, I trained youths from La Grande mobile digital storytelling skills, enabling them to produce short narrative videos using the iMovie application on iPads, and set them loose on their small city to show me "their" La Grande. This presentation will detail my training techniques and screen some of the videos that resulted. I will question whether the resulting videos are indeed ethnographic and what, if any, other benefits arose out of this research practice.

Townsend, Mitchel and G. Mills
Using Forensic Biotic Taphonomy Dentition Signature Analysis to Identify Hominin Mastication Evidence: a Field Application Case Study

Saturday 11:20 AM- 11:40 AM, Meeting Room F

We present a Forensic Biotic Taphonomy Dentition Signature field study of prey bone assemblage modifications from three different geographically separated deposition sites located in the immediate vicinity of Mount St. Helen's, in Washington State. The bones assemblages are characterized as ungulate post mortem remains. Experimental hominin chewing studies have demonstrated close parallels with similar mastication evidence recovered

from several Pleistocene and Holocene archeological bone assemblages. Recognition and understanding of Rib/Bone Peeling as a diagnostic signature of hominin mastication behavior aids greatly in the identification and classification of both pre-archeological and contemporary post mortem bone assemblages. We present diagnostic evidence that supports manual and oral peeling of cortical layers of ungulate ribs as taphonomically diagnostic hominin mastication behavior. The repetitive presence of these recognized diagnostic characteristics across multiple sites and evolutionary time frames enables hominin assignment with increasingly higher degrees of reliability.

Tveskov, Mark and Chelsea Rose (Southern Oregon University, Laboratory of Anthropology)
Disrupted Identities and Frontier Forts: Enlisted Men and Officers at Fort Lane, Oregon Territory, 1853-1856
Thursday 2:00 PM- 2:20 PM, Meeting Room C

Frontiers are contingent and dynamic arenas for the negotiation, entrenchment, and innovation of identity. The imposing materiality of fortifications and their prominence in colonial topographies make them ideal laboratories to examine this dynamic. This paper presents the results of large scale excavations in 2011 and 2012 at the officers' quarters and enlisted men's barracks at Fort Lane, a U.S. Army post used during the Rogue River Wars of southern Oregon from 1853 to 1855, and considers how identities of social class, States-rights confederate or union, and East coaster or frontiersmen were crafted in this pre-Civil War frontier setting.

Valentino, Alicia, Katie Wilson, and Tom Ostrander (ESA)
The archaeology of a Seattle city block from 1880s squatters, Great Northern Railroad workers, and the establishment of Pike Place Market
Friday 11:40 AM- 12:00 PM, Meeting Room E

An inconspicuous city block near today's Pike Place Market held the remains of a 19th century shantytown, evicted in 1902 to prepare for the Great Northern Railroad tunnel beneath Seattle. Construction monitoring of a modern development yielded the remnants of middens and privies dating as early as the 1880s. Spared from the city's major regrade projects, photographs, maps, and artifacts demonstrate that this parcel was once part of the dense carpet of "squatter's cabins" covering the city's hillsides above the waterfront until it was taken over by the GNRR. Several cabins were spared from demolition and appropriated by workers, accompanied by the construction of a mess hall and bunkhouses. Once the tunnel was completed, the railroad buildings were torn down and the property was partially cleared. This paper covers the history of the property and describes our findings from the

remnants of the squatters and railroad workers who lived here.

Van, Kalliane, Chris Walker, Melissa Buckley, Megan McDermott, Skyler Elmstrom, and Taymor Abou-Zaki (Edmonds Community College)

Tribal Youth Pull to Muckleshoot: Student Perspectives
Friday 9:40 AM- 10:00 AM, Meeting Room A

After over 90 miles of travel on the 2015 Tribal Youth Pull to Muckleshoot, we returned with a deepened knowledge of Indigenous culture, experiences of the rejuvenation of tradition, as well as substantial personal and spiritual growth and healing. As students in the LEAF School we were involved in all aspects of the tribal canoe journey. Various tasks delegated to us were to help as ground crew, paddle with the canoe, and provide general support for the canoe families while maintaining an anthropological perspective of a participant observer. The opportunity to contribute to the Tribal Canoe Journey enhanced our understanding of the human ecosystem through participation and education in Coast Salish culture including song and dance, canoe landing protocol, local geography, the effects of colonialism on Native tribes, traditional ethnobotany, and wildlife knowledge.

Voight, Brianna, Lori K. Sheeran, Steven R. Wagner, Lixing Sun (Central Washington University), Xi Wang, and Jinhua Li (Anhui University, China)

A comparison of proximity of Tibetan macaques (*Macaca thibetana*) near provisioned food sources and natural food sources at Mt. Huangshan, China

Friday 4:00 PM- 4:20 PM, Meeting Room D

Food provided by humans may bring non-human primates into proximity with conspecifics more often than natural food sources do, potentially resulting in increased opportunities for aggression. The Yulingkeng 1 troop of Tibetan macaques at Mt Huangshan is provisioned with corn daily for tourism purposes. From 17 August-18 September 2015, we used camera traps to collect video footage on monkeys' proximity in the forest and at the provisioning area. A total of 128 videos were coded using 15 s scan samples to record the number of monkeys visible and the number of monkeys in proximity. Our data shows that more Tibetan macaques are in proximity while in forested areas compared to the provisioning site (Mann Whitney U test, $U=119$, $df=1$, $p<0.0001$). This may mean that the corn is being distributed by park staff in such a way that monkeys are separated as they forage.

Walker, Cam (AINW)

Would you like the Venison, the Duck, or the Lamb?

Residue Analysis Results at the Burnett Site (35CL96)

Thursday 10:20 AM- 10:40 AM, Meeting Room D

Excavations at the Burnett Site (35CL96) during the 1980s and more recently yielded a large number of projectile points and other lithic tools in stratified deposits. Sixty lithic tools were selected for residue analysis; thirty from each excavation period. Extractions from these lithic tools were tested against seven antisera for possible blood protein residues using the technique of cross-over immunoelectrophoresis (CIEP). In total, eight positive results were obtained. These results were from deer (n=3), duck (n=2), and sheep (n=3). An overview of findings, along with the methods and the demonstrated potential of CIEP to reveal the presence of residues from ancient artifacts will be presented, even after long-term laboratory storage.

Ward, David (Puget Sound Partnership)

The Role of Anthropology in Conservation: A Perspective from a State Agency

Friday 11:40 AM- 12:00 PM, Meeting Room A

Many people enter conservation careers out of a love for the Salish Sea's flora and fauna. At some point in every career, however, comes the realization that people are at the center of virtually every issue – either as the cause of a problem or as implementers of solutions. Every sub-strategy within the Puget Sound Action Agenda's Strategic Initiatives is implemented by people. More than 80 percent of those sub-strategies have a social component. More often than not this means we need somebody else to do something beneficial, stop doing something harmful, take some action that is key to the success of a project, or participate in some process. This can leave conservation professionals with natural science backgrounds in unfamiliar territory. This presentation highlight ways anthropologists can contribute, using the LEAF School's an ethnographic assessment of barriers to implementation of green infrastructure in Puget Sound municipalities as an example.

Wegner, Wendy (University of Idaho) *Conducting Research in the Framework of Indigenous Methodologies*

Saturday 11:20 AM- 11:40 AM, Meeting Room B

This paper/presentation outlines the proposed research journey with Indigenous Methodology as a framework. Following Dr. Jelena Porsanger's four "R" core issues, Respect, Reciprocity, Reliability, and Relevance and Shawn Wilson's Research as Ceremony, this thesis research will follow indigenous praxis. Discussion will focus on ethnographic collaboration with the Nez Perce tribe and work will be done with respect for needs and traditions of the community. Recognizing that indigenous methodologies can stand on their own and work in tandem with scientific

data that implements the tribe's pedagogy. Emphasis in participation will be on learning and doing, rather than seeing participants as the "other". The focus is the importance of the tule mat to Nez Perce culture, the benefits of plant gathering and creating an end piece from natural material, and the importance of the plant to ecosystems that have been manipulated by man made changes to waterways. A major goal is to provide the tribe with information that they can use in the future to protect and repair ecosystems.

Wellington, Victoria (University of Washington, Burke Museum)

Data Preservation in American Archaeology

Saturday 9:40 AM- 10:00 AM, Meeting Room C

To excavate is to destroy is a common mantra. With the adoption of technology into archaeological field methods and analysis, archaeologists are continuously producing more and more data. I argue that archaeology ought to establish a notion of data professionalism, where archaeologists must consider how all of their research – raw data, analysis, and results – are securely stored for future reference. However, in the United States, where much archaeology is done by Cultural Resource Management firms, often there is not a plan for mitigating potential data loss between CRMs to the data's final repository, often museums. This paper examines the data flow between CRMs and Museums and discusses possible solutions.

Wesseler, Kim (Oregon State University)

A Preliminary Analysis and Examination of the Hospital at Fort Yamhill, Oregon

Friday 2:00 PM- 2:20 PM, Meeting Room E

There is very little known about pre-Civil War/Civil War military medical practices in the context of the Pacific Northwest and small forts of this era. Fort Yamhill, which was in operation from 1856 to 1866, offers a unique opportunity to examine a mid-19th C. fort hospital and military medical practices. Using geospatial analysis of LiDAR data and aerial photo imagery, the location of the hospital will be determined and associated features located. Archival research will establish a firm understanding of physicians stationed at the fort and the daily routines and medical practices to which they adhered. Preliminary excavations will be conducted this summer, during OSU's historical archaeology field school and will work to confirm the location of the hospital and its construction. Excavated materials will be analyzed to broaden our comprehension of hospital activities.

Wessen, Gary (Wessen & Associates, Inc.)

