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**64th Annual
Northwest Anthropological Conference**

April 21-23, 2011

Common Ground



Hosted by the University of Idaho
Department of Sociology/Anthropology and
Alfred W. Bowers Laboratory of Anthropology

Moscow, Idaho

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Acknowledgements

We would like to thank the following for their generous donations:

SWCA Environmental Consultants provided funding to support Thursday night's reception.

ICF International, Stacey Schneyder, and Mark Warner provided funding to support Thursday night's student mixer.

We would also like to thank Tiffany Brunson for organizing the student mixer, Mary Petrich-Guy and Tracy Schwartz for setting up and managing the NWAC Facebook page, Brian Schneider for his assistance with composing the printed program, and the many University of Idaho students who volunteered their time to help with the conference.

Session Schedule at a Glance

	University Room	Palouse Room	Washington Room	Empire Room
Thursday morning				
Thurs. 8:30am	[T3] Contributed Papers in Historical Archaeology	[T4] Archaeological Methods and Technology	[T2a] Working with THPOs: Tribal historic preservation officer symposium	[T1] Cultural Resources Management in Pacific Northwest Transportation: A joint IDT-ODOT-WSDOT symposium
Break 10:10-10:25				
Thurs. 10:25	[T3] continued	[T4] continued	[T2a] continued	[T1] continued
Thurs. 11:20			[T2b] The Sanak Island Biocomplexity Project and Related Research Symposium Part I	
Lunch 12-1:20				
Thursday afternoon				
Thurs. 1:20pm	[T8] Washington/Oregon Archaeology	[T5a] Tribal Initiated Ethnohistorical Research in the Northwest Symposium	[T6] The Sanak Island Biocomplexity Project and Related Research Symposium Part II	[T7a] Cultivating Sustainability through Archaeology: The University of Idaho's campus trash project symposium
Break 3-3:15				
Thurs. 3:15	[T8] continued	[T5a] continued	[T6] continued	[T7b] Faunal Analysis in the Northwest
Thurs. 3:55		[T5b] Urban Archaeology in Seattle		
Friday morning				
Fri. 8:30am	[F4a] Sandpoint Forum	[F2a] Meaningful Consultation, Anthropological and Archaeological Research and Results: Managing cultural resources within the traditional territories of the Colville Confederated Tribes Symposium	[F3] Primate Studies	[F1] Current Perspectives on Technological Organization and Social Complexity Symposium
Break 10:10-10:25				
10:25	[F4a] continued	[F2b] American Indian Identity, Rights, Resistance, and Implications	[F3] continued	[F1] continued
11:20	[F4b] The Sandpoint Archaeology Project Symposium Part I			
Lunch 12-1:20				
Friday afternoon				
Fri. 1:20pm	[F8] The Sandpoint Archaeology Project Symposium Part II	[F7] Idaho Archaeology	[F6] Archaeology and the Public Sector	[F5a] Panel: Three-Year Retrospective on the Cultural Resource Protection Summit: What we've said, what we're saying, and where we're going
Break 3-3:15				
Fri. 3:15	[F8] continued	[F7] continued	[F6] continued	[F5b] Culture and Identity
Saturday morning				
Sat. 8:30	[S3] Northwest Coast Archaeology	[S2] Archaeology of Historic Forts	[S4a] Global Issues	[S1] Beyond Tyvek Suits: Hazardous materials on-site and in the lab symposium
Break 10:10-10:25				
Sat. 10:25-12:05	[S3] continued	[S2] continued	[S4b] Theoretical Issues in Anthropology	[S1] continued

Northwest Anthropological Conference Program

Events

Reception, Thursday, April 21, 5:30-8:00pm, no-host bar, Silver and Gold Room.

Student mixer, Thursday, April 21, 9:00-11:00pm, at Mickey's Gyros, located in downtown Moscow at 527 S Main Street. Hors d'oeuvres will be provided.

Nez Perce Historical Park Museum and Archive Tour, Friday, April 22, 8:15 am-about 12:30. Meet outside the front door (south entrance) of the Best Western University Inn. Vans will depart from there at 8:30 am, and participants will need to sign a waiver form just prior to departure. Space is limited, so register at the NWAC registration table.

Banquet, Friday, April 22, Silver and Gold Room. No-host bar beginning at 5:30pm and dinner at 6:30pm.

Meetings

Northwest Anthropological Association, Thursday, 4:00-5:00pm, Presidential Suite (first floor)

Association of Oregon Archaeologists, Thursday, 5:10-7:00pm, Palouse Room

Association for Washington Archaeology, Friday, 5:15-7:00pm, Palouse Room

Wednesday evening, April 20

Registration 6:00-9:00pm, Convention Center Lobby

Thursday morning, April 21

Registration 8:00am-5:00pm, Convention Center Lobby

Book Display 8:30am-5:00pm, Idaho Room

Sessions

Empire	[T1] Cultural Resources Management in Pacific Northwest Transportation: A joint IDT-ODOT-WSDOT symposium Organizer and Chair: Scott S. Williams (Washington State Department of Transportation)
8:50-9:10	Williams, Scott S. (Washington State Department of Transportation) "Challenges in Transportation CRM"
9:10-9:30	Hodges, Charles (Pacific Geoarchaeological Services) "Geoarchaeological Investigations Along the I-5 Crossing, Puyallup Delta, Tacoma, Washington: A combined lithostratigraphic and allostratigraphic approach"
9:30-9:50	Ruiz, Christopher L. (University of Oregon-Museum of Natural & Cultural History) and Thomas J. Connolly (University of Oregon-Museum of Natural & Cultural History) "The Archaeology of a 19th Century Pre-allotment Native Homestead on the former Klamath Indian Reservation, Beatty, Oregon"
9:50-10:10	Rose, Chelsea (Southern Oregon University Laboratory of Anthropology) and Katie Johnson (Southern Oregon University Laboratory of Anthropology) "On and Onwards': Finding and mapping the Applegate Trail"
10:10-10:25	Break

- 10:25-10:45 O'Neill, Brian (Museum of Natural and Cultural History, University of Oregon), Paul Baxter (Museum of Natural and Cultural History, University of Oregon), and Christopher Ruiz (Museum of Natural and Cultural History, University of Oregon) "The Harris Homestead: A rogue Indian war battle site in Southwest Oregon"
- 10:45-11:05 Huber, Edgar (Statistical Research, Inc.), Robert Wegener (SRI), Kevin Bartoy (WSDOT), and Sarah Van Galder (SRI) "Deep Explorations in the AWVRP North Access Area, Seattle"
- 11:05-11:25 Elder, J. Tait (ICF International), Patrick Reed (ICF International) and Stacy Schneyder (ICF International) "Context is Everything: Case studies for using expectations to guide archaeological investigations"
- 11:25-noon Discussion
- Washington** **[T2a] Working with THPOs: Tribal historic preservation officer symposium**
Organizer and Chair: Jill Maria Wagner (Coeur d'Alene Tribe)
- 8:30-8:50am Wagner, Jill Maria (Coeur d'Alene Tribe) "Introduction to Tribal Historic Preservation Offices"
- 8:50-9:10 Pleasants, Camille (Confederated Tribes of the Colville Reservation) and Mary Marchand (Confederated Tribes of the Colville Reservation) "Confederated Tribes of the Colville Reservation Historic Preservation Office Overview"
- 9:10-9:30 Lewarch, Dennis (Suquamish Tribe) "Suquamish Tribe Historic Preservation Office Overview"
- 9:30-9:50 Baird, Keith Patrick (Nez Perce Tribe) "Nez Perce Tribe Historic Preservation Office Overview"
- 9:50-10:10 Wagner, Jill Maria (Coeur d'Alene Tribe) "Coeur d'Alene Tribe Historic Preservation Office Overview"
- 10:10-10:25 **Break**
- 10:25-11:00 Working with THPOs Discussion
- Washington** **[T2b]The Sanak Island Biocomplexity Project and Related Research Symposium Part I**
Organizer and Chair: Herbert D. G. Maschner (Anthropology Research Professor; Director, Idaho Museum of Natural History; Director, Center for Archaeology, Materials, and Applied Spectroscopy; Idaho State University)
- 11:20-11:40 Maschner, Herbert D. G. (Idaho State University) "An Introduction to the Biocomplexity of the Western Gulf of Alaska"
- 11:40-noon Russell, Roly (Sandhill Institute), Spencer A. Wood (Stanford University), Amber Tews, (Idaho State University), Dieta Hanson (Cal Poly Pomona), and Herbert D.G. Maschner, (Idaho State University) "Uniting Ancient Midden Archaeology and Modern Intertidal Ecology: Patterns of the Intertidal Ecosystem of Sanak Island, Western Gulf of Alaska over 5,000 years"
- University** **[T3] General Session: Contributed Papers in Historical Archaeology**
Chair: C. Shea Henry (University of Idaho)
- 8:30-8:50am Valentine, David (Idaho Power Company) "Condoms in the Countryside"

- 8:50-9:10 Griffin, Dennis (Oregon Stat Preservation Office) “Remnants from an Ill-fated US Naval Expedition or Early British Shipwreck? Results from the Conservation Efforts of Oregon’s Arch Cape Cannon”
- 9:10-9:30 Bowden, Bradley (Historical Research Associates, Inc.), Michael Falkner (Historical Research Associates, Inc.), Jennifer Olander (Historical Research Associates, Inc.), and Derek Shaw (Historical Research Associates, Inc.) “Trails to Rails: Transportation in the historical archaeology of Southern Pierce County”
- 9:30-9:50 Yunker, Trevor (South Puget Sound Community College) and Cassandra Johnson (South Puget Sound Community College) “Foster Railroad, A Look Into Our Campus’ Past”
- 9:50-10:10 Graham, Tyler (South Puget Sound Community College) and Jamie Voss (South Puget Sound Community College) “The George Bush Homestead: An analysis of artifact types and their distribution”
- 10:10-10:25 **Break**
- 10:25-10:45 Kenmotsu, Nancy (Geo-Marine Inc.), Rose Ferri (Yakama Nation), and Kelsey Doncaster (US Bureau of Reclamation) “Controlling Water – Understanding Settlement, The Impact of Small Irrigation Systems in the Yakima Valley”
- 10:45-11:05 Horton, Beth (National Park Service, Washington State University) “Foodways within Captain Jack’s Stronghold During the 1873 Modoc War”
- 11:05-11:25 Lee, Kelsi (University of Idaho) “Alcohol Consumption at the Kooskia, Idaho, Japanese Internment Camp (1943-1945): Historical artifact analysis”
- 11:25-11:45 Henry, C. Shea (University of Idaho) “Overseas Chinese Foodways of the Western United States: From California to Idaho”
- 11:45-12:05 Gleason, Eric (NPS) “Test Excavations at 35WS453 Chinatown, The Dalles, Oregon”
- Palouse [T4] General Session: Archaeological Methods and Technology**
Chair: Brian Schneider (University of Idaho)
- 8:50-9:10 Black, Jill (Central Washington University), Susan Kerr (Modesto Junior College), Lourdes Henebry-DeLeon (Central Washington University), and Joseph G. Lorenz (Central Washington University) “Dental Calculus as a Non-destructive Source of Mitochondrial DNA for Analysis of Skeletal Remains”
- 9:10-9:30 Harder, David (Plateau Archaeological Investigations, LLC), Michael Drews (Gnomon, Inc.), Christopher Noll (Plateau Archaeological Investigations, LLC), and Jeremy Hall (Gnomon, Inc.) “LiDAR as an Effective Tool for Locating Historic Mining Features at Buckhorn Mountain in Northeastern Washington”
- 9:30-9:50 Jerofke, Linda (Eastern Oregon University) and Erik Harvey (U.S. Forest Service) “Camp Carson Mining District: A cooperative archaeological project between the Wallowa Whitman Forest and Eastern Oregon University”
- 9:50-10:10 Alsoszatai-Petheo, John A. (Central Washing University) “Of Cracked Rocks, Flakes, Psychology, and Falsifying N-Rays”
- 10:10-10:25 **Break**
- 10:25-10:45 Jankowski, Stephen Todd (Central Washington University) “Methods in Archaeological Data Collection: A field recordation form for rock features”

- 10:45-11:05 Mace, Timothy (University of Idaho) "Archaeological Techniques for Understanding Metallurgy and Why We Care"
- 11:05-11:25 McFarland, Doug (Pacific Northwest National Laboratory) "Magnetic Susceptibility: Sediments and compliance with geophysical science"
- 11:25-11:45 Schneider, Brian (University of Idaho) "From Work to Play: An examination of a 18th/19th century work complex at James Madison's Montpelier"
- 11:45-noon Discussion

[TP1] Posters 8:30-noon, Convention Center Hallway

Amador, Raquel (University of Idaho) "The Arrow Beach Affair"

Corn, Tyrone (Idaho Power Company) "The Possible Link Between Solar Radiation and the Selection of Talus Pit Storage Feature Locations"

Dampf, Steven (Historical Research Associates, Inc.), Leonard Kempf (Geo-Marine, Inc.), Jennifer Gilpin (Historical Research Associates, Inc.), and Todd M. Ahlman (Historical Research Associates) "Frontier and Border Archaeology of the Old Boundary Townsite (45ST632), Stevens County, Washington"

Galm, Jerry R. (Eastern Washington University), Tiffany Fulkerson (Eastern Washington University), and Stan Gough (Eastern Washington University) "Revisiting the Haskett Complex in the Pacific Northwest: New perspectives from the Sentinel Gap Site"

Leeds, C.A. (Chimpanzee and Human Communication Institute, Central Washington University), A. Davis (Chimpanzee and Human Communication Institute, Central Washington University), M. Jensvold (Chimpanzee and Human Communication Institute, Central Washington University), and D. Fouts (Chimpanzee and Human Communication Institute, Central Washington University) "Evidence for Menstrual Synchrony in Captive Chimpanzees"

Ozbun, Terry (Archaeological Investigations Northwest, Inc.) "Beyond Pretty Colors: Technological and functional qualities of Oregon obsidians for ancient stone tool production"

Steingraber, Aubrey (Western Washington University) "Identifying Salmonid Species Using Vertebral Morphology at 45WH34 and 45SK46"

Wendel, Ryan E. (University of Montana) and Maggie E. Schirack (University of Montana) "Victorian Secrets: What outhouse artifacts reveal about the gender and class spaces of an early 1900's mining camp"

Noon-1:20 Lunch

Thursday Afternoon, April 21

Sessions

- Palouse** **[T5a] Tribal Initiated Ethnohistorical Research in the Northwest Symposium**
Organizer and Chair: Daniel L. Boxberger (Western Washington University)
- 1:20-1:40 Boxberger, Daniel L. (Western Washington University) Introduction
- 1:40-2:00 Pederson, Nora K. (University of Alberta) " 'Heirs not determined': Inheritance and allotments at Grand Ronde"