Western Washington Shell Midden Chronology: An Introduction and Overview

Friday 11:40 AM- 12:00 PM, Meeting Room C

A data base containing approximately 1,020 radiocarbon dates representing prehistoric shell midden sites in western Washington offers both significant challenges and research opportunities. In the first of a series of papers, this presentation describes the data base, considers problems and possible solutions associated with its use, and offers initial views of the antiquity of these deposits and possible demographic patterns represented by them. While a great majority of the dates represent cultural activities during the last 3,000 years, shell midden deposits dating to more than 5,000 B.P. have also been reported. If demographic patterns are actually represented, some different regional patterns may be indicated.

Whitlam, Rob (DAHP)

Retro-Reflective Review of the Ancient One Case

Friday 9:00 AM- 9:20 AM, Meeting Room D

This paper reviews the history of archaeological research along the Columbia and Snake River systems and details the evolving nature of this research over the last 60 years. How the Kennewick Man find contributes to this history is presented. The implications of this review for a more current, local perspective on Kennewick Man is presented as well.

Williams, Mark (University of New Mexico)

Middle Holocene Shellfish-Harvesting Practices: Evidence from the Labouchere Bay Sites, SE Alaska

Saturday 10:00 AM- 10:20 AM, Meeting Room F

Shifting priorities at seasonally-occupied coastal foraging camps may have facilitated the establishment and long-term sustainability of semi-permanent winter villages on the Northwest Coast. This paper presents preliminary results from one of several shell midden sites excavated on northern Prince of Wales Island, which help reveal the precise foraging decisions made by inhabitants of the northern Northwest Coast during the middle Holocene. Species abundance data from this midden suggest that shellfish-harvesting strategies changed significantly over the course of the site's 4,000-year occupation, with decreasing emphasis being placed on hard-substrate resource patches (rocky tidepools), and relatively little change regarding soft-substrate resource patches (mudflats).

Wilson, Douglas C. (Portland State University, National Park Service)

Exploring Frontier Forts and the Complexities of Colonialism in the Pacific Northwest

Thursday 1:20 PM- 1:40 PM, Meeting Room C

Over the past 300 years, three distinct phases of colonialism occurred in the Pacific Northwest, loosely defined as exploration, trade, and occupation. Frontier forts, armed camps, military training grounds and their support communities are archaeological sites that reflect transitions in the nature of colonialism. In particular, these sites reflect aspects of the relationships between the colonizers and colonized and their view(s) of people and place. Exploration, preservation, and interpretation of forts and their communities place them centrally within sometimes-disparate understandings of heritage and identity. This paper explores how material culture and history can inform on colonialism using examples from forts, military camps, and their communities in the lower Columbia River region. I identify ways in which the material culture of forts and their communities can contribute to complex dialogues on thorny issues of heritage and identity in the Pacific Northwest.

Wonderly, Megan (Pacific Lutheran University)

Analysis and Implications of Obsidian Sources Represented in Mount Rainier Archaeological Sites

Thursday 10:40 AM- 11:00 AM, Meeting Room A

The ability to source obsidian from archaeological sites to specific geologic sources has been useful for understanding pre-contact exchange systems in the Pacific Northwest. Mount Rainier is perhaps remarkable for the lack of obsidian found in the archaeological record, as obsidian does not occur naturally on the mountain and is found at very few sites in small quantities. This paper discusses some of the few obsidian lithic artifacts recovered from archaeological sites in Mount Rainier National Park and their geologic sources of origin. There is a particular focus on material from Ohanapecosh Campground, Forgotten Creek, and Buck Lake that has recently been sourced using X-ray fluorescence (XRF) analysis. Though the use of obsidian was limited on the mountain, examining the different obsidian sources utilized can provide insight into the peoples using Mount Rainier in the past and their interactions with other groups.

Zentgraf, Diane (Oregon State University)

Clay Tobacco Pipes of Fort Hoskins and Fort Yamhill, Oregon

Friday 1:40 PM- 2:00 PM, Meeting Room E

Clay tobacco pipes have been found at historic sites throughout the United States for decades. There is little information about military smoking habits and use of clay pipes at major military forts in Oregon. Research is currently being done on an assemblage of clay tobacco pipes from two civil war era forts, Fort Hoskins and Fort Yamhill, Oregon. The purpose of this study is to explore, expand upon and enhance our understanding of the ethnic, political and social structures present at the two forts from 1856 to

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1866. A detailed analysis will include understanding the manufacturing of clay pipes, the relationship between the two forts, trade and economic history locally and regionally, and social relationships between Native Americans, military personnel and civilians.

Ziegler, Amber (University of Idaho)

Science, Culture, and Corpses: How does Science influence American cultural norms surrounding the dead and dying?

Friday 11:20 AM-11:40 AM, Meeting Room F

Over time and space humans have developed a wide array of methods and meanings associated with death and dying. In the twenty-first century United States, most people die in the hospital or the hospice system; corpses are cared for almost exclusively by morticians. The realms of the dying and dead are typically the purview of the medical establishment and funeral industry. While medicine and funeral work have been the subject of anthropological research, and these settings for death are embedded within scientific understandings of the world, little scholarly inquiry has been made into the intersection of science, culture, and death. In this paper, I examine institutional and historical contexts in order to illuminate relationships among science, scientific knowledge, and American ways of death and dying. I propose that reciprocal influences between science and deathways in American society result in mutually reinforced boundaries surrounding the care of the dying and dead.

Armstrong, Elizabeth and Eric Oosahwee-Voss (Confederated Tribes of the Colville Reservation)
Erosive Effects of the 2014 Wanapum Reservoir Emergency Drawdown on Archaeological Sites as Observed by the Confederated Tribes of the Colville Reservation
Group C (20), Thursday 1:20 PM-2:20 PM, Ballroom
Grant County Public Utility District (GCPUD) employees observed a crack in Wanapum Dam on February 24, 2014. GCPUD dropped the level of the water impounded behind the dam approximately 20 ft causing an emergency drawdown lasting approximately ten months. By December 2014, GCPUD had completed the repairs to the dam and refill of the reservoir began. In coordination with the GCPUD Cultural Resources Department, the CCT History/Archaeology [H/A] Program designated crews tasked primarily with monitoring burial sites for potential exposure with the ultimate goal of protecting ancestral human remains. From March through August 2014, the CCT H/A crews spent eight sessions on the reservoir. This poster details the erosive effects of the reservoir on archaeological sites during the drawdown.

Bobolinski, Kathryn (University of Montana- Missoula)
A Spatial Analysis of Artifacts from the Housepit 54 Ilc Floor at the Bridge River Site (EeRl1), Middle Fraser B.C.
Group C (21), Thursday 1:20 PM-2:20 PM, Ballroom
Prehistoric households living within Housepit 54 at the Bridge River pithouse village in south-central British Columbia participated in complex strategies of resource acquisition, processing, storage, and waste disposal. A preliminary spatial analysis of artifacts from the Ilc floor, which dates to about 1273+/-26 cal., will be explored in this study and should result in a more in-depth understanding of the structure's household organization and the past human behaviors that affected the creation of this assemblage. Ultimately, if there were activity areas being used during the occupation of the HP 54's Ilc floor, then clusters of cultural material and possibly clusters of material types are expected to be found. In addition, this study will also be looking for evidence of past cleaning activities, which could have destroyed, altered or cloaked activity areas and the behaviors that corresponded to them.

Boswell, Sharon (SWCA)
Not Just the Beer: Breweries, Saloons and Community Development
Group A (1), Thursday 10:20 AM-11:20 AM, Ballroom
Brewing was one of the Puget Sound's early industries, as plants opened by the mid-1850s in several of the region's first major settlements. The hard-working, hard-drinking culture of the area's loggers, miners and seamen provided an ideal backdrop for beer-making to thrive. As the number

and size of breweries grew, however, and competition heated up, new sales outlets were needed. Many of the larger breweries created their own demand by outfitting and stocking saloons, or even building their own, at railroad stops, mill sites, and other locations which promised potential demand. Often these saloons and beerhalls became the nucleus of a new community, offering a place to eat, socialize, and, of course, drink beer, while encouraging the development of other companion businesses. This poster explores the development of early Northwestern culture and community through the sponsorship of the regional brewing industry as well as the archaeological record it has left behind.

Bowden, Bradley and Jennifer Olander (HRA)
The (Briefly) Lucrative World of Hop Farming in the Southern Puget Sound, 1880-1920
Group A (2), Thursday 10:20 AM-11:20 AM, Ballroom
The Steilacoom Plains historically supported a wide variety of agricultural activities including commercial hops production. By about 1880, hops from the Pacific Northwest had received worldwide recognition, and production outpaced that of New England and Great Britain. The success of hop growing in Washington was a culmination of a number of factors, including favorable soils and climate, low production costs, the availability of nearby ports and railroads, ready labor pools for hop harvesting, and high market prices for hops during the late nineteenth century. Hop farming was quite labor intensive, and many farms relied on seasonal help from the region's Native Americans. Small, family-owned farms appeared to rely more heavily on pooled resources, however, timing harvests so that groups of families could move from farm to farm over a several week period in the fall. Archaeological evidence supports a relatively lucrative, though short-lived industry.

Butler, Alexander (Evergreen State College)
Bringing Archaeology into the Community: School Outreach
Group B (6), Thursday 10:20 AM-11:20 AM, Ballroom
This poster presents the results of an outreach program aimed at sharing archaeology with the public. Along with another recent graduate of The Evergreen State College, the author organized visits to seven middle and high schools in the immediate region of the Bush Homestead archaeological field school. This field school, held during the summer of 2015, excavated the former property of George Bush, one of the first settlers in what is now Thurston County. The wagon train in which Bush and his family arrived chose this location not only due to the rich resource base, but mainly because Bush, as a man of possibly African descent, was prevented from settling in Oregon due to the Lash Laws. Through the school outreach, over 750 students learned not only about

applied anthropology and archaeology, but also about an often-overlooked figure in early Washington history.