- 2:00-2:20 Lewis, David (Confederated Tribes of Grand Ronde Cultural Resources) and Daniel L. Boxberger (Western Washington University) “Grand Ronde Ceded Lands Research”
- 2:20-2:40 Boxberger, Daniel L. (Western Washington University) and Larry Ralston (Quinault Indian Nation Tribal Council) “Incident at Punta de los Martires”
- 2:40-3:00 Boxberger, Daniel L. (Western Washington University), Nora K. Pederson (University of Alberta), and Justine James, Jr (Quinault Indian Nation Cultural Resources) “Quinault Indian Nation Ocean Fisheries Oral History Project”
- 3:00-3:15 **Break**
- 3:15-3:45 Tribal Initiated Ethnohistorical Research in the Northwest Roundtable
- Palouse** **[T5b] General Session: Urban Archaeology**
Chair: Erik Anderson (Northwest Archaeological Associates)
- 3:55-4:15 Anderson, Erik D. (Northwest Archaeological Associates) “The King County Potter’s Field: Locating a possible archaeological resource in the Georgetown area of Seattle”
- 4:15-4:35 Merrill, Christie (Paragon Research Associates) “Integrating Construction Monitoring with Landmark Rehabilitation: King Street Station as a case study”
- 4:35-4:55 Rooke, Lara C. (AMEC Earth & Environmental, Inc.) “The Washington Park Landfill: The archaeology of a residential community”
- Washington** **[T6] The Sanak Island Biocomplexity Project and Related Research Symposium Part II**
- 1:20-1:40 Tews, Amber (Idaho State University) and Herbert Maschner (Idaho State University) “Temporal Variation in Foraging Behavior: A niche construction approach”
- 1:40-2:00 Misarti, Nicole (Oregon State University), Herbert Maschner (Idaho State University), Kelli Barnes (Idaho State University), Spencer Wood (Stanford University), and Bruce Finney (Idaho State University) “Exploring Changes in Stable Isotope Ratios of Sea Otters over Thousands of Years on Sanak Island, Alaska”
- 2:00-2:20 Barnes, Kelli (Idaho State University), Herbert Maschner (Idaho State University), Bruce Finney (Idaho State University), and Nicole Misarti (Oregon State University) “Isotopic Analyses of Shell and Bone from Sanak Island, Alaska, and their Relevance for Understanding Ancient Environments”
- 2:20-2:40 Wood, Spencer (Stanford University), Jennifer Dunne (Santa Fe Institute), Roly Russell (Sandhill Institute), Herbert Maschner (Idaho State University), and Nancy Huntly (National Science Foundation) “Food-webs as Tools for Understanding Historic and Prehistoric Roles of Humans as Consumers in Marine Ecosystems”
- 2:40-3:00 Maschner, Herbert (Idaho State University), Matthew Betts (Canadian Museum of Civilization), Corey Schou (Idaho State University), Robert Schlader (Idaho State University), Nicholas Clement (Idaho State University), and Jonathan Holmes (Idaho State University) “Democratizing Faunal Analysis: The virtual zooarchaeology of the Arctic Project”
- 3:00-3:15 **Break**
- 3:15-3:35 Schlader, Robert (Idaho State University), Nicholas Clement (Idaho State University), Herbert Maschner (Idaho State University), Corey Schou (Idaho State University), and Matthew Betts (Canadian Museum of Civilization) “The Virtualization Process at the Idaho Virtualization Laboratory: Making the physical digital”

- 3:35-3:55 Clement, Nicholas (Idaho State University), Herbert Maschner (Idaho State University), and Corey Schou (Idaho State University) "Virtual Repositories: Discussing methodologies for integrating access to museum collections"
- 3:55-4:15 Benson, Buck (Idaho State University) and Herbert Maschner (Idaho State University) "Geochemical Analysis of Volcanic Materials from the Lower Alaska Peninsula: A study of comparative techniques and human demographics"
- 4:15-4:35 Maschner, Herbert (Idaho State University) "Prolegomenon to Arctic Prehistory: Or why the North Pacific matters to the origins of the Eskimo and Aleut"
- 4:35-4:55 Discussion
- Empire** [T7a] **Cultivating Sustainability through Archaeology: The University of Idaho's campus trash project symposium**
Organizer and Chair: Stacey Lynn Camp (University of Idaho)
- 1:20-1:40 Camp, Stacey Lynn (University of Idaho) "Teaching with Trash: Archaeological insights on university waste management"
- 1:40-2:00 Allen, Josh (University of Idaho), Elaine Rose Bayly (University of Idaho), Jamie Capawana (University of Idaho), and Meaghan Jones (University of Idaho) "Waste Not Want Not: A study of indoor campus trash"
- 2:00-2:20 Galbraith, Sara (University of Idaho) and Clay Pleasant (University of Idaho) "Waste Not Want Not: The University of Idaho Arboretum and Botanical Garden"
- 2:20-2:40 Henry, Shea (University of Idaho), Heather Sargent (University of Idaho), Tracy Schwartz (University of Idaho), and Rachel Stokeld (University of Idaho) "Bottles, Boxes, Cans, Oh My!: Recycling and litter among new Greek Row fraternities at the University of Idaho"
- 2:40-3:00 Petrich-Guy, Mary (University of Idaho), Kyle Parker-McGlynn (University of Idaho), and Joe Redden (University of Idaho) "Zone 8: Tailgating in Kibbie Dome parking lot #57"
- 3:00-3:15 **Break**
- Empire** [T7b] **General Session: Faunal Analysis in the Northwest**
Chair: Daniel Gilmour (Portland State University)
- 3:15-3:35 Tierney, Angus (Western Washington University) "Reconstructing Canopy Cover Over 5,000 Years Through Stable Isotope Analysis of Elk"
- 3:35-3:55 Gilmour, Daniel M. (Portland State University), Virginia L. Butler (Portland State University), Douglas J. Kennett (University of Oregon), Brendan J. Culleton (University of Oregon), and Edward Byrd Davis (University of Oregon) "Chronology and Ecology of Extinct Mammalian Fauna of the Pleistocene/Holocene Transition in the Northern Willamette Valley, Oregon"
- 3:55-4:15 Stevenson, Alexander E. (Portland State University), Virginia L. Butler (Portland State University), Jessica A. Miller (Oregon State University), Donya Y. Yang (Simon Fraser University), Camilla F. Speller (Simon Fraser University), and Nicole Misarti (Oregon State University) "Anadromous salmonids in the Upper Klamath Basin? Identification of Pacific salmonid (*Oncorhynchus* spp.) species and life history through mtDNA and geochemical analysis"

4:15-4:35 Wojcik, Kathryn (Portland State University) and Shoshana Rosenberg (Portland State University) "Using Vertebral Morphometrics to Determine Salmonid Species (*Oncorhynchus spp.*) at Two Archaeological Sites on the Lower Columbia River"

4:35-4:55 Manning, Cassandra (Portland State University) "The Role of Salmon in Middle Snake River Assemblages: A Re-examination of the Hetrick Site"

University [T8] General Session: Washington/Oregon Archaeology
Chair: Brian O'Neill (Museum of Natural and Cultural History, University of Oregon)

1:20-1:40 Fernandez, Trish (ICF International) "Buena Vista Monitoring: Lessons Learned"

1:40-2:00 McCutcheon, Patrick (Central Washington University) and Kevin A. Vaughn (Central Washington University) "Tool Stone Extraction and Resource Density in the Saddle Mountains, Grant County, Washington"

2:00-2:20 Purdy-Silbernagel, Sarah (Natural Resources Conservation Service) "Preliminary Results of the Pro-Bono Archaeological Investigations at 35MA278, Talbot, Oregon"

2:20-2:40 Koziarski, Ralph (University of Wisconsin-Milwaukee/Drayton Archaeology), Garth Baldwin (Drayton Archaeology), and Stephanie M. Neil "New Insights on the Old Cordilleran: Recent advances in early Holocene archaeology in Northwestern Washington"

2:40-3:00 O'Neill, Brian (Museum of Natural and Cultural History, University of Oregon) "The Pre-Mazama Component at the Williams Creek Site, Southwest Oregon"

3:00-3:15 **Break**

3:15-3:35 Gall, Alexander (Archaeological Services of Clark County) "45CL435: Evaluation of a cobble chopper site within the Vancouver Lake/Lake River Archaeological District"

3:35-3:55 Vargas, Estanislado (Central Washington University) "Radiocarbon Chronology for the Hole-in-the-Wall and French Rapids Archaeological Sites, Middle Columbia River"

3:55-4:15 Lewis, Patrick C. (CWU), Patrick T. McCutcheon (CWU), and Kevin A. Vaughn (CWU) "Intra-Site Analysis at the Sunrise Ridge Borrow Pit Site (45PI408)"

4:15-4:35 Blukis Onat, Astrida R. (BOAS, Inc.) "The Art of Archaeology"

4:35-4:55 Discussion

[TP2] Posters 1:20-5:00, Convention Center Hallway

Beasley, Virgil Roy III (GeoMarine) and Emily Ragsdale (HRA) "The Joint Base Lewis McChord Archaeological Predictive Model"

Cascella, Melissa (ICF International) "Demystifying GIS: An Archaeologist's Perspective"

Covington, Brenda (The Confederated Tribes of the Colville Reservation) "Ongoing Adverse Impacts to Cultural Resources at the Grand Coulee Dam Reservoir, Lake Roosevelt"

Ferry, Joy (Central Washington University) "Analysis of $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ Data Acquired from *Margaritifera falcata* Shell (Site 45KT315, Kittitas County, WA): Holocene environmental change on the Columbia Plateau"

Lewarch, Dennis E. (Archaeology and Historic Preservation Program, Suquamish Tribe), Stephanie E. Trudel (Archaeology and Historic Preservation Program, Suquamish Tribe), and Leonard A. Forsman (Archaeology and Historic Preservation Program, Suquamish Tribe) "Updating Thompson's Settlement Model: Clustering Central and Southern Puget Sound assemblages"

Rorabaugh, Adam N. (Washington State University) "Paying Lip Service: Labrets, identity, and defeats of hierarchy on the Southern Northwest Coast"

Yamamoto, Christopher (Northwest Archaeological Associates) and Brian Boggs (Northwest Archaeological Associates) "Exploratory Lithic Investigations at Pussyfoot Creek: 45-KI-938"

Meetings

4:00-5:00pm Northwest Anthropological Association, Presidential Suite (first floor)

5:10-7:00pm Association of Oregon Archaeologists, Palouse Room

Reception 5:30-8:00pm, no-host bar, Silver and Gold Room

Friday Morning, April 22

Registration 8:00am-4:30pm, Convention Center Lobby

Book Display 8:30am-5:00pm, Idaho Room

Sessions

- | | |
|----------------|--|
| Empire | [F1] Current Perspectives on Technological Organization and Social Complexity Symposium
Organizer and Chair: Adam Rorabaugh (Washington State University) |
| 9:10-9:30 | Williams, Justin (Washington State University) "Debating the Complexity of Clovis: Insights into the complexity paradigm" |
| 9:30-9:50 | Rorabaugh, Adam N. (Washington State University) "Keeping Things in Line: Modeling the impacts of demography on social learning in the Pacific Northwest" |
| 9:50-10:10 | Osiensky, Whitney S. (Western Washington University) "Tracing the Stone: Microphenocryst analysis as a sourcing approach for dacites and other CVRs" |
| 10:10-10:25 | Break |
| 10:25-10:45 | Dolan, Patrick (Washington State University) "The By-Products of Production: Lithic debitage from a Marpole-phase plank house" |
| 10:45-11:05 | Safi, Kristin (Washington State University) "Assessing Prehistoric Salt Processing and Small Scale Production in Minimally Specialized Ground Stone Technology" |
| 11:05-11:25 | Palmer, Jamie (Western Washington University) "A Fresh Look at an Old Artifact: A new interpretation of edged cobbles at Cherry Point, WA" |
| 11:25-11:45 | Discussion |
| Palouse | [F2a] Meaningful Consultation, Anthropological and Archaeological Research and Results: Managing cultural resources within the traditional territories of the Colville Confederated Tribes Symposium
Program Manager and Tribal Historic Preservation Officer: Camille Pleasants
Organizer and Chair: Jon Meyer (Confederated Tribes of the Colville Reservation) |
| 8:30am | Marchand, Mary (Confederated Tribes of the Colville Reservation) "Prayer and Opening Remarks" |

- 8:30-8:50 Marchand, Amelia (Confederated Tribes of the Colville Reservation) “Native Ground: Collaboration efforts to preserve a century-old sweatlodge site”
- 8:50-9:10 Meyer, Jon (Confederated Tribes of the Colville Reservation) “Common Ground...with Restricted Access”
- 9:10-9:30 Covington, Brenda (The Confederated Tribes of the Colville Reservation) “Ongoing Adverse Impacts to Cultural Resources at the Grand Coulee Dam Reservoir, Lake Roosevelt”
- 9:30-9:50 Shannon, Donald (Confederated Tribes of the Colville Reservation) “Salish Place Names on the Eastern Slopes of the Cascades”
- 9:50-10:10 Harry, Lawrence (Confederated Tribes of the Colville Reservation) “Duties of the Traditional Cultural Property Technician: Perspectives from a tribal member”
- 10:10-10:25 **Break**
- Palouse** **[F2b] General Session: American Indian Identity, Rights, Resistance, and Implications**
Chair: Rodney Frey (University of Idaho)
- 10:25-10:45 Luttrell, Charles T. (Washington State Parks) “Did They or Didn’t They: Spokane Indian farming to 1887”
- 10:45-11:05 Wood, Rebecca (University of Montana) “Developing Community Relationships and the Pursuit of Language Socialization Understanding Among the Salish”
- 11:05-11:25 Mueller, Emma Jean (Washington State University) “Controversies of Native Art Appropriation in the Puget Sound Region”
- 11:25-11:45 Heiner, Christina (University of Montana) “You All Know that I Won’t Sell a Foot of Land: Tribal resistance and the allotment process on the Flathead Reservation”
- 11:45-12:05 Frey, Rodney (University of Idaho) “The Turning of the Wheel: The interplay of human diversity and shared humanity – lessons for an ethnographer”
- Washington** **[F3] General Session: Primate Studies**
Chair: Donald Tyler (University of Idaho)
- 8:50-9:10 Zager, Lindsay (Central Washington University) and Mary Lee Jensvold (Central Washington University) “An Experiment in Zoo Visitor Education: Encouraging friendly chimpanzee behaviors”
- 9:10-9:30 Enlow, Grace (Central Washington University), Lori K. Sheeran (Central Washington University), and Susan M. Cheyne (Oxford University) “Vocalizations and Pair-bonding Behaviors in Bornean Agile Gibbons (*Hylobates albibarbis*) in Sabangau National Park, Indonesia”
- 9:30-9:50 Hendershott, Rebecca L. (Central Washington University), Megan D. Matheson (Central Washington University), Lori K. Sheeran (Central Washington University), R. Steven Wagner, (Central Washington University), and Jinhua Li (Anhui University) “Sociosexual Behaviors of Tibetan Macaques (*Macaca thibetana*)”
- 9:50-10:10 Winters, Sandra (Central Washington University), Megan D. Matheson (Central Washington University), Lori K. Sheeran (Central Washington University), R. Steven Wagner (Central Washington University), and Jinhua Li (Anhui University) “Social Recruitment in Tibetan Macaques (*Macaca thibetana*) at Mt. Huangshan, China”

- 10:10-10:25 **Break**
- 10:25-10:45 Winters, Sandra (Central Washington University), Lori Sheeran (Central Washington University), Megan D. Matheson (Central Washington University), Jinhua Li (Anhui Normal University), and R. Steven Wagner (Central Washington University) “The Influence of Infant Physical Disability on Mother-Infant Attachment: A case study of limb loss in an infant Tibetan macaque (*Macaca thibetana*)”
- 10:45-11:05 Wescliff, Julie B. (Central Washington University), Megan D. Matheson (Central Washington University), Lori K. Sheeran (Central Washington University), R. Steven Wagner (Central Washington University), and Jinhua Li (Anhui University) “How close is too close? Spatial Proximity Dynamics of *Macaca thibetana*”
- 11:05-11:25 Winters, Sandra (Central Washington University), Noah D. Simons (Central Washington University), and Joseph G. Lorenz (Central Washington University) “Comparative Analysis of Length Polymorphisms in the Promoter Region of the Serotonin Transporter Gene (SLC6A4) in Cercopithecidae”
- 11:25-11:45 Discussion