Cascella, Melissa, Shane M. Sparks, and Tait J. Elder (ICF International)

Testing the Reliability and Precision of Two Archaeological Site Sensitivity Models on the Puget Sound Coast
Group D (31), Thursday 1:20 PM-2:20 PM, Ballroom

In a previous ICF study, an analysis of a 143-mile segment of the Puget Sound coastline looked at several geomorphic processes and found that the majority of coastal archaeological sites present were located on depositional or neutral landforms. Based on these findings, our poster evaluates whether coastal landform type can be a reliable predictor of coastal archaeological site distributions when compared to traditional sensitivity models, which are typically based on slope and distance to fresh water. To do this, we selected a different segment of the Puget Sound coastline, characterized the shoreline by landform type, and assigned the archaeological sensitivity to each landform type based on whether it was erosional (low), neutral (high), or depositional (high). We then compared this information against the documented archaeological sites present and a random point sample, and then repeated this process with the traditional sensitivity model, to determine the precision and reliability of each.

Clark, Jorie (Oregon State University)

Sea Level Rise Past, Present and Future: Implications for Cultural Resources in the Pacific Northwest

Group D (32), Thursday 1:20 PM-2:20 PM, Ballroom

This presentation will address the implications of past, present, and future sea level rise on cultural resources in the Pacific Northwest. Following the Last Glacial Maximum ~21,000 years ago, globally averaged sea level rose ~130 m, exposing large expanses of continental shelves off the Pacific Northwest coast. This paleogeography changed over the last 20,000 years, with results from sea-level modeling identifying potential coastal migration routes and occupation sites that have since become submerged as global sea level rose to its present height. Sea-level rise over the last 100 years and projections for the next 100 years need to be considered in adaption strategies for cultural resources. Finally, projections of long-term sea-level rise indicate that sea level will continue to rise for many millennia, thus threatening present and future cultural resources.

Coffin, Mikelynn (Western Washington University)

Astor Fort Okanogan Collections Research

Group B (7), Thursday 10:20 AM-11:20 AM, Ballroom

Astor Fort Okanogan, the first American owned and one of the earliest fur trading outposts established in Washington State, was excavated by archaeologists in the 1950's and 1960's. The archaeology of the fort yielded important information on the sites structures, but interpretations of the archaeological material culture is very limited. The Western Washington University archaeological repository in the Department of Anthropology has a collection of artifact descriptions by Dr. Grabert, who excavated the site in 1964 and 1965. I inventoried the records and typed-up his handwritten artifact descriptions in Excel files. Due to my work, his artifact descriptions are accessible for further research.

Cooper, Jason B., Tyler McWilliams, and Tim Gerrish (Amec Foster Wheeler Environment & Infrastructure, Inc)

Hop to It: Growing Hops in the White River Valley During the 19th Century in South King County, Washington
Group A (3), Thursday 10:20 AM-11:20 AM, Ballroom

Growing hops in the White River Valley during the 19th century in south King County reached a pinnacle in the 1880s and 1890s. From the family owned hop farms in the valley to the large hop growing operations, the area surrounding the cities of Auburn and Kent produced some of the best hops in Washington State. Issues that faced hop growers of this time included reliable transportation of their goods, flood control, and most importantly to the growers, the buyers of hops having too much say in determining the price of hops. The issue of price fixing led to the formations of agricultural co-ops intent in protecting the interests of the hop growers. The construction of the Sloan Ditch in the 1890s, which eventually became part of the King County Drainage District No. 1, provided both flood control and reliable irrigation to the burgeoning hops farms in the region.

Daily, Phillip (Boise State University)

Conditioning and Predicting Technological Variability In Coastal Oregon: Utilizing Dr. Lewis Binford's Hunter Gatherer Database

Group D (33), Thursday 1:20 PM-2:20 PM, Ballroom

The aquatic resources available to prehistoric inhabitants of coastal Oregon undoubtedly played a major role in the evolution of diet breadth, in turn shaping technological adaptations along the coast and riverine areas of the interior. Extensive archaeological exploration along the coast, combined with insights from geologists, ecologists and other researchers, has created a fascinating picture of the variation existing among these prehistoric peoples. Providing a new approach to research, the hunter-gatherer database developed by the late Dr. Lewis Binford and his students offers large scale comparison of archaeological and

ethnographic data in order to create frames of reference to assist in first-order pattern recognition and the development of conceptual models. This database has yet to be applied to the Oregon coast. Utilizing archaeological literature, site reports and Dr. Binford's database, this poster will demonstrate the applications of the database to research questions regarding aquatic subsistence and technology in coastal Oregon.

Damitio, William, Emily Whistler, Melissa Goodman Elgar (Washington State University), and Kevin Lyons (Kalispel Tribe of Indians)

Small scale sediment sampling as a method for identifying anthropogenic features: A case study from Pend Oreille County, Washington

Group G (18), Friday 1:20 PM-2:20 PM, Ballroom

This project tested coring of house pits to differentiate between natural and anthropogenic deposits. Frog Island sits (45PO429) on a point bar adjacent the Pend Oreille River, Pend Oreille County, Washington. Previous research identified 115 depressions visible on the surface of the landform which are assumed to be of cultural origin. We tested two proposed house pits by collecting nine sediment cores using bucket augers, and two additional offsite controls. Samples were formally described in the field and in the lab where the sediments were systematically subsampled and sieved. We tested pH, electrical conductivity, organic and inorganic carbon and particle size analyses. These riparian sediments demonstrated largely natural stratigraphy. However, the sequence from the house pits was truncated, and microartifacts were recovered, suggesting anthropogenic influence. This study demonstrates that limited subsurface sampling is a viable method for testing the potential of settlement features prior to launching larger scale investigations.

Dampf, Steven (HRA), James Burr Harrison III, and Kendra Maroney (Spokane Tribe of Indians)

Geophysical Survey at the Sandy Heron Site (45SP485), Spokane County, Washington

Group C (22), Thursday 1:20 PM-2:20 PM, Ballroom

Following the requirements of FERC's Programmatic Agreement for relicensing, HRA assisted Avista Corporation in developing Historic Properties Management Plans for the Spokane River Project in eastern Washington and northern Idaho. In addition to archaeological site monitoring, implementation procedures include formal evaluation to determine a site's eligibility for listing in the National Register of Historic Places. Site 45SP485 consists of numerous deflated fire-modified rock features, shell concentrations, possible housepit depressions, and an assemblage of lithic tools. The site contains intact deposits

with high archaeological potential, but suffers from impacts due to shoreline erosion, deflation of sediments, and recreational artifact collecting. HRA initiated the first phase of evaluation utilizing magnetometry to identify the presence of buried archaeological features for further investigation and to address the integrity of those features and the remaining buried site. These preliminary results are helping delineate activity areas associated with the use of fire and determine feature depth.

Danner, Bryce (University of Idaho and USFS)

The Lochsa River: A Precontact Overview

Group C (23), Thursday 1:20 PM-2:20 PM, Ballroom

The poster focuses on the precontact archaeological sites of the Lochsa River and the future of the project to come. The Lochsa River is a 71 mile long tributary of the Clearwater River, residing within the traditional territory of the Nez Perce Indians. The river contains many sites along it with evidence people utilized the area around 10,000 B.P. Lewis and Clark walked the Lochsa River in 1805, describing fishing weirs in its tributaries. The poster will describe the river systems archaeological sites located along it and current knowledge of precontact use of the river. Archaeological research will consist of previous projects undertaken in the 70's, 80's, and 90's and discuss sites and artifacts located at that time. The poster will also focus on the plans for the future research projects that will occur in the summer of 2016.

Davis, David R., Jenn Calabro-Pecora, Max Morton, Patrick McCutcheon, and Patrick M. Lubinski (Central Washington University)

Central Washington University 2015 Cultural Resource Management Archaeological Field School on Washington Department of Fish and Wildlife Lands

Group C (24), Thursday 1:20 PM-2:20 PM, Ballroom

As part of its archaeological field school in the summer of 2015, faculty from Central Washington University coordinated through the Washington Department of Fish and Wildlife to conduct two pedestrian surveys in the Colockum Wildlife Area. The investigations were limited to surface survey, and conducted by eleven students and staff. As a result, ten new archaeological sites and thirteen isolate finds were recorded and added to the State's cultural resources inventory. Of the ten sites, three consisted of historic artifacts, four consisted of pre-contact artifacts, and three consisted of a combination of historic and pre-contact artifacts. The thirteen isolate finds were made up of nine historic artifacts and four pre-contact artifacts. The students gained valuable applied cultural resource management training and experience as part of a team recording previously unknown cultural resources. These field school

results show how inter-state agency relationships can provide quality educational experiences that benefit all involved.

Davis, John M. (Central Washington University)

A Statistical and Managerial Analysis of Testing Projects on the US Army Yakima Training Center, WA

Group C (25), Thursday 1:20 PM-2:20 PM, Ballroom

For over three decades, the Department of Defense and U.S. Army have been contracting Cultural Resource Management (CRM) projects at the Yakima Training Center (YTC).

Changing management strategies, combined with limited budgets for compliance projects, have created a need for a comprehensive review and assessment of archaeological testing programs. The objectives of this research project are to: (1) determine what an analysis of the archaeological data addressing questions of sample representativeness reveals by quantitatively analyzing and comparing assemblage diversity, (2) analyze how cost effective/successful the testing programs have been for the purpose of Section 106 compliance according to Criterion D, and (3) offer potential management recommendations to help recalibrate testing and evaluation projects on the YTC using cost efficient strategies.