University [F4a] Sandpoint Forum

Organizers: Amanda Haught (University of Idaho) and Molly Swords (SWCA Environmental Consultants)

- 8:30-10:10am Panelists: Amanda Haught (University of Idaho), Molly Swords (SWCA Environmental Consultants), Robert Weaver (EHC, Inc), James Bard (SWCA Environmental Consultants), Mark Warner (University of Idaho), Priscilla Wegars (University of Idaho), Robert Betts (Vanguard Research), Jamelon Emmick (SWCA Environmental Consultants), Breanne Kisling (SWCA Environmental Consultants), Mary Kienholz (University of Idaho), Oliver Biemann (SWCA Environmental Consultants), Jamie Capawana (University of Idaho), Mary Petrich-Guy (University of Idaho), and Curtis Cawley (SWCA Environmental Consultants)

- 10:10-10:25 **Break**

- 10:25-11:10 **Sandpoint Forum**, continued

University [F4b] The Sandpoint Archaeology Project Symposium Part I

Organizers and Co-Chairs: James C. Bard (SWCA Environmental Consultants) and Robert M. Weaver (The Environmental History Company)

- 11:20-11:40 Weaver, Robert M. (The Environmental History Company) and James C. Bard (SWCA Environmental Consultants) “Introduction to the Sandpoint Archaeology Project Symposium”
- 11:40-noon Betts, Robert C. (Vanguard Research) and James C. Bard (SWCA Environmental Consultants) “From Time Immemorial: The prehistoric record in the Sand Creek Byway, Sandpoint, Idaho”

[FP1] Posters, 8:30-noon, Convention Center Hallway

Cooper, Jason B. (AMEC Earth & Environmental) and Tim Gerrish (AMEC Earth & Environmental) “US 101 Bone River Bridge Replacement Project, Pacific County, Washington”

Coutts, Allison (Eastern Washington University) and Matthew Cox (Eastern Washington University) “Early Irrigation Attempts Along the Middle Columbia”

Drews, Michael (Gnomon, Inc.), David Harder (Plateau Archaeological Investigations, LLC), Christopher Noll (Plateau Archaeological Investigations, LLC), and Jeremy Hall (Gnomon, Inc.) “Work Beneath the Canopy: LiDAR as an aid in locating historic mining features in areas of marginal surface visibility”

Elder, J. Tait (ICF International) and Kurt Perkins (ICF International) “Fish Traps and Data Gaps: A preliminary synthesis of fish capture features in Washington State”

McClure-Mentzer, Kari (Eastern Washington University) and Jerry R. Galm (Eastern Washington University) “The Case for a Single Period of Late Paeleoindian Occupation at the Late Sentinel Gap Site”

Sterling, Sarah (Portland State University), Kristine Bovy (University of Rhode Island), Virginia Butler (Portland State University), Sarah Campbell (Western Washington University), and Michael Etnier (University of Washington) “Beyond the Palimpsest: Using high resolution excavation techniques to evaluate household scale economic strategies and earthquake response on the Northwest Coast”

Williams, Louise (Simon Fraser University) “Refitting the Locarno Beach Site (DhRt-6): A spatial and temporal analysis of previous collections”

Wilson, Katie (Paragon Research Associates) and Jackie Ferry (Samish Indian Nation) “Making the Most of Collections: Revitalization of the Samish Indian Nation’s archaeological collections”

Noon-1:20 Lunch

Friday Afternoon, April 22

Sessions

Empire	[F5a] Panel: Three-Year Retrospective on the Cultural Resource Protection Summit: What we’ve said, what we’re saying, and where we’re going Organizer/Moderator: Mary Rossi (APT-Applied Preservation Technologies)
1:20-3:00	Panel members: Mary Rossi (APT-Applied Preservation Technologies), Lynn Compas (HRA), Dennis Lewarch (The Suquamish Tribe), Julie Longenecker (Confederated Tribes of the Umatilla Indian Reservation), and Darby Stapp (Northwest Anthropology)
3:00-3:15	Break
Empire	[F5b] General Session: Culture and Identity Leah Evans-Janke (University of Idaho)
3:15-3:35	Bermensolo, Kylie (University of Idaho) “Disappearing Identity: Rock art of Northern Tanzania”
3:35-3:55	Fitzgerald, Kevin (Western Washington University) “Integrating Psychological and Sociological Approaches to Heavy Metal Music”
3:55-4:15	Evans-Janke, Leah (University of Idaho) and Ariana Burns (University of Idaho) “Shop 'Til You Drop: A diachronic study of rural American purchasing habits in the early 20th century”
4:15-4:35	Eastley, Jessica and Jeannette Mageo (Washington State University) “U.S. Parent/Child Alienation Dreams: Autonomy and dependence”
4:35-4:55	Leaf, Francesca (Western Washington University) “Foca, Bosnia-Herzegovina: Wartime rape and the stigmatized identity of victims”

Washington**[F6] General Session: Archaeology and the Public Sector**

Chair: Stan McDonald (Oregon-Washington BLM)

- 1:20-1:40 Kester, Lindsey (SWCA Environmental Consultants), Nicci Barger (SWCA Environmental Consultants), and Tanya Johnson (SWCA Environmental Consultants) "Developing Methods for Assessment of Visual Impacts to Cultural Resource Sites in Utah"
- 1:40-2:00 Jenkins, Chris (Tribal Relations Specialist Seattle District, USACE) "Working with the Corps' Regulatory Branch-Things you need to know"
- 2:00-2:20 McDonald, Stan (Oregon-Washington BLM) "Cultural Resource Management on Public Lands in the Northwest: A status report"
- 2:20-2:40 Mawhirter, Matthew (Washington State University) "Federal Agency Cooperation and Cultural Influence in the CCC"
- 2:40-3:00 MacDonald, Doug (University of Montana) and Elaine Hale (Yellowstone National Park) "The Montana Yellowstone Archaeological Project"
- 3:00-3:15 **Break**
- 3:15-3:35 Poetschat, George (Oregon Archaeological Society), James D. Keyser (USDA Forest Service Retired), and David A. Kaiser (Oregon Archaeological Society) "Making Order out of Chaos. The Bear Gulch and Atherton Canyon Data Base"
- 3:35-3:55 Lohse, E.S. (Idaho State University) "Sites and sites: Making sense and assigning significance"
- 3:55-4:15 Campbell, Bethany Hauer, (University of Montana) "A Collective History: The curation 'crisis' and the emergence of a new paradigm"
- 4:15-4:35 Henebry-DeLeon, Lourdes (Central Washington University) "Columbia Plateau NAGPRA Database: A cultural affiliation resource"
- 4:35-4:55 Discussion

Palouse**[F7] General Session: Idaho Archaeology**

Lee Sappington (University of Idaho)

- 1:20-1:40 Griffith, Tabitha (Geo-Marine) "Contextual Approaches to Cultural Resources Management in Southern Idaho"
- 1:40-2:00 Lohse, E.S.^{KP} "Where are the Early Paleoindian Sites? Building a Predictive Model for Late Pleistocene Site Encounter"
- 2:00-2:20 Frederick, C. D. (Consulting Geoarchaeologist) and T. L. Griffith (Geo-Marine, Inc.) "Geoarchaeological Investigations on the Owyhee Plateau, Idaho"
- 2:20-2:40 Gilbert, Hollie K. (Idaho National Laboratory) "Italian Immigrants Baking Under the Desert Sun"
- 2:40-3:00 Altman, Julia (University of Idaho) "Shield Bearing Warriors in Idaho Indian Rock Art"
- 3:00-3:15 **Break**

- 3:15-3:35 Trosper, Tabitha (Central Washington University), Lisa Ely (Central Washington University), Steven Hackenberger (Central Washington University), Kenneth Reid (Idaho State Historic Preservation Office) “Relationships between Snake River Paleofloods and Occupational Patterns at Redbird Beach Archaeological Site (10 NP 55) in Lower Hells Canyon, Idaho”
- 3:35-3:55 Root, Matthew J. (Rain Shadow Research), Kenneth C. Reid (Idaho State Historical Society), Daryl E. Ferguson (Rain Shadow Research), Joy D. Mastrogiuseppe (Washington State University), John Mattoon (Washington State University), Keith E. Miller (U.S. Forest Service), Jan Boles (The College of Idaho), Nakia Williamson (Nez Perce Tribe), and Sarah M. Moore (Rain Shadow Research) “The High Bar Textile Cache, Hells Canyon, Idaho”
- 3:55-4:15 Longstaff, Laura (University of Idaho), Robert Lee Sappington (University of Idaho), and Bruce Ellis (Clearwater National Forest) “Preliminary Results From the Kelly Forks Work Center Site, Clearwater National Forest, North Central Idaho”
- 4:15-4:35 Carlini, Daniel P. (University of Idaho) “A Craig Mountain Phase Precipitation Record of the Lower Salmon River Canyon: Analysis of *Margaritifera falcata* shell $\delta^{18}\text{O}$ from the Heckman Ranch site, Idaho”
- 4:35-4:55 Dennis, J. Corey (University of Idaho) “Obsidian on the Move: An examination of obsidian artifacts in the Clearwater River Drainage, North Central Idaho”

University

[F8] The Sandpoint Archaeology Project Symposium Part II

- 1:20-1:40 Bard, James C. and Sylvester L. Lahren, Jr. (SWCA Environmental Consultants) “Was There a Village at Sandpoint? – Digging Deeper into the Archaeological and Ethnographic Record”
- 1:40-2:00 Wegars, Priscilla (SWCA Environmental Consultants) “The Chinese in Sandpoint, Idaho”
- 2:00-2:20 Kislung, Breanne (SWCA Environmental Consultants) “Childhood Treasures: The toys of Sandpoint, Idaho”
- 2:20-2:40 Mitchell, Joseph C. (SWCA Environmental Consultants) “Developing an Artifact Coding System and Database for Blacksmith/Machine Shop Sites: A case study from Sandpoint, Idaho”
- 2:40-3:00 Biemann, Oliver R. (SWCA Environmental Consultants) “The Quantity not Quality: Foodways of a late 19th century boardinghouse residence, Sandpoint, Idaho”
- 3:00-3:15 **Break**
- 3:15-3:35 Swords, Molly (SWCA Environmental Consultants) “Smoking Allowed: An examination of tobacco usage in historic Sandpoint, Idaho”
- 3:35-3:55 Emmick, Jamelon (SWCA Environmental Consultants) “Evidence for Dental Health in Historic Sandpoint Gathered from Human Remains, Isolated Teeth, and Artifacts”
- 3:55-4:15 Warner, Mark S. (University of Idaho) “Status in a Box(car): Consumer culture in Sandpoint, Idaho”
- 4:15-4:35 Weaver, Robert M. (Environmental History Company) “Why the heck dig there? - Targeting cultural resources in an urban environment”
- 4:35-4:55 Discussion

[FP2] Posters, 1:20-5:00, Convention Center Hallway

Crabtree, Stefani (Washington State University) "There is No Such Thing as a Free Lunch: Costly exchange in the village ecodynamics project, a network analysis"

Heckelman, Amber (Washington State University) "The Applied Anthropological Perspective on the Current State of Natural Resource Management: The case of the *Manicaria saccifera* in the Tortuguero region, Costa Rica"

Hofkamp, Anthony (Portland State University) and Virginia L. Butler (Portland State University) "Ground Truthing": The use of radiographic analysis of annular growth rings for age determination in Pacific salmon (*Oncorhynchus* sp.)

McFarland, Doug (Pacific Northwest National Laboratory) "Magnetic "Fabric" as a Way to Measure Disturbance of Buried Archaeological Deposits"

Oliver, Kali D. V. (University of Idaho) "Kooskia Japanese American Internment Camp Medical Standards and Safety Research Project"

Stokeld, Rachel (University of Idaho) "*Good for One Fare*: From Tacoma's Japanese Town to Kooskia Internment Camp"

Wilson, Erin (University of Idaho) "GET TO THE POINT: Challenges with predicting relative age using projectile point technologies at the Weitas Creek site"

Taylor, Amanda (University of Washington) "Defensive Sites on the San Juan Islands? An Application of Martindale and Supernant (2009) Defensive Index Approach"

Taylor, Joanne (University of British Columbia) and Erica Sure (University of British Columbia) "Social, Environmental and Cultural Impacts of Flooding: Four case studies"

Meetings

5:15-7:00pm Association for Washington Archaeology, Palouse Room

Banquet

no-host bar 5:30, dinner 6:30

Saturday Morning, April 23

Registration 8:00-10:30am, Convention Center Lobby

Book Display 8:30am-noon, Idaho Room

Sessions

Washington **[S1] Beyond Tyvek Suits: Hazardous materials on-site and in the lab symposium**
Organizers and Co-Chairs: Laura Phillips (Burke Museum) and Paula Johnson (Paragon Research Associates)

8:50-9:10 Phillips, Laura (Burke Museum of Natural History and Culture), Steven Denton (Burke Museum of Natural History and Culture), Kelly Meyers (Burke Museum of Natural History and Culture), and Megon Noble (Burke Museum of Natural History and Culture) "Inherited or Inherent Vice?: Archaeological collections that pose a harm"

- 9:10-9:30 Williams, Scott S. (Washington State Department of Transportation) "Cultural Material or Hazardous Waste? What To Do When Your 'Site' is Both"
- 9:30-9:50 Dellert, Jenny and Jen Gilpin (Historical Resources Associates) "How to Work in Haz Mat Sites, Now and in the Future(?)"
- 9:50-10:10 Lockwood, Chris (Paragon Research Associates) "Digging Danger: Doing archaeology amid hazardous waste"
- 10:10-10:25 **Break**
- 10:25-10:45 Parvey, Michele (Northwest Archaeological Associates, Inc.) "This Site Stinks, Dealing with Petroleum Contamination from the Field to Lab"
- 10:45-11:05 Wilson, Katie (Paragon Research Associates) "When the Bottle Isn't Empty: A case study from the King Street Station Monitoring Project, Seattle"
- 11:05-11:25 Weaver, Robert (The Environmental History Company) "Looking for a Job?: Opportunities for applied archaeology in the environmental industry"
- 11:25-11:45 Discussion
- Palouse** **[S2] General Session: Archaeology of Historic Forts**
Caroline Carley (University of Idaho)
- 8:30-8:50am Holschuh, Dana (Portland State University) "The Archaeology of Capitalism: Ideology in the material culture of Kanaka Village"
- 8:50-9:10 Mullaley, Meris (Portland State University and ICF International) "Architectural Variation and Community-Building in Fort Vancouver's Village, ca. 1829-1860"
- 9:10-9:30 Marcotte, Jacqueline "Maritime Archaeology in the Columbia River: The Fort Vancouver waterfront"
- 9:30-9:50 Wilson, Douglas C. (National Park Service) "Exploring the Roots of Diversity In the Far Northwest: The National Park Service Public Archaeology Program and Fort Vancouver's Village"
- 9:50-10:10 Manion, Mollie (Oregon State University) "Still Worth Digging After All These Years: Excavations at Fort Hoskins 2010"
- 10:10-10:25 **Break**
- 10:25-10:45 Eichelberger, Justin E. (Oregon State University) "Archaeological Symbols of the Rank and File: Metal uniform insignia from Fort Yamhill and Fort Hoskins, 1856-1866"
- 10:45-11:05 Brauner, David (Oregon State University) "'The Past Disappears Like The Morning Mist': A primer on historic sites taphonomy"
- 11:05-11:25 French, Jamie (Oregon State) "Use of LIDAR Bare Earth Data to Extrapolate Structure Dimensions of Historical Archaeological Features"
- 11:25-11:45 Sargent, Heather (University of Idaho) "Bullets, Buttons and Beads: The history and archaeology of Fort Spokane, Washington"
- 11:45-12:05 Brunson, Tiffany (University of Idaho) "Making Farmers and Wives: Historic archaeology at the Fort Spokane Indian Boarding School"

University**[S3] General Session: Northwest Coast Archaeology**

Chair: Kenneth Ames (Portland State University)

- 8:30-8:50am Hawes, Kathleen L (The Evergreen State College) "Environmental Reconstruction and Climate Change through Analysis of Archaeological Wood Charcoal Macro-Remains"
- 8:50-9:10 Cvekić, Rastko (University of Toronto) "Shell Middens and the Sacred?"
- 9:10-9:30 Croes, Dale R. (South Puget Sound Community College and Washington State University) "Salish Sea Wet Site Archaeology: Ancient basketry, the key to defining long-term Salish heritage throughout their sea"
- 9:30-9:50 Holmberg, James M (South Puget Sound Community College) "An Analysis of Archaeological Recovery, Conservation, and Identification of Clam Drying Sticks Found at the Qwu?gwes Cultural Site"
- 9:50-10:10 Chatters, James C. (AMEC Earth & Environmental, Inc.), Jason B. Cooper (AMEC Earth & Environmental, Inc.), Philippe Letourneau (King County, Washington), and Linda Scott Cummings (Paleo Research Institute) "Understanding Olcott: Findings of the Granite Falls Alternate Route Data Recovery Project, Snohomish County, Washington"
- 10:10-10:25 **Break**
- 10:25-10:45 Ames, Kenneth M (Portland State University), H. Kory Cooper (Purdue University), and Loren Davis (Oregon State University) "Analyses of Contact-era Cupreous Artifacts from the Meier and Cathlapotle Archaeological Sites, Lower Columbia River"
- 10:45-11:05 Grier, Colin (Department of Anthropology, Washington State University) and Meghann Stevens (Department of Anthropology, Washington State University) "There Goes the Neighborhood? The 2010 Household Excavations at the Dionisio Point Locality, Galiano Island, Southwestern British Columbia"
- 11:05-11:25 Cannon, Jacqueline (Western Washington University) "Nuu-chah-nulth Fishing Technology in the Archaeological Record & Its Place in the Repatriation Process"
- 11:25-11:45 Discussion

Empire**[S4a] General Session: Global Issues**

Chair: John R. Wagner (University of British Columbia Okanagan)

- 8:30-8:50am Wieland, Josef (Portland State University) "Agendas and Ontologies: 'Dietary governmentality' in Oaxaca, Mexico"
- 8:50-9:10 Trusler, Kate (University of Leicester) "Downpipes and Sanitation: Indications for population dynamics, urbanization and household behavior in Pompeii"
- 9:10-9:30 Anwar, Mohammad Hossen (University of British Columbia Okanagan) and John R. Wagner (University of British Columbia Okanagan) "Transboundary Water Governance, Human Rights and Food Security: A comparison of the Ganges and Columbia River Basins"
- 9:30-9:50 Jatel, Nelson (University of British Columbia Okanagan) and John Wagner (University of British Columbia Okanagan) "Addressing the Wicked Problem of Water Governance: The Okanagan Basin Water Board, a case study of distributed multi-level governance"
- 9:50-10:10 Adjepong, Godfried Kwakjo (Central Washington University) "Sustainable Water Resource Management in Ghana, A Case Study From the Birim River Sub-Basin"

10:10-10:25 **Break**

Empire **[S4b] General Session: Theoretical Issues in Anthropology**

Chair: Laura Putsche (University of Idaho)

10:25-10:45 Chapman, Brandon M. (Washington State University) "Culture and Economics in Decision-making: The case of a Trinidad Small-scale Fishery"

10:45-11:05 Maier, Kadence C. (Washington State University) "Caught Between Two Worlds: The contribution of traditional practice in defining modern Hawaiian identity"

11:05-11:25 Lapoint, Elwyn C. (Eastern Washington University) "Prolegomena to a Heideggerian Anthropology"

11:25-11:45 Whalen, Thomas B. (Gonzaga University) "Interaction, Negotiation, and Emergence: A multidisciplinary approach to cultural ontology"

11:45-12:05 Tyllas, Nicole (Washington State University) "Understanding Each Other: A phenomenological exploration into human sociality"

[SP] Posters, 8:30-noon, Convention Center Hallway

Derr, Kelly (Washington State University) "Pre-Contact Fire Use and the Implications for Modern Forestry Management in the Pacific Northwest"

Henry, C. Shea (University of Idaho) " 'Sweet Tooth? Keep Societe Hard Candies Handy' Candy Purchasing and Consumption at the Kooskia Internment Camp"

Kienholz, Mary (University of Idaho), Molly Swords (University of Idaho), and Amanda Haught (University of Idaho) "Hot Off the Press: The printing plates of Sandpoint, Idaho"

Meidinger, Brett N. (Drayton Archaeological Research) "Kelp and Eelgrass: Indirect evidence for marine plant and algae utilization at 45WH9, *Strav-a-wa*, 'the place for clams'"

Schuster, Katrina (Western Washington University) "The Spatial Analysis of Chipped and Ground Stone Artifacts at 45-WH-4"

Simons, Noah D. (Central Washington University), Josphe G.Lorenz (Central Washington University), Lori K. Sheeran (Central Washington University), Megan D. Matheson (Central Washington University), R. Steven Wagner (Central Washington University), and Jinhua Li (Anhui University) "Methods and Implications of the Noninvasive Collection of Saliva from Nonhuman Primates"

Snyder, Charles (Washington State University) and Keri B. Snyder (Washington State University) "Aces in their Places: The role of the anthropologist in collaborative praxis"

Forum, Panel, and Symposia Abstracts

Forum: Lickety Split: Sandpoint's Artifacts in Three Minutes

A Special 2.5 Hour Forum of Three Minute Papers with Discussions

Sandpoint, Idaho is one of the largest sites excavated in the Northwest and includes a plethora of artifacts, some unique to Sandpoint while others are found throughout the West. This exciting forum will explore individual artifacts unearthed in Sandpoint in a forum setting of three minute papers. Often artifacts are skimmed over in reports or lumped into classes rather than giving those interested a detailed look at the individual pieces which contributed to the everyday lives of the past. During this forum presenters will showcase an artifact every three minutes, revealing the details and asking the bigger questions that will not only shape the history of Sandpoint but will aid archaeologists in our region with identification and interpretation of common and not so common artifacts found throughout the American West. Time will be allowed for questions and discussions throughout this forum.

Co-Organizers: Amanda Haught (University of Idaho) and Molly Swords (SWCA)

Panel: Three-Year Retrospective on the Cultural Resource Protection Summit: What We've Said, What We're Saying, and Where We're Going

Since 2008, the nonprofit program Applied Preservation Technologies (APT) has helped produce the annual "Cultural Resource Protection Summit" at the Suquamish Tribe's Kiana Lodge near Poulsbo, WA. The Summit is designed to promote collaborative cultural resource planning as an effective means of finding resolution to issues related to the intersection of cultural resource and land use before they escalate into emotionally-charged, divisive, expensive stalemates or law suits. Through keynotes, panels, and networking, attendees representing all parties affected by this intersection explore the most pressing issues with the goals of building relationships between diverse interest groups and designing practical solutions to common problems.

You are invited to participate in an open discussion about: 1) issues discussed at the first three Summits regarding successes/failures in the Cultural Resource Management (CRM) profession; 2) a preview of the fourth annual Summit to be held May 23-24; and 3) ways the CRM profession can improve its methods and outcomes.

Organizer: Mary Rossi (Applied Preservation Technologies)

Beyond Tyvek Suits: Hazardous Materials On-Site and In the Lab

Archaeology and hazardous materials are increasingly intersecting in the field and in the lab. Archaeologists need to plan for the potential of contaminated cultural deposits (such as shell middens exposed to petroleum or more inherently contaminated sites such as industrial historic sites) and for the safety of the people working around hazardous materials both in the field and afterwards. Archaeologists and museum professionals discuss their attempts to face these new realities, including developing policies and procedures to address the seemingly contradictory process of preserving data while potentially compromising the collections.

Co-Organizers: Laura Phillips (University of Washington, Burke Museum) and Paula Johnson (Paragon Research Associates)

Cultivating Sustainability through Archaeology: The University of Idaho's Campus Trash Project

A sense of civic duty and responsibility for one's surrounding environment is best cultivated through one's interaction with and daily observation of it. The Campus Trash Project, an archaeological study of trash accumulation on the University of Idaho campus, was designed with this principle in mind. The Campus Trash Project involves undergraduate and graduate students enrolled in an archaeological methods and theories course studying areas or zones that have dense trash deposits. Students work in archaeological teams assigned to each zone, in the process gaining vital archaeological and ethnographic skills such as mapping, participant observation, artifact cataloging, analysis and interpretation. Students have used their findings to inform campus waste management strategies, including the placement or relocation of trash cans and the curtailment of student littering through new recycling initiatives. This symposium reviews the pedagogical and applied components of the Campus Trash Project, focusing on how the project can be replicated at other universities to assist in both sustainability efforts and imparting archaeological methodologies to students of anthropology.

Organizer: Stacey Camp (University of Idaho)

Cultural Resources Management in Pacific Northwest Transportation: A Joint IDT-ODOT-WSDOT Symposium

This symposium is a joint presentation of the Idaho Transportation Department (IDT), Oregon Department of Transportation (ODOT), and Washington State Department of Transportation (WSDOT) cultural resources programs to highlight projects and issues in transportation projects over the past year. Participants include DOT staff and consultants, and will cover a range of topics including archaeology, agency cultural resources management, and historical investigations.

Organizer: Scott S. Williams (Washington State Department of Transportation)

Current Perspectives on Technological Organization and Social Complexity

What constitutes “social complexity” in small scale societies and how can we infer it from the archaeological record? One fruitful approach towards these fundamental questions in archaeology is through the study of technological organization. Technological organization examines the behaviors patterning the ways in which peoples made, used, and transported material culture. Drawing on a diverse set of case studies across different regions, time scales, and technological practices, shifts in the patterns of tool production, retouch, and discard are examined for insights as to how they inform our knowledge of social organization. Each paper provides perspectives on what social complexity entails from social inequality to specialization, and how these social processes may be visible in the archaeological record. The approaches used include experimental studies, the examination of formed tools and their byproducts, and agent based models; highlighting the methodological diversity in the approaches to answering these fundamental questions in archaeology.

Organizer: Adam Rorabaugh (Washington State University)

“Meaningful Consultation, Anthropological and Archaeological Research and Results: Managing Cultural Resources within the Traditional; Territories of the Colville Confederated Tribes”

The Confederated Tribes of the Colville Reservation (Colville Confederated Tribes [CCT]) History/Archaeology Program assists federal agencies with cultural resources management compliance for the 1.4 million acre reservation and throughout the 25 million acres of Traditional Territories in the northwest United States. Different perspectives from the various agencies and CCT require early consultation to attempt to achieve cultural resources management objectives. The CCT History/Archaeology Program contributes to regional research objectives by combining tribal knowledge with anthropological and archaeological methods. The symposium presentations are a collection of cultural resources management projects, anthropological and archaeological research results and History/Archaeology staff duties which assist both agency compliance and attempt to promote the interests of the CCT.

Program Manager and Tribal Historic Preservation Officer: Camille Pleasants

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

The Sanak Island Biocomplexity Project and Related Research

Long-term multidimensional research on Sanak Island and the Western Alaska Peninsulahas focused on humans as part of the northern ecosystems where the modern and the prehistoric, the terrestrial and the marine, the local and the regional, and the empirical and theoretical are all interrelated. We suggest that this multidimensional approach is not only possible but necessary to our understanding of the North Pacific region. We also suggest that through multifaceted social dynamics the Aleut conditioned the structure of complex ecosystems. They were not simple and passive harvesters, but were rather active participants in a regional system that included them at the top of the food chain. The implications of this type of approach are profound and require the integration of anthropology, archaeology, geology, ecology, oceanography, and history, the perspective of all spatial and temporal scales, new methods of analysis, and the seamless merging of various theoretical approaches from the most humanistic to the most deterministic.

Organizer: Maschner, Herbert D. G., Anthropology Research Professor; Director, Idaho Museum of Natural History; Director, Center for Archaeology, Materials, and Applied Spectroscopy; Idaho State University.

The Sandpoint Archaeology Project

The Sandpoint Archaeology Project is the largest data recovery project in the history of the state of Idaho. Three years of excavations ahead of Idaho Transportation Department’s reconstruction of US Highway 95 around Sandpoint, Idaho yielded 568,447 artifacts recovered from several sites and features. The project recovered large portions of historic Sandpoint’s original townsite including artifacts associated with prehistoric Kalispel occupations, the overseas Chinese, several saloons, restaurants and bordellos in Sandpoint’s Restricted District, various features associated with former commercial businesses including a former Northern Pacific Railroad hotel, and remains from a former blacksmiths/machine shop associated with the Humbird Mill. This symposium presents the results of some of the analysis and reporting work now in progress.

Co-Organizers: James C. Bard (SWCA Environmental Consultants) and Robert M. Weaver (The Environmental History Company)

Tribal Initiated Ethnohistorical Research in the Northwest

This session reviews collaborative research between Western Washington University, the Confederated Tribes of Grand Ronde and the Quinault Indian Nation. Tribal initiated research centers around issues of ceded lands and treaty rights to resources. What can ethnohistorical research contribute to the ongoing dialogue between the tribes, the legal community and academia?

Organizer: Daniel L. Boxberger (Western Washington University)

Working with THPOs: Tribal Historic Preservation Officer Symposium

Tribal Historic Preservation Officers (THPOs) from Washington and Idaho present how their various programs operate and what is expected from and offered to CRM contractors and/or other researchers working on the reservations and within the Tribes' traditional territories. As with SHPOs, each THPO and office has unique operating procedures, confidentiality requirements, resources, and so on, at their disposal. As a result, there is no one-size-fits-all approach to working with THPOs. This symposium is an opportunity for CRM contractors, academic professionals and students to understand what each THPO has to offer to and requires from researchers along with the chance to interact directly with the THPOs.

Organizer: Jill Maria Wagner (Coeur d'Alene Tribe)

Paper and Poster Abstracts

[S4a] Adjepong, Godfried Kwakjo (Central Washington University) “Sustainable Water Resource Management in Ghana, A Case Study From the Birim River Sub-Basin”

As water resources increasingly become scarce around the world, there is growing concern about the need for sustainable water resources management, particularly, as water has no substitute. This need is echoed in the United Nation’s Millennium Development Goals because good water management is critical to a healthy environment and sustainable development. Focusing in the Birim River Basin, Ghana, this research seeks to: i) identify and examine water problems, ii) evaluate existing policies and government agencies in charge of water management, to identify critical indicators that should be included in the Birim Basin management plan, iii) identify and examine traditional institutions, belief systems and social practices that have relevance to Integrated Water Resource Management, and iv) recommending changes that could help improve the water situation in the Birim Basin while steps are taken to develop long term management plan. The study employs in-depth semi structured interviews, focus group discussions and participant observation to gather data. Successful local and international models provide a theoretical framework and basis for analysis.