Desrosiers, Ryan and Josh Heflin (Western Washington University)

Using Crystallographic Texture of Bivalve Shells to Confirm Taxon: A Case Study from the Tse-whit-zen Village Site (45-CA-523)

Group E (1), Friday 10:20 AM-11:20 AM, Ballroom

This poster details the results of an experimental approach of using crystallographic texture of bivalve shells to infer specific taxon in the absence of other morphological characteristics. In the process of sorting shell samples from the Tse-whit-zen site (45-CA-523), thin, flat body fragments that appeared more consistent with Pacific Geoduck (*Panopea generosa*) than other clams were found, but lacked definitive morphological characteristics such as hinges. To attempt to confirm the tentative identification, crystallographic textures of 10 cf. *Panopea* and 2 *Tresus* shell fragments from the Tse-whit-zen site were examined using a scanning electron microscope (SEM). My results show that all specimens that were examined displayed the same crystallographic texture as modern comparative *Tresus* specimens.

Diaz, Nickolas (Oregon State University)

Itrax based chemostratigraphic analysis at Woodburn High School in Woodburn, Oregon

Group G (19), Friday 1:20 PM-2:20 PM, Ballroom

The Willamette Valley during the Terminal Pleistocene was an environment in constant flux, creating a changing world for the early inhabitants of the Pacific Northwest. The valley floor contains an extensive record of Pleistocene ecology and archaeology; however, the information is locked within a complex stratigraphic sequence. Using a Geoprobe direct push coring rig, 13 sediment cores were extracted from surficial deposits in the Mill Creek watershed at Woodburn High School. The core samples were analyzed on Oregon State University's Itrax core scanner, returning high-resolution optical imagery, radiograph images, and x-ray fluorescence (XRF) data. The XRF data is used to construct a chemostratigraphic profile of the study area in order to define and model the distribution of sediments potentially related to late Pleistocene-aged archaeological sites.

Ellison, Leigh Anne, Adam Brin (The Center for Digital Antiquity, School of Human Evolution and Social Change, Arizona State University), and Jodi Reeves-Flores (University of Arizona)

Curating and Preserving Digital Archaeological Data: A Guide to Good Practice

Group E (2), Friday 10:20 AM-11:20 AM, Ballroom

Archaeologists generate large numbers of digital materials during the course of field, laboratory, and records investigations. Maps, photographs, data analysis, and reports are often produced digitally. Good curation of digital data means it can be discovered and accessed, and preserving these materials means they are accessible for future use. In many ways the managing, curating and preserving digital materials involves similar steps as those taken with physical artifacts, samples, and paper records. However, the digital materials are different and the process can appear daunting at first. In this poster we outline some simple steps for managing and curating digital materials that can be integrated into existing or future project and that can be applied to digital materials from completed projects. We will also use real world examples from tDAR (the Digital Archaeological Record) to illustrate how people are preserving their digital materials for access and future use.

Falzon, Rachel (University of Idaho)

The Archaeology of Historic Pen d'Oreille City (1860-1880)

Group B (8), Thursday 10:20 AM-11:20 AM, Ballroom

This poster will cover the archaeological investigations conducted at the site of historic Pen d'Oreille City and the importance of preserving the land. A reconnaissance survey of the land was conducted through Bowers Laboratory of Anthropology at the University of Idaho in September 2015. The project included the survey and archival and lab research. With the leadership of Dr. Stacey Camp, M.A. student Dakota Wallen, and the public, we were able to

survey what is believed to be one of the oldest settlements in Idaho. Old buildings and wall features were visible throughout the area. With the use of maps, pictures, and books, we were able to locate these features. Artifacts were found littered across the site, but this area is being disturbed by continuous activities and modern buildings. Without this project, historic Pen d'Oreille City could well be on its way to being forgotten.

Fashing, Allison, Emma Scott, and Darcy Wayman
(University of Idaho)

The Pursuit for Happiness in Times of Darkness: An Exploration into Recreational Activities at the Kooskia Internment Camp (1943-1945)

Group B (9), Thursday 10:20 AM-11:20 AM, Ballroom

Dozens of men are gathered around to play a game of softball, but their interest in the sport isn't the only thing they have had in common. They were all prisoners of war. The Kooskia Internment Camp was one of many WWII internment camps for Japanese Americans in the United States. Though they were seen as prisoners and treated as such they were still allowed to partake in recreational activities like sports, arts and crafts, board games and the camp's canteen facility due to the Geneva Convention. Our project will explore the men's leisure activities during a time of great oppression.

Frierson, Andrew (Washington State University), and David Rice (Army Corps of Engineers (Retired))

Revisiting Rock Creek Shelter: Results from the 2015 Summer Fieldwork

Group C (26), Thursday 1:20 PM-2:20 PM, Ballroom

The poster will discuss the 2015 summer fieldwork carried out by Andrew Frierson, Dr. David Rice, Anan Raymond, and an intern from the Oregon Department of Fish and Wildlife at a site referred to as Rock Creek Shelter (35LK22). The site is located in Hart Mountain National Antelope Refuge in Lake County, Oregon. This site was excavated in 1967 by Dr. Rice during a WSU field school. Field time was spent counting and recording surface artifacts, determining the exact coordinates for the site, and producing a sketch map, which Raymond later included with an updated site record form and official site report for the Oregon Department of Fish and Wildlife. The collection from the initial excavation is currently held at the WSU Museum of Anthropology and will be analyzed for Frierson's thesis. The poster will conclude by explaining the current direction of the project.

Fulkerson, Tiffany J. (Washington State University)

Gender, Task Differentiation, and Power in Prehistory: Engendering the Archaeological Record of the Southern Plateau, Northwestern North America

Group I (31), Friday 1:20- 2:20 PM, Ballroom

This study addresses the relative absence of archaeological considerations of gender and, specifically, the underrepresented role of women in the pre-contact period of the Southern Plateau. Ethnographic and historical records are reviewed in search of material and contextual correlates for gender in the past, revealing that paleoethnobotanical remains, cooking features, puberty/menstrual/birthing architectural structures, digging sticks and digging stick handles, ground stone tools, needles, and basketry and woven textiles are particularly useful correlates for female-based task differentiation. "Power" is offered as a useful framework for exploring gender relations in economic and other social spheres of society. It is argued that gender-differentiated work organization operated as a mechanism for maintaining gender equality, and also as a source from which power and autonomy was enacted, reinforced, and derived. It is also argued that there was greater fluidity and flexibility of gender roles than has often been presented in ethnographic literature.

Gamble, Erin (Evergreen State College and University of Washington)

Bush Homestead Archaeology Project: Results from First Field Season

Group B (10), Thursday 10:20 AM-11:20 AM, Ballroom

This poster outlines results of the excavation conducted in July and August 2015 by The Evergreen State College's first archaeological field school. The site, 45TN91H, is historically significant as one of the first homesteads in southern Puget Sound, originally settled by George and Isabella Bush in the winter of 1845/6. Twenty 1x1 meter units were excavated to a maximum depth of 50 cm, and one additional 50x50cm test pit to 100cm depth. Over 4,000 artifacts were recovered including glass, ceramics, metal, and organic. Due to prior sub-surface interference, historical and non-historical artifacts were found in the same contexts, and a stratigraphic sequence could not be determined. However, our findings suggest that continued excavations may yield further information about the Bush Homestead and the early history of Washington State. As such, we hope to propose a second season in the summer of 2016.

Gamet, Nambi, Christopher Barrett and Heather Boswell
(Western Washington University)

Osteological Complexity: Testing Allometric Hypotheses on Pterion - Preliminary Study

Group I (26), Friday 1:20 PM-2:20 PM, Ballroom

Pterion is an osteological landmark located several centimeters behind the orbit on the lateral vault of the skull where the frontal, temporal, parietal and or sphenoid bones articulate. Morphological variation results from the different

combinations of articulations. Since the early work of Ashley-Montagu in 1933 and despite evolutionary and biomedical significance, the precise mechanisms producing patterns in pterion variation are unclear. Research examining sutural patterns use primate models for investigation and suggest that forces producing variation are multifactorial. Comparative data (n=108) illustrate the complex osteological relationships at pterion in vertebrate model testing of allometric hypotheses in felidae and canidae. Using multiple and stepwise linear regressions (SPSS 23), we tested overall cranial dimensions on pterion pattern. Findings suggest significant correlation between principle components and sutural pattern with interdependent variables. Further studies call for more comprehensive osteological examinations of pterion and identification of significant independent variables.

Gilmour, Daniel M., Paul S. Solimano, (Willamette Cultural Resources Associates, Ltd.), Thomas J. Brown, and Kenneth M. Ames (Portland State University)

Site Types and Assemblage Structure within Radiocarbon Dated Windust Assemblages

Group C (27), Thursday 1:20 PM-2:20 PM, Ballroom

The Western Stemmed Tradition as expressed on the Columbia Plateau is generally referred to as the Windust Phase. Most work on the age and duration of Windust and the nature of associated land-use systems are now decades old. In this poster we examine spatial and temporal trends in Windust lithic toolkit organization and subsistence. Specifically, we inspect lithic assemblage diversity and content, the presence of features, fired rock, and zooarchaeological data within a temporal structure created by Bayesian chronological modeling. We test specifically hypotheses postulating that subsistence shifted during the Windust period from a broad spectrum foraging pattern to a later focus on larger game and with a slight increase in logistical organization by the Later Windust period.