[T7a] Allen, Josh (University of Idaho), Elaine Rose Bayly (University of Idaho), Jamie Capawana (University of Idaho), and Meaghan Jones (University of Idaho) “Waste Not Want Not: A study of indoor campus trash” [symposium]

Our research examined, using archaeological methodologies, two heavily used university lecture halls in which we found that the littering of small items is a major issue on campus. Though lecture halls are unconventional subjects for the study of littering problems, they provide an intriguing look into the way students think about trash. How indoor litter is viewed is important when educating students about campus trash as well as raising the campus sustainability rate. Through our artifact collections and analysis, we discovered that many of the items in these classrooms were recyclable, which suggests that large lecture halls and other high traffic classroom areas present a strong opportunity to expand university recycling programs.

[T4] Alsoszatai-Petheo, John A. (Central Washington University) “Of Cracked Rocks, Flakes, Psychology, and Falsifying N-Rays”

Inter-observer differences identified between original and subsequent restudy of an experimental archaeological data set are interpreted as a possible example of the psychological mechanism known as "observer bias." This mechanism is briefly reviewed along with examples from other disciplines. Neither unknown nor surprising, the discrepancies thus uncovered point to potentially disturbing consequences to commonly used assumptions regarding the use of "solid physical examples." Logical positivist and post-positivist arguments, the use of "generic" or hypothetical examples, and the availability of reliable independently verifiable criteria used in systematic falsification of a priori assumptions are brought into question where it concerns distinctions made between lithic specimens of unknown genesis produced either naturally or by human hands.

[F7] Altman, Julia (University of Idaho) “Shield Bearing Warriors in Idaho Indian Rock Art”

This paper serves as a general introduction to shield bearing warrior rock art in Idaho. Warriors, holding body shields and sometimes engaged in active combat, were painted and inscribed on rock surfaces over a period of thousands of years, with the oldest image in Idaho dating from over 8000 years ago and the youngest dating to the postcontact period. An understanding of these images is important to the general shield bearer literature, which in turn aids in understanding precontact spirituality, warfare, and settlement patterns. This paper is based upon recent field work in the Bennett Hills and East Central Idaho. It includes original photographs and answers the questions of why these images were made, who made them, what they mean, where they are found, cultural affiliation and method of manufacture.

[TP1] Amador, Raquel (University of Idaho) "The Arrow Beach Affair" [poster]

In the late 1960s, highway construction projects unearthed numerous Nez Perce Village sites. While every attempt was made to salvage, and/or preserve, as much of the archaeological materials as possible, in some instances politics, social pressures, and poor communication made such attempts impossible. This paper presentation will address the obstacles encountered prior to, during, and after the controlled excavation of Arrow Beach (10NP102) by Idaho State University in 1967. Prior to their arrival, this site had been excavated by "amateurs" who had damaged a great portion of the site. The result, is what became known as the “Arrow Beach Affair.” In 2010, after being housed for several decades in storage, the collection was re-opened for rehabilitation and curation revealing a wealth of material remains newly available for interpretation.

[S3] Ames, Kenneth M. (Portland State University), H. Kory Cooper (Purdue University), and Loren Davis (Oregon State University) “Analyses of Contact-era Cupreous Artifacts from the Meier and Cathlapotle Archaeological Sites, Lower Columbia River”

Excavations at the Meier and Cathlapotle sites, Lower Columbia River, produced 187 cupreous artifacts, from contact-era deposits. The sites date between AD 1400 and the 1830s and represent large permanent settlements. The key question about the cupreous objects is whether any were of "native" copper and hence potentially pre-contact heirlooms. Given the likely rarity of such objects, all were initially analyzed using Oregon State University's hand-held XRF unit. Based on those results, 50 were selected for further XRF and SEM analysis at Purdue University. Although a number of the objects are almost pure copper, all appear to be smelted copper, i.e. trade copper. Given the size of the sample across two sites, this suggests that native copper was extremely rare, if present, on the Lower Columbia in the last few centuries. The work also demonstrates the effectiveness of hand-held XRF equipment for initial sorting and analyses.

[T5b] Anderson, Erik D. (Northwest Archaeological Associates) “The King County Potter’s Field: Locating a possible archaeological resource in the Georgetown area of Seattle”

Those interned in the King County Potter’s Field were exhumed in 1912 as part of the project to straighten out the Duwamish Waterway. Historical resources mention the existence of the cemetery, a list of those exhumed in 1912, as well as the mismanagement of those exhumations, none of which give a specific location to the cemetery itself. Knowing of the history of internment and exhumation mismanagement even at the most well funded cemeteries in this country, with the remains of the poor and indigent, there is a high probability that not all remains were removed. With numerous construction projects in the Georgetown area of Seattle, it was important to ascertain at least a general location of the cemetery.

[S4a] Anwar, Mohammad Hossen (UBC Okanagan) and John R. Wagner (UBC Okanagan) “Transboundary Water Governance, Human Rights and Food Security: A comparison of the Ganges and Columbia River Basins”

Water access is a core issue of survival for agricultural communities in Bangladesh and is essential to the realization of several other human rights as defined by the United Nations: the rights to food, education, health care, sanitation, and housing. However, transnational hydro-politics and weak international agreements over shared water resources create unequal outcomes for powerful versus weaker stakeholders. In this paper we argue that a central goal of international water agreements should be to protect the full range of human rights identified above. This argument is especially compelling in the case of Bangladesh and India since unilateral actions taken by India along the Ganges and other shared rivers have had disastrous consequences on downstream Bangladeshi communities. It is also relevant to the Columbia Basin, however, where human rights and food security issues should be on the table as Canada and the US prepare to renegotiate the Columbia River Treaty.

[T2a] Baird, Keith Patrick (Nez Perce Tribe) “Nez Perce Tribe Historic Preservation Office Overview” [symposium]
The history, current status, program operating procedures and policies of the Nez Perce THPO.

[F8] Bard, James C. (SWCA Environmental Consultants) and Sylvester L. Lahren, Jr. (SWCA Environmental Consultants) “Was There a Village at Sandpoint? – Digging Deeper into the Archaeological and Ethnographic Record” [symposium]

The Kalispel Indians lived around the shores of Lake Pend Oreille. Archaeologists have recorded many occupation sites along the shores though many are now seasonally flooded as a result of the operation of the Albeni Falls Dam which began regulation of the lake in the 1950s. Ethnographers recorded a number of summer camps, fishing sites and winter villages around the perimeter of Lake Pend Oreille and on both sides of the Pend Oreille River. The long sandy peninsula and grassy meadows where Sand Creek flows into Lake Pend Oreille was an attractive occupation spot and one that was used for thousands of years for fishing, hunting, and possibly as a winter village or small hamlet occupied during the winter months. This paper explores the ethnographic record pertinent to Sandpoint and highlights what we know and what more may be learned through additional archaeological and ethnological research.

[T6] Barnes, Kelli (Idaho State University), Herbert Maschner (Idaho State University), Bruce Finney (Idaho State University), and Nicole Misarti (Oregon State University) “Isotopic Analyses of Shell and Bone from Sanak Island, Alaska, and their Relevance for Understanding Ancient Environments” [symposium]

Isotope studies can elucidate a broad spectrum of ancient environmental data that have implications for understanding human culture change throughout prehistory. Studies that seek to understand the interaction between humans and the environment are particularly relevant in the Arctic, where humans will likely be a part of the systems most dramatically affected by future climate change. This paper will review two lines of investigation at Idaho State University: isotope data on ancient shells and bone from Sanak Island, Alaska. Although shell has the potential for yielding data on food web studies and ancient climate, its usage is not straight forward, and methods are still being developed to deal with complex

issues of diagenesis, pretreatment, and interpretation for different species. The analysis of bone in food web studies is well-established and an example from ancient fox bones will be presented.

[TP2] Beasley, Virgil Roy III (GeoMarine) and Emily Ragsdale (HRA) “The Joint Base Lewis McChord Archaeological Predictive Model” [poster]

GeoMarine, Historical Research Associates, Inc. (HRA), and the Cultural Resources Office at Joint Base Lewis-McChord (JBLM) have developed an archaeological predictive model designed to classify the archaeological sensitivity of JBLM lands. The model was developed in consultation with the Washington Department of Archaeology and Historic Preservation (DAHP) and the region's tribes, and it is intended to help identify archaeological resources that may be affected by various ground disturbing activities. The model uses a series of environmental variables to establish the likelihood that archaeological resources are present in any given location on the base. This tool will help to prioritize future archaeological surveys and to quickly assess the likelihood that archaeological resources will be affected by any given action. HRA and the JBLM also developed a web site to explain how the model works.

[T6] Benson, Buck (Idaho State University) and Herbert Maschner (Idaho State University) “Geochemical Analysis of Volcanic Materials from the Lower Alaska Peninsula: A study of comparative techniques and human demographics” [symposium]

In an attempt to find the most accurate means of identifying the number of potential sources of basalt tool stone material from the Alaska Peninsula, a multi-technique study was performed on fifty flakes from five village sites from the lower Alaska Peninsula. Techniques used include; Time-of-Flight Laser Ablation ICP-MS (TOF-LA-ICP-MS), Neutron Activation Analysis (NAA), Quadropole Laser Ablation ICP-MS (LA-ICP-MS), handheld x-ray fluorescence analyzer, and Photon Activation Analysis (PAA). Analyses of data from these techniques demonstrated similar results, identifying between three and five regional sources. Some of these methods have also been used to identify obsidian artifacts from known sources shedding new light on the extent of trade and demographic movement across the region. These data demonstrate that inter-island trade was active in the Aleutian region by 5000 years ago, with networks spanning 500 km.

[F5b] Bermensolo, Kylie (University of Idaho) “Disappearing Identity: Rock art of Northern Tanzania”

The rock art of the Hadzabe tribe in Northern Tanzania is mysterious, elusive, and quickly disappearing due to natural corrosion. This rock art represents a forgotten history of the Hadzabe, and my goal has been to locate, record, and preserve this rock art. During summer 2010 I conducted independent research in Tanzania, which led me to finding and recording six separate rock art sites in the Yaida Valley. Preservation has been accomplished through the innovative new digital DStretch technology that allows for stunning clarification of almost invisible rock art, bringing it into the public and academic sphere. This paper covers the styles, stories, and importance of this rock art to the Hadzabe, and emphasizes the use and application of DStretch technology in rock art research.

[F4b] Betts, Robert C. (Vanguard Research) and James C. Bard (SWCA Environmental Consultants) “From Time Immemorial: The prehistoric record in the Sand Creek Byway, Sandpoint, Idaho” [symposium]

A small assemblage of 119 lithic artifacts was recovered during the excavation of the historic Sandpoint Townsite. Most were recovered from historically disturbed sediments also containing historic artifacts. Still, the prehistoric artifact assemblage allows some insights on Native American use of the project area prior to the arrival of fur traders in 1809. Comparison of projectile point morphology of the 16 complete or partial points recovered with established regional chronologies indicates that prehistoric use of Sand Creek extends back in time as least 5,000 years. Lithic material recovered includes obsidian, nephrite, and Kootenai Argillite pointing to long distance prehistoric trade and/or contact with groups in S.W. Idaho and two locations in British Columbia. This paper will focus on the results of the analysis of the prehistoric lithic artifacts recovered during the Sandpoint Byway excavation.

[F8] Biemann, Oliver R. (SWCA Environmental Consultants) “The Quantity not Quality: Foodways of a late 19th century boardinghouse residents, Sandpoint, Idaho” [symposium]

A common bond among late 19th century camp workers, food was crucial to the cohesiveness and performance of the camp as a whole. The recovery of 1,471 bone elements from a boardinghouse associated with 19th century railroad workers in Sandpoint, Idaho, not only provides a glimpse into the daily lives of residents but also illustrates the central role played by large quantities of food. Dominated by domestic mammals and birds, such as cattle, pork, chicken and turkey, the foodways displayed at the boardinghouse closely mimic those of U.S. during the same time period – an emphasis on huge quantities of food, and in this case, meat. An exploration of institutionalized foodways, this paper examines the nature of food consumption from a boardinghouse in an isolated North Idaho town.

[T4] Black, Jill (Central Washington University), Susan Kerr (Modesto Junior College), Lourdes Henebry-DeLeon (Central Washington University), and Joseph G. Lorenz (Central Washington University) “Dental Calculus as a Non-destructive Source of Mitochondrial DNA for Analysis of Skeletal Remains”

Mitochondrial DNA is widely used in studies of affinities among living peoples and prehistoric populations represented by skeletal remains excavated at archaeological sites. Although many Indian groups see the utility of using mtDNA analysis as a means of connecting past and present, cultural norms regarding treatment of human remains prevent the use of destructive techniques in obtaining DNA. In this paper we discuss the utility of using dental calculus collected from a number of individuals comprising a pre-contact burial site (CA-SOL-357; 600 - 1000 c.e.) as a possible source of mtDNA.

[T8] Blukis Onat, Astrida R. (BOAS, Inc.) “The Art of Archaeology”

The common ground of this paper involved collaboration between archaeologists, the Sauk-Suiattle Tribe, and a group of artists who were volunteers on an Earthwatch Institute project. The ground investigated was the Bedal Homestead at the forks of the Sauk River, on the west side of the Cascade Mountains. The Tribe provided elder knowledge about the site area and provided advice about how to look at the setting. The artists provided meticulous records and drawings, as well as insight into the materials at hand. Survey of a nearby mountain trail provided additional cultural context for the site. The archaeologists analyzed site morphology, artifacts, old photographs, and made a lot of maps of the site and beyond. The collaborative effort resulted in a most satisfactory and culturally complete archaeology project.

[T3] Bowden, Bradley (Historical Research Associates, Inc.), Michael Falkner (Historical Research Associates, Inc.), Jennifer Olander (Historical Research Associates, Inc.), and Derek Shaw (Historical Research Associates, Inc.) “Trails to Rails: Transportation in the historical archaeology of southern Pierce County”

HRA conducted excavations at several historical archaeological sites on Joint Base Lewis-McChord (JBLM) in 2009 and 2010. The goal of these investigations was to determine their eligibility to the National Register of Historic Places. These sites were associated with late nineteenth to early twentieth century farms incorporated into the JBLM in the early twentieth century. This paper presents the histories and artifact assemblages at several of these sites and explores consumer choice and commodity flow models to explain the variability in assemblages.

[T5a] Boxberger, Daniel L. (Western Washington University) and Larry Ralston (Quinault Indian Nation Tribal Council) “Incident at Punta de los Martires” [symposium]

One of the most renowned events in the history of European settlement in the Pacific Northwest is the “Incident at Punta de los Martires,” the first recorded encounter between newcomers and Natives in what is now Washington State. Much has been written about this event by historians and anthropologists who seem to have been overly obsessed with identifying the exact location of the incident. There are at least seven historical accounts written by five different individuals who were there on July 13-14, 1775, and there are twice as many secondary accounts that have puzzled over the turn of events which characterized this encounter. In none of these accounts is the Quinault side of the story mentioned. We offer here a possible explanation for the Quinault reaction to the Spanish encounter based on Quinault oral histories.