Gonzalez, Sarah and Ian Kretzler (University of Washington)

Field Methods in Indigenous Archaeology: Community-Based Research on the Grand Ronde Reservation

Group E (3), Friday 10:20 AM-11:20 AM, Ballroom

There are few formal field schools in the United States where students can receive formal training in tribal historic preservation, community-based collaboration, and archaeological field methods. Given the increasing role of consultation and collaboration in disciplinary practice, learning to effectively communicate and build relationships with a Tribal Historic Preservation Office (THPO) is a critical skill. The Confederated Tribes of Grand Ronde Community of Oregon's THPO and the University of Washington have thus

partnered to develop Field Methods in Indigenous Archaeology, a summer field school that offers both Grand Ronde community members and undergraduate students training in tribal historic preservation and archaeological field methods. Implementing a community-based, indigenized approach to archaeological research, this program contributes to the capacity of the Grand Ronde THPO to care for tribal heritage and educates the next generation of heritage managers and archaeologists—tribal and non-tribal—about what it means to care for tribal cultural resources.

Gonzalez, Sarah, Ian Kretzler, Scott Adams, Karl Bloomberg, Daisy Jaime, Kandice Joyner, and Allie Terjeson (University of Washington)

Field Methods in Indigenous Archaeology: A Low-Impact Approach to the Study of Grand Ronde History

Group E (4), Friday 10:20 AM-11:20 AM, Ballroom

Growing concern from archaeologists and indigenous communities about the destructive nature of archaeological fieldwork has stimulated the development of new research protocols. Low-impact approaches emphasizing maximal recovery of information with minimal site disturbance have been proposed as effective strategies for documenting and protecting tribal cultural resources. In the summer of 2015, the Field Methods in Indigenous Archaeology training program implemented a low-impact methodology to the study of Grand Ronde Reservation history. Combining non-invasive survey technologies, including ground penetrating radar, metal detection, drone photography, satellite imagery, and LiDAR, and a catch-and-release surface collection strategy, this approach 1) generated new understandings of reservation cultural resources with little site disturbance and 2) facilitated the creation of a targeted excavation protocol centered on areas in which sub-surface excavation is appropriate and justified. The methods employed in this project highlight the benefits of low-impact approaches in archaeological field research.

Goodwin, Matthew, Breanne Taylor, and Paul Solimano (Willamette Cultural Resources Associates, Ltd.)

Interpreting Site Data at the Bruce's Eddy Site (10CW1)

Group C (28), Thursday 1:20 PM-2:20 PM, Ballroom

In the early 1960s, Idaho State University conducted archaeological excavations at the Bruce's Eddy site (10CW1) along the North Fork of the Clearwater River in Clearwater County, Idaho. The excavations produced a rich assemblage; however, due to lack of funding and other constraints, analysis of the artifacts remained incomplete for more than five decades. In 2014, WillametteCRA was contracted by the USACE to complete the analysis. This poster presents the results of the WillametteCRA study, which focused on

interpreting the assemblage with an emphasis on mobility and the function of 10CW1 within the local land-use system. Preliminary analysis of the archaeological data indicate the most intense site occupation occurred after about 2,000 years ago and that the site was part of a sedentary, logistically organized land-use system; the type that dominated the Columbia Plateau at that time.

Hanson, Marsha R. (Drayton Archaeology)

Investigating the Middle Paleolithic Lithic Industry: The Woodhaven Phase

Group F (11), Friday 10:20 AM-11:20 AM, Ballroom

Early Period archaeology of the Puget Lowland, largely referred to as Old Cordilleran, or more locally as “Olcott” has relied on relative dating techniques of Pleistocene glaciations and the correlation of sediments and landforms. Thermal luminescence dating of fire-altered rock from a hearth feature at 45WH417 dates the site to 7,300 +/- 430 BC and 5,870 +/- 300 BC (approximately 8700 BP and 7400 BP), offering one of the first reliable dates of a single component, undisturbed Paleolithic site in western Washington. The artifact assemblage, consisting of mostly local materials, represents all stages of tool production from material acquisition and initial reduction to the disposal of exhausted tools. By locally defining Middle Paleolithic lithic industry along the Stillaguamish and Pilchuk Rivers broader regional patterns may be established as well as changes in lithic chronologies throughout western Washington and southern British Columbia.

Harris, Megan and Mike Rousseau (Antiquus Archaeological Consultations Ltd)

Mega Cache Pits of EfQw-26

Group C (29), Thursday 1:20 PM-2:20 PM, Ballroom

Archaeological site EfQw-26 is a cultural depression site on the southwestern shore of Adams Lake in British Columbia dated to the Plateau Horizon (2400 – 1200 BP). The site has four concentrations of cultural depressions over two terrace features. Excavations in 2013 revealed that the surficial depressions were deeper and larger than anticipated with smaller cache pits 2.5 m below the surface. These types of cache pits are defined as “mega cache pits” on the basis of their size and presence of smaller cache pits within the larger pits. This poster presents the results of the 2013 excavations at EfQw-26 from two of the four concentrations of cultural depressions at this site where mega caches were revealed.

Herritt, Caroline, Daniel J. Polito, and Renae J. Campbell (University of Idaho)

Bar Hopping as Praxis: The Bovill Run as Orality and Folklore

Group I (27), Friday 1:20 PM-2:20 PM, Ballroom

This poster presents on-going research on what is known as the “Bovill Run.” Although the specific route has varied over time, in general, making a Bovill Run is described as a traveling a 70-mile circuit between Moscow and Bovill, Idaho, visiting a series of small-town bars in a single night. According to local lore, the Bovill Run has been around since at least the 1940s and possibly as early as 1908. This tradition appears to have a rich and dynamic history that is associated with a number of diverse individuals and communities. Despite this, and although the Bovill Run is well known in local tradition, it is not well documented. This research project seeks to identify the historical origins and changing cultural dynamics of the Bovill Run through archival research and oral histories aimed at exploring the tradition’s importance in individual practice, community development, and local memory.

Hibdon, Sarah R. and Stephanie A. E. Jolivet (SRI)
Clothing Fasteners from the Historic Morgue at the Washington State Insane Asylum

Group B (11), Thursday 10:20 AM-11:20 AM, Ballroom

In 2015 SRI archaeologists excavated a trash deposit located adjacent to the historic Morgue at Western State Hospital in Lakewood, Washington. The Washington State Insane Asylum was established on the property in 1871. The site comprises more than a meter and a half of stratified deposits containing artifacts dating from the 1890s-1920s, including medical supplies, institutional kitchen debris, as well as personal items belonging to both the patients and hospital staff. Fragments of burned cloth as well as a variety of clothing fasteners suggest that this dump served as the sanitary disposal area for hospital clothing. Studies of shell, bone, and ceramic buttons from the site exhibit a wide variety of styles, suggesting that early institutional clothing was not mass produced. The question of whether clothing and fasteners were deposited by Morgue attendants or whether the dump served as a repository for other adjacent hospital buildings will be addressed.

Johnson Humphries, Sarah and Michelle N. North (Equinox Research and Consulting International, Inc.)

Landscape Modification and the Importance of Historic Research in CRM.

Group E (5), Friday 10:20 AM-11:20 AM, Ballroom

Human modification to the landscape has been occurring throughout human occupation, and continues into the historic period, where the scope and magnitude of this modification has intensified. This poster explores through specific examples the importance of identifying historic modifications to the landscape before engaging in fieldwork, and the ways in which this knowledge can inform and alter

the interpretation of both historic and precontact deposits. Examples for this poster are taken directly from data gathered during mitigative CRM projects on Whidbey Island in Washington State, and explore the impact of factors such as the development of public infrastructure, wetland reclamation, and recreation on the precontact and historic record.

Johnson, Matthew (Central Washington University)
A Proposed Faunal Analysis of Two Columbia River House Feature Sites: Hole-in-the-Wall-Canyon (45KT12) and French Rapids (45KT13)

Group H (22), Friday 1:20 PM-2:20 PM, Ballroom

As part of proposed thesis work, a faunal analysis will be completed for the zooarchaeological collections ($n \approx 4,650$) of two house feature sites, Hole-in-the-Wall Canyon (45KT12) and French Rapids (45KT13). Both sites are located near Vantage, Washington, within the inundated area of the Wanapum Reservoir, and date ca. 2400-200 B.P. Originally excavated prior to dam construction in the summers of 1961-62, the fauna was never analyzed. While fauna from house feature sites has been reported for areas to the north and south along the Columbia River, as well as for sites along the Snake River, almost no significant quantifiable faunal data has been reported for the Columbia between its confluence with the Wenatchee River (river mile 468) and Snake River (river mile 325). This analysis will focus on finding differences and similarities between the analyzed faunal collections and other reported house feature faunal assemblages along the Snake and Columbia Rivers.

Johnson, Meghan, Marci Monaco, and Kelley Prince Martinez (AINW)

Portland Basin Projectile Point Technology

Group F (12), Friday 10:20 AM-11:20 AM, Ballroom

Technological analysis of projectile points from the Rylander/Decker site (35CO2) located near St. Helens, provided information on the production and maintenance strategies used by the occupants of this late pre-contact village on the lower Columbia River. We analyzed 379 projectile points from a private collection and tabulated attributes that reflect pre-contact choices made to select raw material, apply heat treatment, and manufacture and maintain functional points. These attributes were compiled in a database to compare point type frequency from three other local late pre-contact villages, Meier (35CO5), Briar (35CO35), and Cathlapotle (45CL1). Our study demonstrated a consistent regional approach in the production and maintenance of late pre-contact projectile points, with few variations. The variations likely reflect differing skill levels, quality of raw material, and personal preference for the

sharpening and repair of used points within acceptable cultural parameters and functional needs.

Jolivet, Stephanie A. E. and Sarah J. Van Galder (SRI)
Late 19th Century Daily Lives of Patients at Western State Hospital

Group B (12), Thursday 10:20 AM-11:20 AM, Ballroom

The Washington State Insane Asylum was established in 1871 in Lakewood, Washington. The early hospital relied primarily on occupational therapy for patient treatment starting in the 1880s the hospital was run as a self-sustaining institution. Patient labor was utilized to run an extensive on-site farm as well as in the kitchens and laundry. Types of labor were different for the sexes, with women largely sequestered in indoor activities while men worked in the farm and gardens. A deep trash deposit excavated by SRI archaeologists in 2015 uncovered artifacts associated with the institutions farming, gardening, and sewing activities dating from the 1880s-1920s. An array of personal items likely belonging to patients were also uncovered, providing insight into the daily lives of patients at this historic institution.

Karson Engum, Jennifer (Confederated Tribes of the Umatilla Indian Reservation)

Places Are Alive as Long as We Remember

Group I (28), Friday 1:20 PM-2:20 PM, Ballroom

Homeland holds great importance to the Cayuse, Umatilla and Walla Walla people. The connection to traditional landscapes remains strong one hundred and sixty years after the Treaty of 1855 instigated the removal of our three tribes off of our aboriginal land base and on to the Umatilla Indian Reservation. Places are embedded in Indian culture. The names of places convey knowledge of the land, its resources and its history. Places connect people through legends, ceremonies, cultural activities, spiritual beliefs, memories and activities associated with the location. This poster compliments our recently released native place names atlas, which features ethno-geographic content and GIS mapping of over 600 places throughout the ceded homeland. Caw Pawa Laakni 'They are Not Forgotten': A Sahaptian Place Names Atlas of the Cayuse, Umatilla, and Walla Walla Tribes will be on sale at the JONA table in the NWAC book room.

Kearns, Michelle and Patrick Pringle (Centralia College)

Do oral histories of Puget Lowland tribes preserve a cultural memory of catastrophic volcanic floods from Mount Rainier in the Puyallup and White Rivers from more than 1100 years ago?

Group G (20), Friday 1:20 PM-2:20 PM, Ballroom

Myths of Puget Lowland native peoples transcribed by Ballard (1929) and Clark (1953) appear to describe the

profound effects of volcanic activity at Mount Rainier on downstream areas. In “How the whales reached the sea”, burrowing whales change the course of White River creating Stuck River, the historic name of a stream that drains from Auburn into the Puyallup River. Buried forests radiocarbon dated to ~1100 yr BP at Auburn and Fife show a great volcanic flood inundated these areas with a thick (0.5–2m) layer of andesitic sand and gravel. Other stories describe a flood that buried the Puyallup River valley near Orting and likely refer to the Electron Mudflow that buried that area about ~1500CE. The thickness and extent of volcanic deposits indicates catastrophic aggradation in the valley bottoms, and the scale of these landscape changes more than Millennium ago appears to have been captured in oral stories.

Kiers, Roger (WA State Dept. of Transportation)

A Tale of Two Privies: Residents of Early Tacoma's Lower Pacific Neighborhood

Group B (13), Thursday 10:20 AM-11:20 AM, Ballroom

In October 2014, two historic privies were discovered during construction of a stormwater pond associated with the addition of high-occupancy-vehicle (HOV) lanes on I-5 through Tacoma, Washington. WSDOT archaeologists bisected and excavated both privy shafts to their terminal depths, recovering an assortment of domestic and personal items. The artifacts, combined with historical documents that include maps, photographs, city directories, and census records, provide a glimpse into the lives of individual families living on the southern fringe of the city's downtown core around the turn of the century. One of the more unique artifacts even appears to have been signed by one of the young residents themselves.

Kirkpatrick, Molly (Oregon State University)

Probing into the Past: Revisiting the Tahkenitch Landing Site (35DO130) and Surrounding Area

Group D (34), Thursday 1:20 PM-2:20 PM, Ballroom

Located inland from the modern day coastline, the Tahkenitch Landing Site is situated between a coastal dune sheet and the rugged uplands and river valleys of the Oregon Coast Range. In 1986, Tahkenitch Landing was reported as the oldest known archaeological site along the Central Oregon Coast with initial occupation dating as early as 8,000 years BP. Site boundaries were defined as the presence or absence of shell midden; however, other evidence of cultural occupation not associated with shell midden may be present. To better define the site boundaries in both horizontal and vertical space, new non-invasive technologies such as high-resolution XRF analysis of sediment cores are being used to compare known cultural deposits to previously unexplored areas. In addition to

chemostratigraphic correlation, absolute dating methods will be used to enhance our understanding of the site's extents and its archaeological contents.

Lewis, Ian (Equinox Research and Consulting International, Inc.)

Mermaid Tears and Midden: A Possible Protohistoric Artifact from 45SJ50

Group D (35), Thursday 1:20 PM-2:20 PM, Ballroom

Site 45SJ50 is a culture rich shell midden located on a headland at the north end of Roche Harbor on San Juan Island, Washington. Historically the landform was used as the site of the Roche Harbor Lime Company Staveless Barrel Factory, and more recently it has been the location of a private residence. Field research beginning in the spring of 2015 allowed for the collection of midden samples that were radiocarbon dated to between 3459 ± 30 B.P. and 2595 ± 30 B.P. With dates that place this site in the Locarno Beach phase, it was quite interesting to find what appears to be a modified fragment of glass, which had subsequently been rolled in the beach splash zone among many other pieces of possible historic glass. Such an artifact provides a unique perspective into the possible protohistoric occupation of the area.

Litzkow, Jamie M. (BLM, Spokane District)

The Development of an Historic Mining Context for Northeastern Washington State

Group B (14), Thursday 10:20 AM-11:20 AM, Ballroom

In Washington, mining properties represent a unique cultural resource, significant in the settlement of the state and the development of its rich industrial economy. Cultural sites related to mining account for approximately 59% of known sites on BLM-managed lands across northeastern Washington (Pend Oreille, Stevens, Ferry, and Okanogan counties). The process of evaluating these sites for eligibility to the National Register of Historic Places (NRHP) is extensive, as no historic contexts for mining in the region currently exist to provide guidance regarding data gaps, data potential, and individual site significance. As a result, identification of property types, important research themes, and questions relevant at a local and regional scale have only been addressed on a site-by-site basis under the auspices of Section 106 and NEPA compliance reporting. At their best, contexts act as critical tools for understanding, identifying, evaluating, and protecting resources that afford a community its individual character and sense of place. There are, however, potential issues engrained in historic contexts that can ultimately translate to irreversible (often detrimental) effects to important cultural sites. This presentation seeks to resolve some of these potential pitfalls by engaging the local historical community in the

planning process and identification of relevant themes for historic mining in the state.

Lockwood, Chris and Thomas Ostrander (Environmental Science Associates)

A Lahar Runs Through It: Archaeological Implications of Post-Glacial Geomorphology of the Duwamish River Valley
Group G (21), Friday 1:20 PM-2:20 PM, Ballroom

The Duwamish River Valley is the setting for a number of important precontact archaeological sites including Duwamish No. 1, Allentown, and the River Bend site. The formation and configuration of the river valley is the result of an unusual series of geological events acting differentially along the valley axis. During the Late Holocene, the predominance of fluvial processes within the upper Duwamish has resulted in an older and thicker alluvial floodplain when compared to the lower Duwamish in which lahar flow and tectonic uplift were more significant. This variation in mechanisms and timing of floodplain formation has implications for the distribution and age of archaeological sites, as well as approaches to prospecting for sites, along different reaches of the Duwamish.

Maroney, Kendra L. (Kalispel Tribe) and Sharon Boswell (SWCA)

The Kalispel Tribe and SWCA Dive into the History at Beaver Lake and Gamlin Lake

Group C (30), Thursday 1:20 PM-2:20 PM, Ballroom

Historic properties have been identified on lands managed by the Kalispel Tribe in Bonner County, Idaho. These lands are primarily managed to improve, preserve, and/or restore wetland function and their associated wildlife habitats. Collateral to that mission is the preservation of historic properties and their narratives. The Tribe and SWCA have been collaborating on a three year project to better understand the history of the area and develop interpretive content to benefit neighboring communities. Our mission is to provide contextual information on North Idaho settlement, document the historic properties, and lastly make a sustainable educational impact with products available to the public. This project investigated the John B. Martin Homestead and Israel Gamlin Claim on Gamlin Lake, and the William L. Vestal Homestead on Beaver Lake. Historians and archaeologists examine these early 20th century settlements together to illustrate pieces of the historic record in Northern Idaho.

Martinez, Kelley Prince (Portland State University and AINW)

Laying the Groundwork: A Preliminary Examination of Ground Stone Distribution and Analysis in the Lower Columbia River Valley

Group F (13), Friday 10:20 AM-11:20 AM, Ballroom

The Rylander/Decker archaeological site (35CO2), a late pre-contact village site near St. Helens, Oregon, was historically referred to as Clackstar Village. Site 35CO2 was one of the largest villages on the Lower Columbia River with an estimated 28 houses and 1,200 inhabitants as reported in the Lewis and Clark Expedition Journals. Artifacts from the Rylander private collection along with data collected during excavations conducted by the Oregon Archaeological Society at site 35CO2 indicate a substantial and diverse presence of groundstone artifacts including mauls, pestles, bowls, adzes, abraders, net weights, stone sculptures, and clubs. Data from the analysis of groundstone from site 35CO2 will inform on aspects of groundstone design, manufacturing techniques, and function. By comparing groundstone tool assemblages from site 35CO2 with the Meier site (35CO5) and Cathlapotle site (45CL1), I will identify trends in groundstone spatial distribution in the region and examine differences in site-specific functions and activities.