[T5a] Boxberger, Daniel L. (Western Washington University), Nora K. Pederson (University of Alberta) and Justine James, Jr. (Quinault Indian Nation Cultural Resources) “Quinault Indian Nation Ocean Fisheries Oral History Project” [symposium]

From July to October 2010 oral histories were collected from Quinault Indian Nation ocean fishers and elders knowledgeable about ocean resources. The ocean fishery consultants ranged in age from 35 to 80, the elder consultants in particular had insight into QIN involvement in ocean fisheries both before and after the 1974 Boldt Decision. What was evident from the interviews was that the Boldt Decision actually restricted rather than enhanced the QIN ocean fishery. Current ocean fishers participate in several commercial fisheries, including trolling for salmon, crabbing, longlining for halibut, black cod, rock fish, ling cod, and hook and line for tuna. These fisheries are currently carried out in the area between Point Chehalis and Destruction Island and up to 100 miles or more offshore. QIN ocean fishers have been pioneers and active participants in the commercial use of ocean resources since the beginning of recorded history.

[S2] Brauner, David (Oregon State University) “‘The Past Disappears Like The Morning Mist’: A primer on historic sites taphonomy”

Rarely do we have the opportunity to return to an archaeological site over a span of 30+ years. This past Summer Oregon State University returned to the site of Fort Hoskins in the western Oregon Coast Range. One of our objectives was to compare the condition of the material remains after a significant passage of time. Could we see measurable changes in the integrity of the material culture and document the rate of data loss? The preliminary results are both encouraging and frightening. We must never forget that our historic sites are dynamic entities and have a lifespan that we may be able to document. We must wake up to the fact that our buried historic record will not wait around for future generations of archaeologists to realize the significance of the recent past.

[S2] Brunson, Tiffany (University of Idaho) “Making Farmers and Wives: Historic archaeology at the Fort Spokane Indian boarding school”

Though well researched by historians, few Indian boarding schools have been excavated by archaeologists despite their importance in Indian history and what they reveal about federal Indian policies. Research on this period allows for exploration of the experiences of Indian children caught between Indian culture and the forced Euro-American assimilation. Students at boarding schools negotiated and made choices about what to accept and resist as well as how to incorporate the Euro-American education they were receiving into their existing world view. Fort Spokane in Northeastern Washington served as a federal Indian boarding school from 1899 until 1910. Excavations at there in 2010 focused on the dormitories for the young girls and for the young boys. Differences between the personal adornment artifacts found in these structures reveals how Indian children at boarding schools were indoctrinated in Euro-American gender roles and how they may have resisted those roles.

[T7a] Camp, Stacey Lynn (University of Idaho) “Teaching with Trash: Archaeological insights on university waste management” [symposium]

The archaeological study of modern trash on an American university campus can yield valuable insight into how both human and environmental processes contribute to the accumulation and distribution of litter. The Campus Trash Project, run by the University of Idaho, utilizes archaeological methodologies to evaluate the effectiveness of university waste management policies designed to curtail litter on campus. As this case study illustrates, the discipline of archaeology can make significant contributions to the reduction of campus trash while providing students with the necessary practical skills required to become professional archaeologists upon graduation.

[F6] Campbell, Bethany Hauer (University of Montana) “A Collective History: The curation ‘crisis’ and the emergence of a new paradigm”

The archaeological and collection management community are on the brink of a paradigm shift. While the curation “crisis”, involving neglected collections, has been brought to the forefront by curators and researchers alike, the methodologies of how we, as archaeologists, approach collections has not drastically changed in the last decade. The past paradigm was to survey, excavate, analyze, publish and move on to the next project; often times with little regard for the long term care and management of the collections. What happens to these artifacts? Will they be available for the future? I present examples of an emerging paradigm, focusing on the research potential of these collections, despite their placement in long-term storage, and the proper education of the next generation of archaeologists to be ethically responsible for the care of collections in perpetuity.

[S3] Cannon, Jacqueline (Western Washington University) “Nuu-chah-nulth Fishing Technology in the Archaeological Record & Its Place in the Repatriation Process”

In November of 2009, the Nuu-chah-nulth (a First Nations band that resides on the west coast of Vancouver Island) were granted the right to harvest and sell fish found within their territories. This right was granted after a long and tedious review process that began in 2003. The Nuu-chah-nulth were required to prove to the Canadian government that prior to contact with Europeans they extensively harvested fish, traded fish with other groups of people, and had the sociopolitical and economic complexity to support such a system. They hired anthropologists to argue these criteria and the Canadian government also hired an anthropologist to evaluate these criteria. In her report, she downplayed the socio-political and economy complexity of Nuu-chah-nulth society, arguing that the culture did not truly have the ability to harvest and trade marine resources on a large scale. In my presentation, I will argue that her evaluation is unfair, especially in regards to the assessment of pre-contact fishing practices. The report neglects to address the extensive archaeological record that shows distinctive, varied, and effective Nuu-chah-nulth fishing technologies.

[F7] Carlini, Daniel P. (University of Idaho) “A Craig Mountain Phase Precipitation Record of the Lower Salmon River Canyon: Analysis of *Margaritifera falcata* Shell $\delta^{18}\text{O}$ from the Heckman Ranch Site, Idaho”

Davis and Muechlenbachs (2001) created an interpolated time curve using *Margaritifera falcata* stable oxygen 18 isotope ($\delta^{18}\text{O}$) record taken from various archaeological sites along the Lower Salmon River, plotted against radiocarbon dates (BP). Their dates ranged from 1,700 yr BP to 11,800 yr BP, with an approximate 3500 year time gap from ~4,500 yr BP to ~8,000 yr BP. Dates and stable isotope data taken from *Margaritifera falcata* shells recovered from the Craig Mountain Cultural Phase, Heckman Ranch site (10IH579) fill in a portion of this gap. The purpose of this paper is to present $\delta^{18}\text{O}$ data that further increases our understanding of precipitation variations of the Lower Salmon River Canyon. Additionally, this paper will attempt to relate mussel subsistence for this time period to environmental factors, reflected in $\delta^{18}\text{O}$ data.

[TP2] Cascella, Melissa (ICF International) “Demystifying GIS: An Archaeologist’s Perspective” [poster]
Geographical Information Systems (GIS) is a powerful spatial analysis and visualization tool that can be used to generate

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Geographical Information Systems (GIS) is a powerful spatial analysis and visualization tool that can be used to generate

data, answer research questions, and display the results of archaeological investigations and analysis. Using this technology to its full potential requires an understanding of its terminology and capabilities. As a former GIS analyst and current archaeologist, I will share insights on GIS formatting, research potential, and the appropriate language to communicate your needs and ideas successfully. By gaining a working understanding of GIS, you will be able to take full advantage of the software's spatial analysis and visualization capabilities to answer your archaeological research questions and display your data appropriately and effectively.

[S4b] Chapman, Brandon M. (Washington State University) “Culture and Economics in Decision-making: The Case of a Trinidad Small-scale Fishery”

Human behavioral ecology (HBE) aims to develop universal (i.e., reproductive fitness) hypotheses to explain why humans cooperate. One problem with HBE is that culture is seldom addressed, does not have any properties of its own, and cultural models, which are increasingly shown as prominent in decision-making are seldom discussed. I evaluate the exchange patterns and use of cultural models among two different ethnic groups in a Trinidad/Tobago village and compare these against metrics of HBE concerning fish catch distribution to test the significance and integration of evolutionary and cognitive theories on allocation choices. While HBE hypotheses partially explain divergences in transfer patterns among and between ethnicities, cultural models are a more reliable predictor in most cases. Kin selection and reciprocal altruism show moderately significant influence, but models of on and off-water work habits, fishing experience, and trustworthiness and reliability are the most powerful explanations of salience in resource transfers.

[S3] Chatters, James C. (AMEC Earth & Environmental, Inc.), Jason B. Cooper (AMEC Earth & Environmental, Inc.), Philippe Letourneau (King County, Washington), and Linda Scott Cummings (Paleo Research Institute) “Understanding Olcott: Findings of the Granite Falls Alternate Route Data Recovery Project, Snohomish County, Washington”

The Olcott Complex, and early lithic industry found in the Puget Lowland of Western Washington, was identified 50 years ago but remains an enigma. The complex occurs in acidic, extensively bioturbated soils, which have thus far stymied efforts to determine the age, subsistence base, and overall adaptive strategy of the early peoples who produced the industry. Analysis of artifacts, faunal remains, and thermally altered rocks from three occupation areas of sites 45SN28 and 45SN303 in Granite Falls Washington have shown that Olcott people were familiar with both stone boiling and earth oven methods of hot rock cooking, processed acorns in the earth ovens, and consumed (at least) beavers and deer. Paleoecological study of a nearby bog demonstrates that the local environment was a fire-maintained mosaic of forests in a range of successional stages. Overall, these findings and the associated lithic technology indicate a highly residentially mobile adaption focused on terrestrial resources.

[T6] Clement, Nicholas (Idaho State University), Herbert Maschner (Idaho State University), and Corey Schou (Idaho State University) “Virtual Repositories: Discussing Methodologies for Integrating Access to Museum Collections” [symposium]

Due to obvious constraints of locality, issues of multi-agency ownership, and the generally perishable nature of museum collections, there is a growing need in collaborative academic pursuits to create multi-level access, virtual repositories or cyber-infrastructures, which allow researchers to access, integrate, and mine diverse data assemblages at scales not being realized through current research paradigms. Accessing data can often present aggregating problems to researchers in nearly every academic field of study. Museum collections represent a large portion of this data bottleneck and the lack of comprehensive access to specimens has been a contributing factor in the absence of hard data comparability and an increasing reliance on the conclusions drawn by other researchers in resulting publications. We propose, therefore, the creation of a virtual repository or a comprehensive, hyper-plastic database system which will house and serve complete representations of a museum's inventory in a content oriented, comprehensive Virtual Museum system.

[FP1] Cooper, Jason B. (AMEC Earth & Environmental) and Tim Gerrish (AMEC Earth & Environmental) “US 101 Bone River Bridge Replacement Project, Pacific County, Washington” [poster]

AMEC Earth & Environmental, under subcontract with WSDOT, provided a cultural resource assessment of the proposed US 101 Bone River Bridge Replacement Project. Significant archaeological deposits associated with the previously documented site 45PC28 were identified within the Project's APE. Located on the north bank of Bone River and primarily east of US 101, site 45PC28 is one of the most important archaeological sites in Pacific County. The multi-component site contains intact cultural deposits that span prehistoric, ethnohistoric and historic occupation. The historic occupation of the site was documented in James Swan's popular account of the region, *Northwest Coast*, circa 1850s. Tribal consultation with the Chinook Tribe and Shoalwater Bay Tribe resulted in proactive discussions about the sensitive nature of the archaeological deposits in and around Bone River prior to commencing archaeological investigations.

[TP1] Corn, Tyrone (Idaho Power Company) “The Possible Link Between Solar Radiation and the Selection of Talus Pit Storage Feature Locations” [poster]

The poster will display the results of a GIS analysis evaluating the possible link between solar radiation (by season) and the selection of locations for talus pit storage features. The practicality of selecting a low solar gain location for talus pit storage features, however, assumes the storage of perishable items. The poster will also address the range of possible uses of such pits drawing on the literature and ethnographic studies.

[FP1] Coutts, Allison (Eastern Washington University) and Matthew Cox (Eastern Washington University) “Early Irrigation Attempts Along the Middle Columbia” [poster]

As settlers migrated to the Pacific Northwest, they found themselves unprepared for the challenge of cultivating crops in an environment greatly differing from the American heartland. Agriculture along the Middle Columbia was extremely difficult in the areas outside the naturally watered lowlands without using various irrigation techniques. Real estate companies often found it necessary to construct irrigation systems in order to attract settlers and investors to areas that possessed a naturally occurring water source but lacked sufficient rainfall. In 1910 the Columbia Valley Orchard Company along with the Beverley Investment Company purchased approximately 500 acres of land near Beverly, WA and constructed a coal fed, steam powered pumping plant to draw water from the Columbia River to irrigate the planned orchard complex. Recent archaeological investigations along the Middle Columbia have discovered the remains of these early irrigation efforts.

[TP2, F2a] Covington, Brenda (Confederated Tribes of the Colville Reservation) “Ongoing Adverse Impacts to Cultural Resources at the Grand Coulee Dam Reservoir, Lake Roosevelt” [symposium and poster]

Impacts to archaeological sites within and surrounding the reservoir created behind Grand Coulee Dam are numerous and have been documented at various sites over a considerable period of time. Impacts include erosion, deposition, looting, off-road vehicle use of the drawdown zone, domestic livestock use of the reservoir environment, and use by recreationists. With over 1000 archaeological sites and traditional places, addressing impacts is crucial to preserving a significant part of the region's past.

[FP2] Crabtree, Stefani (Washington State University) “There is No Such Thing as a Free Lunch: Costly exchange in the Village Ecodynamics Project, a network analysis” [poster]

This poster will explore the networks formed from costly food exchange in the prehistoric Southwest. Utilizing Agent-Based Modeling, the Village Ecodynamics Project (VEP) aims to understand interactions of ancestral Puebloan societies. Using ethnography we are able to understand the daily exchange of food items, which may have been the difference between starvation and survival in lean years. Analyzing these networks, I propose that we may understand aggregation in the Southwest, which lead to some of the spectacular Cliff Palaces well documented in Mesa Verde.

[S3] Croes, Dale R. (South Puget Sound Community College and Washington State University) “Salish Sea Wet Site Archaeology: Ancient basketry, the key to defining long-term Salish heritage throughout their sea”

Waterlogged/wet archaeological site exploration has demonstrated an enduring Salishan basketry tradition for the past at least 3000 years throughout the Salish Sea, stylistically linking sites from the Gulf of Georgia to the southern end of Puget Sound. The twelve main sites investigated are found along the entire length of the newly defined Salish Sea, adding *never before considered* cultural historical justification for the name change. The follow-up question would revolve around why has there been considerable continuity of the Salish Tradition over this vast area? What exchange-of-ideas/products are reflected in the evolution of non-basketry versus basketry artifacts throughout the region and beyond. In other words, how does this reflect the sharing of extra-regional artifact styles (used to define archaeological “phases”), versus intra-regional guarding of artifact styles, and particularly basketry (used here to trace Salish ethnicity).

[S3] Cvekíć, Rastko (University of Toronto) “Shell Middens and the Sacred?”

Shell middens are omnipresent on the Northwest Coast. Rather than considering them as parts of sacred landscapes, archaeologists have largely studied these localities as parts of subsistence-settlement systems of everyday activity. This paper, however, explores some recent approaches that do consider sacred characteristics of shell-matrix sites and contextualizes them within similar research in Brazil and the southeastern USA. I argue that the concept of hierophany (*cf.* Mircea Eliade) is a useful heuristic device for tacking back and forth between interpretations of sacred and everyday aspects of shell-matrix (and other archaeological) sites.

[TP1] Dampf, Steven (Historical Research Associates, Inc.), Leonard Kempf (Geo-Marine, Inc.), Jennifer Gilpin (Historical Research Associates, Inc.), and Todd M. Ahlman (Historical Research Associates) “Frontier and Border Archaeology of the Old Boundary Townsite (45ST632), Stevens County, Washington” [poster]

Recent archaeological investigations at the Old Boundary Townsite have revealed a significant and intriguing dataset that dates from the late nineteenth and early twentieth centuries. On behalf of U.S. Customs and Border Protection (CBP), archaeologists gathered archaeological and historical data on commercial ventures, private residences, and other occupations. Local tradition paints the town as a lawless border town; however, the archaeological data suggest a more sedate multi-ethnic settlement with evidence of numerous families living in the town as well as domestic occupations being carried out at the commercial structures. One unusual find was a network of 1, 3, and 4-inch pipes crossing the site's southern end – the presentation examines possible uses. In addition, this presentation demonstrates a positive collaboration between the archaeologists, CBP, Washington Department of Archaeology and Historic Preservation, the Confederated Tribes of the Colville Reservation, and local historical societies.