Mastrangelo, Elizabeth and Alexander Gall (Archaeological Services, LLC)

Recording Hobbyist Knapping Sites in Washington State

Group F (14), Friday 10:20 AM-11:20 AM, Ballroom

This poster will exhibit the first recorded example of a new type of site recognized by the Washington State Department of Archaeology and Historic Preservation (DAHP), the "Non-archaeological Hobbyist Flint Knapper" site type, which is distinguished from other lithic scatters by its modern deposition. In 2014, the Scott's Knoll Hobbyist Flint Knapper Site was identified and determined to be non-archaeological by Archaeological Services, LLC (ASCC) during fieldwork on a residential property near the city of Vancouver, Washington. ASCC observed a pile of lithic raw material, some of which had been cut with a rock saw, in addition to recently knapped debitage and tools, all observed in close proximity to modern residences. DAHP requested that ASCC record these deposits as a non-archaeological site in order to ensure that they are not mistaken for a legitimate archaeological site in the future. This site type designation may become increasingly useful as the former dwellings of mid-century and modern rock-hounds are developed.

McConnell, Kelson (Evergreen State College)

Maker's Marks on Ceramic Artifacts from the 2015 Bush Homestead Excavation

Group B (15), Thursday 10:20 AM-11:20 AM, Ballroom

In 1845, George Bush arrived in the Pacific Northwest and became the first African American settler of what would one

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day become Thurston County. In 2015, The Evergreen State College conducted an excavation on the site of his homestead as part of an Archaeological Field School. This poster is a summary of student research done on ceramic maker's marks from artifacts uncovered during the excavation. Identification of these marks can suggest insights into the life of George Bush, a man whose history is of importance to all citizens of Washington state.

Montine, John and Emily Chesterfield (Whatcom Community College)

Into the Woods: Early 20th Century Logging in Skagit County

Group B (16), Thursday 10:20 AM-11:20 AM, Ballroom

In the early 20th century, logging was one of the most important industries in the Pacific Northwest. Archaeological research can help us to better understand this recent history. In fall 2015, the authors surveyed a section of forest in Bow, WA as part of a survey conducted by WCC's Archaeology class. Looking for any signs of human usage, we were able to determine that the area surveyed was used for logging purposes in the early 1900s. Since this area set near the border of the socialist Equality Colony and a commercial logging company, we wondered if it was possible to differentiate between cooperative versus competitive use of the space. By presenting the artifacts and the remains of logged trees found on the property, we can show that archaeology can focus not only on ancient remains of humans, but can also contribute to our understanding of more recent history.

Moret-Ferguson, Celia (Archaeological Consultant)

Artifact Illustration: Bringing the Past to Life

Group E (6), Friday 10:20 AM-11:20 AM, Ballroom

Artifact illustration serves to present the results of archaeological fieldwork, research, and analysis in a way that is meaningful and visually appealing. Illustration sheds light on the unique workmanship and relationship between the maker of an artifact and their surrounding landscape. Celia Moret-Ferguson shows how the past can be brought to life through detailed illustration and how this can enhance technical reports, publications, presentations, and museum displays.

Palmer, Erica, Shannon Tushingham, and Brian M. Kemp (Washington State University)

Ancient Smelt Fish DNA Species Identification from Northern California Region Archaeological Projects

Group H (23), Friday 1:20 PM-2:20 PM, Ballroom

This project genetically analyzed numerous fish vertebrae from Northern California archaeological sites across the region to determine the species of fish the native people

were harvesting. The data allows researchers to analyze native diets and modify current ideas regarding subsistence strategies in the area. The archaeological specimens tested in this project were obtained from Nickel Creek (CA-DNO-14), Humboldt Bay (CA-HUM-321), CA-DNO-335, CA-DNO-13, and CA-DNO-22. Overall, 147 fish vertebrae DNA samples were extracted, resulting in 35 positive sequences. The majority of species identified from the remains were *Hypomesus pretiosus*. CA-HUM-321 provided most of the samples that retained useable sequences, as well as the outlier species identified, *Leptocottus armatus*, and *Mustelus canis*. In conclusion, this project demonstrates the importance of smelt, specifically *Hypomesus pretiosus*, harvesting in the Northern California region as well as employs research techniques at the forefront of ancient DNA studies.

Palmer, Sara E. (WA State Dept. of Natural Resources)

LiDAR Applications in Cultural Resource Assessment

Group E (7), Friday 10:20 AM-11:20 AM, Ballroom

LiDAR offers exciting options for understanding cultural features, particularly in the wetter or forested parts of the Pacific Northwest, where heavy vegetation may obscure signs of cultural resources. This poster shows examples of recent work using Washington DNR's growing collection of LiDAR imagery to identify and assess historic mining features and logging railroad grades.

Paton, Courtney J. (Drayton Archeology)

Investigating the Hunting Dog of the Coast Salish

Group H (24), Friday 1:20 PM-2:20 PM, Ballroom

A once valued companion and tool to the first nation's people of the northwest coast, the Hunting dog, or 'Village dog', played a key role in village life. Kept separate from its counterpart, the Wool dog, the hunting dog was thought to be used in deer and wapiti drives. Supporting information from various ethnohistoric accounts and archaeological evidence from site 45WH17 suggests that the hunting dog was a larger breed, resembling more of a coyote (*Canis Latrans*), and was just as valuable as the Wool dog, however, there is still little known about it. The hunting dog's existence, domestication, morphology and overall place in a Coast Salish village continues to be debated.

Rinck, Brandy (SWCA), Josh Wisniewski (Port Gamble S'Klallam Tribe), and Robert Kopperl (Willamette Cultural Resources Associates)

Archaeological Investigations at the Point Julia Shell Midden (45KP21), Port Gamble Bay, Washington

Group D (36), Thursday 1:20 PM-2:20 PM, Ballroom

The Point Julia Shell Midden Site (45KP21) is on the northeast side of Port Gamble Bay (nəxˈqiyt) at Little Boston

on Kitsap Peninsula. The site was recorded in 1982 and determined eligible for listing in the NRHP in 1991. 45KP21 was revisited for a community archaeology project involving SWCA archaeologists and Port Gamble S'Klallam Tribal members. This poster presents preliminary artifact, faunal, and stratigraphic results from the data recovery project. Trench and unit profiles exhibit well-stratified midden with features. Radiocarbon analysis of charcoal samples places the site in local and regional context. The site location aligns with early historical maps of the prehistoric shoreline and a sand spit that is now buried below wetland sediment and fill. Historic use of *naxwqiyt* demonstrates the importance of the Point Julia sand spit for settlement and resource procurement through time, and it is still used for harvesting and processing of traditional resources today.

Robison-Mathes, Anna (ICF International)

Data Collection and ArcGIS Collector

Group E (8), Friday 10:20 AM-11:20 AM, Ballroom

With new technologies come new learning curves; a look at how a CRM office uses the ArcGIS Collector mobile software, and what that looks like for use in the field. New logistical considerations and ideas for maximizing data collection while performing efficient, thorough fieldwork in a variety of field settings.

Sappington, Ericha E. (University of West Florida)

Surviving the Florida Frontier: An Examination of Spanish and Native American Agency and Trade at Fort San Marcos de Apalache, 1639-1821

Group B (17), Thursday 10:20 AM-11:20 AM, Ballroom

Early in the 17th century the port of San Marcos was strategically established deep in the heart of Spain's La Florida territory. The outpost, fortified later that century would serve frontier trade interests until the early 19th century despite remaining undermanned, undersupplied, and in a constant state of disrepair. During three lengthy Spanish occupations at Fort San Marcos de Apalache, agency by Native American groups including the Apalachee, Creek, and Seminoles, played a role in the establishment, maintenance, and survival of the fort and its Spanish garrison. Historical and archaeological examination of materials relating to these three occupations reveals the unique role of the outpost in the greater historical context of Spain's colonial ventures, the influence of agency on the development of Fort San Marcos de Apalache and its role in facilitating the frontier trade, and the implications of these concepts for other North American regions including the Pacific Northwest.

Saunders, Anthony and Steven Hackenberger (Central Washington University)

Modeling Prehistoric Land Use on the Frank Church River of No Return Wilderness

Group E (9), Friday 10:20 AM-11:20 AM, Ballroom

Archaeologists can gain a better understanding of subsistence strategies by using of Geographic Information Systems (GIS) to map the predictions of economic decision models. By using economic decision models to forecast human behavior, this study revisits the work of Hackenberger in the Frank Church River of No Return Wilderness (FC-RONRW). We use GIS techniques to model cost/benefit decisions (is "decisions" the right word to use here?) using the Huff Model. Results for initial tests of the Huff Model are presented and compared to site inventory data. Predictive maps and sampling strategies are created for new high elevation areas. Use of the Huff Model demonstrates the effect of high elevation resources on seasonal settlement and land use.

Shong, Mike (SWCA)

Native American Contribution to the Early Hops Industry in the Southern Puget Sound

Group A (4), Thursday 10:20 AM-11:20 AM, Ballroom

Beginning in the late 19th century growing hops for beer production became an economically important industry for both Euroamerican farmers and Native American laborers. Many of the largest hop farms in the Pacific Northwest were concentrated in the southern Puget Sound, particularly in the White and Puyallup River valleys. For over a generation picking hops became a regular component of the seasonal round for many Native Americans who traveled from as far away as British Columbia and Alaska to earn money and gather with a sense of community. As with other seasonal resource destinations, temporary hop camps were also the scene of leisurely pursuits such as gaming, trading, racing and feasting. This presentation explores the scope of Native American involvement in the hops industry and potential archaeological implications associated with hop camps.

Skinner, Trent, Robert Dickenson, Katee Withee, and Kay Shelnuitt (USFS Malheur National Forest)

Chinese Miners at the Happy Camp Mining Complex

Group B (18), Thursday 10:20 AM-11:20 AM, Ballroom

The Happy Camp mining complex, located on the Malheur National Forest, played an important role in the 19th century mining boom of eastern Oregon. This poster outlines the ongoing research efforts of the Forest Service and its partners to comprehensively document the landscape of this Chinese affiliated mining complex. This multi-year effort began in 2014 with archaeological testing and continued, in 2015, with a LIDAR guided survey of the broader landscape. In 2016, a Forest Service sponsored

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Passport in Time project, using the LIDAR data, will concentrate on geophysical survey and mapping of probable activity and habitation areas. Mined by the Chinese for more than two decades, the evolving scale and duration of the Happy Camp endeavor affords a unique opportunity to further our understanding of both the cultural dynamics of these pioneers and their rich and enduring legacy.

Sparaga, Joseph (Western Washington University)
Choice and Design: An Analysis of Lithics from Block A4 from the Tse-Whit-Zen Village site

Group F (15), Friday 10:20 AM-11:20 AM, Ballroom
Material availability and tool design are integral to understanding choices that humans have made in the prehistoric records. Tse-Whit-Zen Village, and archaeological site unearthed in Port Angeles Washington, was a large settlement which was inhabited for 2,000 years on the coast of the Strait of Juan de Fuca. Lithic artifacts recovered from the site assist in portraying the choices made by people for adapting to the surrounding environment through tool development. The selections for material, reductive manufacturing strategies, and the ubiquity of typologies were evaluated for understanding the efficiency, expediency, and reliability in forming these artifacts and explaining unusual results.

Stevenson, Alexander (HRA) and Steve Navarro (Pacific Brewing and Malting)
Pacific Brewing and Malting: Rise, Fall, and Rebirth of a Tacoma Brewery

Group A (5), Thursday 10:20 AM-11:20 AM, Ballroom
Pacific Brewing and Malting formed in 1897 when Puget Sound Brewing Company and Milwaukee Brewing Company merged in Tacoma South of South 25th Street just west of C. Street. Through changes in ownership and dramatic expansion Anton Huth's Pacific Brewing and Malting became the second largest brewery in Washington State prior to Washington State's prohibition in 1916. With a new brewery in San Francisco Pacific Brewing and Malting Tacoma brewery became a production facility for "Pacific Foam" a non-alcoholic beer, then a soap factory. Intellectual property rights associated with Pacific Brewing and Malting eventually fell out of ownership and the brewery complex was purchased and is listed on the NRHP. In 2014, Pacific Brewing and Malting was reborn in what is quickly becoming Tacoma's new brewery district. Our poster shares a more personal look at this history with photographs and information from the new owner of the brewery

Taylor, Amanda, Emma Holm (Pacific Lutheran University), Mark Adler, Jordan Thompson (Portland State University), Alejandra Barrera-Pallares, Amber Brown, Shaleigh Diaz-

Ryder, Mara Page, Nicole Plastino (University of Washington), Marcy Galloway (Aquaterra Cultural Resource Consultants), and Jack Johnson (Burke Museum)
The Roche Harbor Homestead Project

Group B (19), Thursday 10:20 AM-11:20 AM, Ballroom
In this poster, we present preliminary results of survey, testing, and excavation of a historic homestead on San Juan Island, Washington. In this initial investigation of the homestead, we address basic questions about the families that lived on the property. When and why did they live there? What was their class and ethnic identity? How were they connected to other San Juan Island communities including native groups? Historic maps and documents indicate that families were living in a small community north of Young Hill in the Roche Harbor Highlands since the late 19th century. Structures and features are still visible on the ground surface including two plank and log cabins. We include student research projects on site mapping, cabin architecture, nails, geoarchaeology, historic bottles, historic shoes, and forest history.

Thompson, Jordan (Portland State University)
Portable X-Ray Florescence: From the Laboratory to the Field

Group E (10), Friday 10:20 AM-11:20 AM, Ballroom
Many archaeologists are skeptical about the use of Portable X-ray Florescence in the field and are concerned about the devices accuracy, precision, data correction schemes and sampling limitations. However, using pXRF during field excavation has the potential to change the way we think about excavation strategy and on site analysis. Several case studies suggest that pXRF is indeed a valid method for sourcing. Off-the-shelf calibration is often sufficient for preliminary analysis, as the use of analytical software can be applied to create custom calibrations. Moreover, pXRF removes the need for inter-laboratory compatibility, thereby reducing inter-technique error. Having an affordable, portable, non-destructive method to analyze artifacts at the time of excavation can affect how a site is investigated, lends immediate insight to the context of the site, connects the site to the analysis process and allows for on-site revisions to research designs, goals and techniques to more efficiently the explore site.

Wang, Penglin (Central Washington University)
Semantic Notes on the Ethnonyms Xiongnu, Loufan, and Tabyač

Group I (29), Friday 1:20 PM-2:20 PM, Ballroom
These ethnonyms refer to three nations of ancient Inner Asia. Xiongnu had more impact on actual events in Inner Asia and Chinese diplomacy, as well as on the minds of Chinese dynastic historians, than any other foreign entity in

ancient times. The reason for this was not the attraction of its prowess and resources, though both had unique resonance to curious minds, but the fact that its enormous herds of livestock including sheep armed and empowered its people to confront China. These ethnonym kept receiving various phonetic and semantic interpretations, none of which seems satisfactory. Based on the widespread zoographic nomenclature in Inner Asia attested in ancient literature, I offer new and viable approaches to the meaning of Xiongnu and Loufan in terms of 'pack animals' such as sheep and of Tabyač in terms of 'farmer.' My explanations are corroborated with solid pieces of textual and linguistic evidence.

Williams, Laura A. (Western Washington University)
An Examination of Avifaunal Remains Recovered from Birch Bay Archeological Site

Group H (25), Friday 1:20 PM-2:20 PM, Ballroom
Bird remains from the Northwest Coast are often overlooked during analysis of archeological assemblages. For a class project I sorted previously unanalyzed faunal remains recovered from the 1976 salvage archaeology project at site 45WH009, Birch Bay, northwestern Washington. Site 45WH009 is one of several archaeological sites along Birch Bay, which offered a rich environment for Salish people of the past. My research focused on avifauna, of which there were over 400 specimens. This poster presents my research, particularly relating to element distribution.

Williams-Larson, Alexandra (AINW)
Up, Up, and Away: Examining Site 35WN93's Role in the Northward Trade of Obsidian Cliffs Obsidian
Group F (16), Friday 10:20 AM-11:20 AM, Ballroom
Obsidian artifacts recovered from site 35WN93, located in Washington County, Oregon, reflect a lithic technology emphasizing the manufacture of mid- to late-stage bifaces. Produced from obsidian obtained from Obsidian Cliffs in 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 this source's obsidian beginning 3,500 years ago. Obsidian Cliffs obsidian has been recorded at sites across Oregon, Washington, and British Columbia, reflecting the long distance movement of resources in organized interaction spheres. This analysis examines the role of site 35WN93 as an important link in the trade and transport of obsidian bifaces from the source location to groups to the north and west.

Wright, Kaitlin, L. K. Sheeran, J. A. Mayhew, R. S. Wagner , L. Sun (Central Washington University), and L. Jin-Hua (Anhui University, China)

Play in Immature Tibetan Macaques: Location Preference and Causes of Bout Termination at Mt. Huangshan, China
Group I (30), Friday 1:20 PM-2:20 PM, Ballroom

We examined the relationship between immatures' play behaviors and locations and the causes of play bout termination in free-ranging, provisioned Tibetan macaques (*Macaca thibetana*). Video data were gathered at the Valley of the Wild Monkeys, China, and focused on 21 immature macaques (0-5 yr). All occurrence sampling of play behaviors were scored with an ethogram, and preliminary statistical testing was conducted on a data subset (approximately half of the total). A previous study at this site found high rates of infant-directed aggression in the provisioning zone, apparently as part of feeding competition. We hypothesized that play occurs more in areas outside of the provisioning zone and that third-party adult aggression ends play more than other forms of termination. A significant deviation from the expected values was found for both hypothesis one ($\chi^2(1)=48.026, p$

Yamasaki, Yuumi (University of Idaho)
The Contributions and Influences of Don E. Crabtree to Lithic Technology

Group F (17), Friday 10:20 AM-11:20 AM, Ballroom
Don E. Crabtree singlehandedly brought lithic technology to the world's attention during 1960s and 1970s; however, his accomplishments have not been described in detail. As an archaeology Master's student interested in experimental archaeology focusing on lithic analysis, I will visit and explore how his contributions and influences have changed and developed North American archaeological lithic studies. This poster will present a part of my thesis project, which intends to create a complete biography of Crabtree. It also includes my personal experimentation on academic flint knapping seeking an insightful grasp of his personal experiences. This poster will focus on the beginning of his career as an archaeologist, initial researches he conducted, and the beginning of academic flint knapping as experimental lithic studies. Its primary sources include the reviews of scholarly articles by his direct students during his career that add some significant insights to my project.

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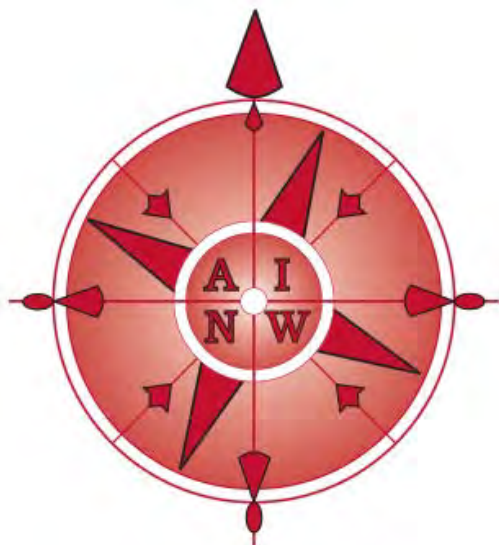


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