[S1] Dellert, Jenny (Historical Resources Associates) and Jen Gilpin (Historical Resources Associates) “How to Work in Haz Mat Sites, Now and in the Future(?)” [symposium]

Conducting archaeological investigations and monitoring in areas being cleaned up for remediation projects is changing how archaeologists conduct our work and collect our data. This paper will discuss how to prepare for a HAZWOPER required project, such as courses, personal protective equipment, health and safety plans, and general ways that archaeologists need to be more conservative when on a hazardous materials site. How can we as a field anticipate the number of HAZWOPER-required projects in the future, and perhaps predict where these projects may occur? Given an increase in awareness to chemicals used during the historic-period, and even today, how do we see the future of archaeology, with respect to monitoring, testing, and data recovery projects? Will a chemistry degree have to go hand-in-hand with an anthropology/archaeology degree? Will a lab coat, goggles, and nitrile gloves replace khaki pants and bare hands?

[F7] Dennis, J. Corey (University of Idaho) “Obsidian on the Move: An examination of obsidian artifacts in the Clearwater River drainage, North Central Idaho”

Geochemical sourcing studies of obsidian artifacts using the X-Ray Fluorescence (XRF) method have been providing a vast storehouse of data within the Clearwater Region of North Central Idaho since first pioneered by Lee Sappington in the 1970s. This paper investigates regionally known sites containing obsidian artifacts and their relationships with tested procurement sources. Ethnographic evidence places the study area within the Nez Perce aboriginal interaction sphere. With this consideration, maps of pre-contact trails and use areas provided in Stephen D. Shawley's, *Nez Perce Trails* (1977) are utilized, examining possible routes for obsidian procurement. Additionally, new artifact testing on currently curated Clearwater drainage collections, not yet sourced with XRF or other techniques, will be discussed here.

[SP] Derr, Kelly (Washington State University) “Pre-Contact Fire Use and the Implications for Modern Forestry Management in the Pacific Northwest” [poster]

Before the arrival of Euro-Americans, indigenous peoples of the Pacific Northwest were actively managing the landscapes they inhabited through the use of fire. The loss of native populations as active stewards of their ancestral lands, increased fire suppression policies, and climate change have all played a role in current forest health across the Northwest. Determining the role human played in these fire regimes is important to consider when creating modern forestry management plans. The research presented here presents data regarding anthropogenic fire use surrounding Shingle Point, Valdes Island in Southwestern British Columbia during the last five millennia. Both ethnographic accounts and sediment charcoal data demonstrate the use of anthropogenic fire as a tool for increasing plant productivity and landscape maintenance and underscore the need for forest managers to consider the role of pre-contact populations on the ecology of the Pacific Northwest.

[F1] Dolan, Patrick (Washington State University) “The By-Products of Production: Lithic debitage from a Marpole-phase plank house” [symposium]

Understanding the organization of production is an important precursor to explaining economic systems within pre-contact households of the Pacific Northwest. The analysis of tools within house deposits is the most direct means of addressing production. Nevertheless, tool assemblages are in many cases impoverished as a result of their transport away from the site through use or away from the habitation area through discard. Under circumstances such as these, the form and distribution of lithic debitage, by-products of the manufacture of chipped stone tools, can faithfully reflect chipped stone tool production. Drawing on archaeological materials recovered from the 1,400 year old Dionisio Point Site on Galiano Island in southwestern British Columbia, I demonstrate the utility of lithic debitage analyses in explaining patterns of chipped stone manufacture, use, and discard within a large pre-contact plankhouse.

[FP1] Drews, Michael (Gnomon, Inc.), David Harder (Plateau Archaeological Investigations, LLC), Christopher Noll (Plateau Archaeological Investigations, LLC), and Jeremy Hall (Gnomon, Inc.) “Work Beneath the Canopy: LiDAR as an aid in locating historic mining features in areas of marginal surface visibility” [poster]

Mine expansion necessitated new field inventory and re-evaluation of existing National Register eligible mining properties at the Buckhorn Mine in northeastern Washington. Steep slopes and dense vegetation obscured ground visibility, so LiDAR was chosen as a method to help locate surface mining features such as prospects, shafts and adits. LiDAR imaging produced resolutions of 8.5 points per square meter with a 7.2 cm vertical accuracy. Over 728 surface anomalies were field checked with fewer than 10% attributed to natural features. LiDAR imaging proved to be a cost effective method to augment traditional field inventory facilitating the evaluation and mapping of site boundaries and feature complexes.

[F5b] Eastley, Jessica (Washington State University) and Mageo, Jeannette (Washington State University) “U.S. Parent/Child Alienation Dreams: Autonomy and dependence”

This paper is a “dream ethnography” of young Northwestern American’s inner lives. Employing psychological projective techniques and anthropological life-history interviews, we argue dream collecting can reveal a cultural psychology, while documenting discourses and practices under-represent the full range of people’s emotions. We demonstrate the usefulness of this approach through dreams collected during the 2008-2009 period. The data suggest that in the contemporary American family system, autonomy and dependence are two sides of one emotional landscape, which young people struggle with for years after leaving their parent’s home and which is a source of emotional conflict during their college years. This struggle is particularly visible in dreams about parents among students ready to leave college. The feelings that arose when they moved from high schools to a distant college location reoccur. The paper explores both how and when middle class American students transition into independent adulthood.

[S2] Eichelberger, Justin E. (Oregon State University) “Archaeological Symbols of the Rank and File: Metal uniform insignia from Fort Yamhill and Fort Hoskins, 1856-1866”

Metal uniform objects are one of the most diagnostic artifacts found at military sites. Once recovered, these artifacts provide archaeologists with a means of dating a site, identifying a post’s occupants and in some cases these artifacts can provide information on the procurement of uniform supplies and the use and reuse of particular uniform styles. During several seasons of excavation, one hundred and twenty-four metal uniform objects have been recovered from Fort Yamhill and Fort Hoskins. The metal uniform insignia recovered from these posts demonstrate that although U.S. Army Quartermasters attempted to supply military posts in the Pacific Northwest with correct uniform insignia some soldiers were forced to wear insignia that was outdated and incorrect.

[FP1] Elder, J. Tait (ICF International) and Kurt Perkins (ICF International) “Fish Traps and Data Gaps: A preliminary synthesis of fish capture features in Washington State” [poster]

With the recent discovery of a fish weir/trap feature buried under 20 feet of historic fill along the northern margin of the Grays Harbor estuary, just two miles north of an extensive fish weir/trap complex recorded in 1999, it seemed likely that this kind of feature is regionally abundant and well studied. However, additional research revealed very little synthetic information about the spatial, temporal, and technological (construction method, location, and materials) range and variation of fish weir/trap alignments along the inner and outer coasts of Washington state. This, in comparison to the extensive study of alignments north and south of Washington, results in a gap in our understanding of these features, and how they fit into the larger Pacific Northwest Coast regional context. Our poster represents a preliminary effort to compile and synthesize the basic attributes of fish weir/trap features along the Washington coastline.

[T1] Elder, J. Tait (ICF International), Patrick Reed (ICF International), and Stacy Schneyder (ICF International) “Context is Everything: Case studies for using expectations to guide archaeological investigations” [symposium]

Urban and Industrial environments present a unique challenge for archaeological investigations and analysis. Such environments are subject to extensive anthropogenic modification, which can include both the removal of naturally deposited surfaces, and deposition of fill. Depending on the source, fill can include imported historic or precontact artifacts, and/or redeposited sites. If present, these objects introduce the potential for incorrect interpretations of deposit integrity and significance. To accommodate for these challenges, it is necessary to establish expectations for identifying intact archaeological deposits, likely property types, and data potential based on the geology and land use history of the project area. These expectations should form the foundation for the design and implementation of field investigations, including archaeological monitoring. We present two case studies from WSDOT projects in urban and industrial environments for disseminating archaeological expectations to field crew early, and the effect that this had on data collection and productivity.

[F8] Emmick, Jamelon (SWCA Environmental Consultants) “Evidence for Dental Health in Historic Sandpoint Gathered from Human Remains, Isolated Teeth, and Artifacts” [symposium]

Human remains and isolated teeth recovered from historic Sandpoint suggest that residents suffered from poor dental health and sought a dentist’s services only under dire circumstances. Professional care and preventative hygiene practices were associated with the native-born middle class in the early 1900s and may not have been available to or adopted by many people, particular immigrant laborers, in the working-class town. However, artifacts from two sites associated with marginalized groups—a Chinese laundry and Euroamerican brothel—indicate that occupants practiced oral hygiene. In addition to discussing the evidence for dental health and hygiene practices, this paper examines the reasons these Sandpoint residents defy the hygiene stereotype.

[F3] Enlow, Grace (Central Washington University), Lori K. Sheeran (Central Washington University), Susan M. Cheyne (Oxford University), Mary Lee Jensvold (Central Washington University), and Megan D. Matheson (Central Washington University) “Vocalizations and Pair-bonding Behaviors in Bornean Agile Gibbons (*Hylobates albibarbis*) in Sabangau National Park, Indonesia”

Gibbons (Hylobatidae) engage in complex songs that hypothetically are integral to adults’ pair-bond formation and maintenance. GE and SC studied one, habituated group of four Bornean agile gibbons (*Hylobates albibarbis*) in Sabangau National Park, Indonesia from June 22-September 19, 2010. GE collected behavioral and singing data during focal follows of the gibbon group and from auditory observation posts in the group’s territory. We tested whether the pair’s average daily duet duration correlated with mated adults’ proximity and behavioral synchrony. All interactions were affiliative, and the mated adults’ behaviors were usually synchronized (T-test, $n_1=n_2=11$, $t=4.52$, $\alpha=.01$, $df=10$, $p=.001$). As daily average duet duration increased, behavioral synchronization increased ($r^2= 0.177593001$) and distances between the mated pair decreased ($r^2= -0.041329378$), although neither correlation was significant. These preliminary results support the hypothesis that dueting predicts pair-bond strength.

[F5b] Evans-Janke, Leah (University of Idaho) and Ariana Burns (University of Idaho) “Shop 'Til You Drop: A diachronic study of rural American purchasing habits in the early 20th century”

In the decades following the Second Industrial Revolution, Americans developed a youthful version of the capitalist system we routinely practice today. In the subsequent eight or so generations Americans have become obsessed with consumerism. This paper analyzes cultural influences to reveal discernible evidence of individual consumer behavioral changes between generations as the country shifted from a nation of producers to one of consumers.

[T8] Fernandez, Trish (ICF International) “Buena Vista Monitoring: Lessons Learned”

ICF implemented archaeological construction monitoring under contract with ODOT in 2010. The project was the replacement of the Buena Vista Ferry and the project included areas on both sides of the Willamette River in Marion and Polk counties. Pre construction archaeological survey and excavation identified a precontact site consisting of two hearth loci with burned shell, charcoal, and fire modified rock on the Marion County side. Monitoring was to be conducted for no more than eight days. At the end of monitoring, a total of 53 days were spent monitoring, one historic site was identified, and 2 additional hearth loci were identified and evaluated. This paper presents the lessons learned from this project—not only as they relate to projecting monitoring costs but also to developing effective strategies for locating ephemeral but significant features that, because of their nature, can be so easily missed.

[F5b] Fitzgerald, Kevin (Western Washington University) “Integrating Psychological and Sociological Approaches to Heavy Metal Music”

The sociological study of heavy metal has recently bloomed while its psychological counter-part has waned. There is an interesting body of psychological literature from around 1986 to 1996 on the influence of heavy metal music on adolescent listeners in the U.S. that has gone largely overlooked in recent studies. I discuss two themes in this literature—pragmatic ethics and the concept of personality—and argue that they still operate in more recent sociological studies. I also discuss the handful of physiological studies on heavy metal affect and argue that this approach can provide a basis for effective interdisciplinary discourse focused on the integral experience of music and community. Recent studies on neuroaesthetics and evolutionary musicology are proposed as exciting new areas of inquiry.

[TP2] Ferry, Joy (Central Washington University) “Analysis of $\delta^{18}\text{O}$ and $\delta^{13}\text{C}$ Data Acquired from *Margaritifera falcata* Shell (Site 45KT315, Kittitas County, WA): Holocene environmental change on the Columbia Plateau” [poster]

M. falcata shell remains were recovered from the 1502 trench of the Sanders Site (45KT315) in the 1970’s by Dr. W. Smith. The site is located on Johnson Creek and a tributary of the Middle Columbia River; today this creek does not support this species. The majority of the *M. falcata* remains in the site were concentrated within 4 levels, radiocarbon dated to roughly 3000 years ago. A select sample of 50 *M. falcata* shells were prepared and submitted to a laboratory for $\delta^{18}\text{O}$ and

δ13C analyses. Results suggest that this shellfish population may have been supported by more steady mesic conditions about 3300-3000 cal BP.

[F7] Frederick, C. D. (Consulting Geoarchaeologist) and T. L. Griffith (Geo-Marine, Inc.) "Geoarchaeological Investigations on the Owyhee Plateau, Idaho"

Geoarchaeological investigations performed in tandem with archeological testing of prehistoric sites in the western portion of southern Idaho are attempting to assess the potential for archaeological site burial in a wide variety of landscape settings on the loess covered Owyhee Plateau. Studies to date have examined upland and alluvial settings, and employ a soil-geomorphic approach in order to assess the age of Holocene deposits in the field. Radiocarbon and optically stimulated luminescence dating, together with a broad suite of soil/sediment analyses are being used to document the age and degree of soil development of different age deposits in order to develop more formal criteria for distinguishing Holocene and Late Pleistocene sediments.

[S2] French, Jamie (Oregon State) "Use of LIDAR Bare Earth Data to Extrapolate Structure Dimensions of Historical Archaeological Features"

Archaeological study and survey relies heavily on ground reconnaissance and evaluation. This method is problematic with a heavy incidence of error. Once a site has been identified a multitude of ground penetrating sensors can be used depending on the projects monetary constraints. These methods are reliable at times, provided of course that the buried features have artifacts and features that can be distinguished through these methods. High spatial resolution is essential in archaeological remote sensing on the level of meters and centimeters. LIDAR is one of the few remote-sensing tools applicable to the field of archaeology with its ability to extrapolate the bare earth topographic data and remove vegetative cover showing previously unseen depressions and rises in the topography. LIDAR can be used in conjunction with archaeological excavation maps to determine site parameters and focus excavations.

[F2b] Frey, Rodney (University of Idaho) "The Turning of the Wheel: The interplay of human diversity and shared humanity – lessons for an ethnographer"

Ethnographic work with American Indians has demonstrated their uncanny ability to simultaneously travel distinct ways of life, as for example, being a self-effacing "elder" and a self-serving "trickster," of being a sincere Sundancer and devout Baptist, and doing so with such ease, keeping each path distinct and separate from the other, while at the same time seeing the varied paths in an indispensable relationship as part of a greater whole. Articulated by one elder in the image of the "wagon wheel," this paper will explore the implications of the interplay between the human diversity of the spokes and the shared humanity of the hub and rim in the life's work of one ethnographer, and implications for us all to discover.

[T7a] Galbraith, Sara (University of Idaho) and Clay Pleasant (University of Idaho) "Waste Not Want Not: The University of Idaho Arboretum and Botanical Garden" [symposium]

The University of Idaho Arboretum and Botanical Gardens was selected for this study in order to make inferences about human trash depositional practices in a park-like and pristine area. Survey and collection was conducted a total of five times on the north and south entrances, for comparison. Pedestrian traffic and activity was also recorded over the course of four months at the north entrance; as well as temperature, wind, and other environmental data. This data was analyzed to determine the extent at which environment, gender, age, and single vs. group travel affect deposition practices and/or artifact patterning. The results indicate a relation to varying weather conditions and gender, group composition and directional travel preferences; however there was shown to be no direct correlation to artifact patterning and gender, group composition and directional travel preferences. Our conclusions suggest that artifact patterning in the Arboretum was largely determined by eolian depositional processes.

[T8] Gall, Alexander (Archaeological Services of Clark County) "45CL435: Evaluation of a cobble chopper site within the Vancouver Lake/Lake River Archaeological District"

Archaeological Services of Clark County (ASCC) has completed the fieldwork for an archaeological evaluation of a portion of site 45CL435, The Delaney Fields Lithic Scatter Site, which is located within the Vancouver Lake/Lake River Archaeological District (VLLRAD). The research design followed that which was first introduced by ASCC at the 2008 NWAC for the treatment of sites dominated by unifacially flaked cobble tools (cobble choppers) within the VLLRAD. This paper will discuss the efficacy of this research design, which emphasized the collection of data from an intensive ground surface inventory rather than extensive subsurface investigations. It will also discuss the results of archaeo-botanic analyses on a sample of cobble choppers in our effort to test the wood procurement hypothesis with regard to these tools' function.

[TP1] Galm, Jerry R. (Eastern Washington University), Tiffany Fulkerson (Eastern Washington University), and Stan Gough (Eastern Washington University) “Revisiting the Haskett Complex in the Pacific Northwest: New perspectives from the Sentinel Gap site” [poster]

The Late Paleoindian Sentinel Gap site assemblage includes projectile point/knife and biface forms stylistically similar to examples reported for the Haskett Complex. The Type 1 category of Haskett point was first defined from surface point finds at the Haskett site (10PR37) in the eastern Snake River Plain of Idaho. The Type 1 style shares morphological similarities with point forms found in Agate Basin and Hell Gap complexes from the Great Plains and even selected Parman point forms from sites in the Great Basin. In this study, the vectors of style, technology, and function are employed in the examination of Haskett and stylistically similar lanceolate projectile point/knife forms. Comparisons to other lanceolate complexes from regional Late Paleolithic occupations reveal, among other things, greater resolution of the geographic distributions of these point complexes.

[F7] Gilbert, Hollie K. (Idaho National Laboratory) “Italian Immigrants Baking Under the Desert Sun”

Within the boundaries of the Idaho National Laboratory, seven beehive shaped rock features exist in association with a railroad, constructed in 1900 and canals constructed ca. 1908. Although originally thought to be igloos for storing explosives used in canal construction, research indicated that these features are bread ovens constructed and used by Italian immigrant workers. The ovens are associated with a construction company that was historically based in Utah. This company known as Corey Brothers Construction was awarded many railroad and canal construction contracts throughout the Intermountain and Pacific Northwest regions. The ovens are found in association with the Corey Brothers projects and display distinct features. This paper will discuss the known ovens’ locations and characteristics.

[T7b] Gilmour, Daniel M. (Portland State University), Virginia L. Butler (Portland State University), Douglas J. Kennett (University of Oregon), Brendan J. Culleton (University of Oregon), and Edward Byrd Davis (University of Oregon) “Chronology and Ecology of Extinct Mammalian Fauna of the Pleistocene/Holocene Transition in the Northern Willamette Valley, Oregon”

Numerous megafaunal remains from Late Pleistocene geologic deposits in Oregon’s northern Willamette Valley have been noted and collected over the past century, though most have not been described or dated. We undertook a project to synthesize these faunal records to reconstruct paleoenvironments and to develop a local chronology of events to consider the causes of the Late Quaternary extinctions. We have obtained AMS ages and stable isotopes ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) on 15 individuals from five genera (*Bison*, *Mammuthus*, *Mammuthus*, *Equus*, *Paramylodon*), most dating between ~15,000-13,000 cal yrs BP. Results suggest a mixed herbivore community persisted in an open landscape through the Clovis Horizon until the Younger Dryas boundary. Implications for the extinction debate and Late Pleistocene forager adaptations are considered.

[T3] Gleason, Eric (NPS) “Test Excavations at 35WS453 Chinatown, The Dalles, Oregon”

In February 2011 test excavations began at 35WS453, a site that occupies one half of a city block in the urban core of The Dalles, Oregon. The excavations consist of several 1x1 meter test units placed around an 1879 brick building. Local tradition, Sanborn maps and census records indicate that this building operated as a Chinese store, wash house and lodgings for most of the late 19th and early 20th century. The recent excavations have uncovered a well-stratified deposit dating from 1879 to ca. 1940. Preliminary results of these excavations have revealed a pre-1879 foundation as well as numerous artifacts associated with the Chinese occupation.

[T3] Graham, Tyler (South Puget Sound Community College) and Jamie Voss (South Puget Sound Community College) “The George Bush Homestead: An analysis of artifact types and their distribution”

The George Bush family was one of the founding families of first non-Indian settlers in Washington State in what is now the Olympia/Tumwater area. George was African American and was not able to hold land in Oregon or California, so the wagon train of families he was guiding opted to move north, eventually onto southern Puget Sound. Artifacts have been recovered at the Bush Homestead by property owners throughout the years and a professional archaeological survey was conducted in 2009. 216 artifacts were located during the survey in two distinct locations. Typology of the artifacts in each location has been used to establish the site of a house and a barn. An in-depth analysis of selected artifacts including a tobacco pipe and oxen shoes, was conducted to build a better picture of daily life on the homestead.

[S3] Grier Colin (Washington State University) and Meghann Stevens (Washington State University) “There Goes the Neighborhood? The 2010 Household Excavations at the Dionisio Point Locality, Galiano Island, Southwestern British Columbia”

The five-plankhouse village at Dionisio Point dating to roughly 1500 BP has received substantial archaeological attention over the last 15 years. Recent excavations have broadened to include investigation of the remains of a single, large plankhouse that sits 200 m distant from the village core. We report on investigations in the interior of this house and its

surrounding midden area, considering its temporal and spatial relationship to other archaeological features in this complex locality. Interestingly, the central area of the house contains a large and somewhat enigmatic sea-urchin roasting feature, potentially indicative of winter ceremonial feasting in the house. Otherwise, artifacts, debitage and faunal data document the day-to-day practices in the household, and together these data add significantly to our understanding of plank house village organization in the islands of coastal southwestern British Columbia.

[T3] Griffin, Dennis (Oregon State Preservation Office) “Remnants from an Ill-fated US Naval expedition or Early British Shipwreck? Results from the Conservation Efforts of Oregon’s Arch Cape Cannon”

In February 2008, a young girl spotted the first of two iron cannon exposed along Oregon’s coastline, west of the unincorporated town of Arch Cape. These cannon were found less than two hundred feet south of the historic post office where another cannon was discovered following a storm in 1898. The newly discovered cannon were totally covered with concretions and hardly recognizable. Initial thoughts were that they were from the USS Shark, an American naval vessel that wrecked in 1846 near the mouth of the Columbia River. Following their recovery the cannon were sent to Texas A&M for conservation. The concretions have now been removed and the cannon are being stabilized before being returned for long-term curation and exhibition. This paper offers highlights learned from the recovery and conservation efforts, to date, on the origin and history of the cannon.

[F7] Griffith, Tabitha (Geo-Marine) "Contextual Approaches to Cultural Resources Management in Southern Idaho"

Over the past four decades, cultural resources investigations performed by archaeologists on the central Owyhee Plateau have resulted in the documentation in over 4,000 prehistoric and historic archaeological sites. Archaeological surveys to date have relied upon traditional survey methods, and have generally employed a surface-only approach in making recommendations for site management. More recently, efforts are being made to improve survey methods by incorporating subsurface data into making stronger eligibility recommendations on archaeological sites and confronting land management problems from a contextual approach. In this presentation, we describe some of strategies we are incorporating to overcome current land management challenges, while simultaneously providing concise, quality data that can be used to answer archaeologically driven research questions about land use throughout prehistory and history.

[T4] Harder, David (Plateau Archaeological Investigations, LLC), Michael Drews (Gnomon, Inc.), Christopher Noll (Plateau Archaeological Investigations, LLC), and Jeremy Hall (Gnomon, Inc.) “LiDAR as an Effective Tool for Locating Historic Mining Features at Buckhorn Mountain in Northeastern Washington”

Previous archaeological research in the Kettle River Range in northeastern Washington has revealed a long history of mining, but steep terrain and dense forest cover has hindered discovery and assessment of features relating to the mining landscape. A surge in mining activity in the region has necessitated new inventory and re-evaluation of existing National Register eligible properties. LiDAR imagery provided an effective means to view surface anomalies by filtering out heavy forest cover. After field checking 728 such anomalies, LiDAR proved to be a cost effective method to accurately locate mining related features ranging from shallow prospect pits to deep shafts. The technique is useful not only to the field archaeologist for assessing site boundaries and feature extent, but provides agency archaeologists with some degree of confidence in the adequacy of survey coverage and site evaluations.

[F2a] Harry, Lawrence (Confederated Tribes of the Colville Reservation) “Duties of the Traditional Cultural Property Technician - Perspectives from a tribal member” [symposium]

This presentation will go in detail describing the duties of a Traditional Cultural Property Technician, such as; identifying potential informants, contact via letters and phone calls, organizing field visits with informants, the process of transferring of one media format to another, and the finalized products of the History/Archaeology Program. As an enrolled member working for my Tribe’s H/A Program, the projects have a personal connection, linking my work to my family and my ancestral homelands.

[S3] Hawes, Kathleen L. (The Evergreen State College) “Environmental Reconstruction and Climate Change through Analysis of Archaeological Wood Charcoal Macro-Remains”

The analysis and interpretation of wood charcoal macro-remains from archaeological sites has been extensively used by archaeobotanists and paleoecologists in Europe as a means for reconstructing past vegetation, and by inference, climate patterns. This technique, however, has been infrequently applied to archaeological sites in the United States. Wood charcoal is the charred remains of a plant’s woody structures, predominantly from trees and shrubs; and is the most common plant material recovered archaeologically, due to the fact that it preserves in most conditions. This paper will examine the technique of cellular analysis in identifying archaeological charcoal to genus and often to species, and how it can be applied to archaeological sites from the Pacific Northwest Coast to reconstruct past vegetation and allow for possible interpretation of climate patterns.

[FP2] Heckelman, Amber (Washington State University) “The Applied Anthropological Perspective on the Current State of Natural Resource Management: The case of the *Manicaria saccifera* in the Tortuguero region, Costa Rica” [poster]

This study uses an applied environmental anthropological approach to investigate the natural resource management of *Manicaria saccifera* in Tortuguero, Costa Rica. *Manicaria saccifera* is a palm that is favored among locals for thatch due to its broad sized leaves, ability to regenerate quickly, and natural insecticide. It was presumed that the respective palm was being depleted as population increased in the region. This study shows that there are factors affecting the health and sustainability of *Manicaria saccifera*, but local usage has declined significantly and poses no threat to the palm. The main threat to *Manicaria saccifera* is habitat destruction. There are two prominent reasons for the decline in usage among locals: (1) a change in attitude, resulting in the loss of knowledge of how to harvest and thatch; and (2) the implementation of Ministerio del Ambiente, Energia y Telecomunicaciones’ permit system.

The poster that will be presented provides an overview of a report that was completed and submitted to the Canadian Organization for Tropical Education and Rainforest Conservation (COTERC), the Area de Conservación Tortuguero (ACTo), and the Ministerio del Ambiente, Energia y Telecomunicaciones (MINAET) as part of a field course that was offered through Laurentian University.

[F2b] Heiner, Christina (Cryse) (University of Montana) “You All Know that I Won’t Sell a Foot of Land: Tribal resistance and the allotment process on the Flathead Reservation”

In 1910, the U.S. government opened the Flathead Reservation to white settlement in Northwestern Montana as outlined by the Dawes Act passed in 1887. The Dawes Act or General Allotment Act stipulated that each tribal member would receive a certain amount of land dependent upon their marital status or age. Heads of households would receive 160 acres of land, single individuals over 18 would receive 80 acres of land and children 40 acres. Remaining lands would be sold by the federal government and out of tribal control. This paper explores the continual resistance in the late 19th and early 20th centuries by tribal members against the Allotment Act. The Allotment Act was not only another breach of the Hellgate Treaty (1855) but an act detrimental to both tribal sovereignty and culture that continues to affect the Confederated Salish and Kootenai tribes today.

[F3] Hendershott, Rebecca L. (Central Washington University), Megan D. Matheson (Central Washington University), Lori K. Sheeran (Central Washington University), R. Steven Wagner (Central Washington University), and Jinhua Li (Anhui University) “Sociosexual Behaviors of Tibetan Macaques (*Macaca thibetana*)”

Both male and female Tibetan macaques exhibit sociosexual behaviors, including embracing, social mounting, penis-sucking, and bridging (the simultaneously coordinated lifting of an infant with grooming or genital licking). These behaviors may serve a form of generalized tension reduction and/or agonistic buffering, wherein adult-infant interactions and sociosexuality are used in order to mediate social stress. This study analyzed the relative importance of provisioned food and tourist presence (as both increase arousal), as well as the effect of kinship on the sociosexual behaviors of a group of Tibetan macaques at a tourist site in Anhui Province, China. *Ad libitum* notes were taken and results were analyzed with z and χ^2 tests. Food provisioning increased the likelihood of embraces and social mounts; tourist presence decreased the likelihood of penis-sucking and bridging; and kinship between two adults was more likely in bridging attempts and less likely in social mounts.

[F6] Henebry-DeLeon, Lourdes (Central Washington University) “Columbia Plateau NAGPRA Database: A cultural affiliation resource”

Central Washington University produced its NAGPRA inventory by surveying its collection of Native American human remains using standard osteological procedures. The inventory documented what was physically present but did not document missing items or locate collections from the same sites stored in multiple institutions. This paper describes the challenge documenting a collection shared among institutions for more than 30 years and the resulting comprehensive NAGPRA database that will facilitate the cultural affiliation of Columbia Plateau human remains and funerary objects.

[T3] Henry, C. Shea (University of Idaho) “Overseas Chinese Foodways of the Western United States: From California to Idaho”

During the later decades of the 19th century, thousands of Chinese men and women not only emigrated from China to the United States, but also made the arduous journey from the California coast to the Inland Northwest and Idaho. Already forced to make concessions in California, these Overseas Chinese immigrants moved further away from home, and further away from the food they were accustomed to. Lack of access to traditional resources and small Chinese populations led to vastly different meat consumption habits between the California coast and Idaho. This paper considers initial faunal data coming out of San Jose, California (Market Street Chinatown) in comparison to data from several Chinese occupied sites in Idaho. Initial results from this comparison indicate that food consumption changed the further inland Chinese settlers ventured.

[SP] Henry, C. Shea (University of Idaho) “ ‘Sweet Tooth? Keep Society Hard Candies Handy’ Candy Purchasing and Consumption at the Kooskia Internment Camp” [poster]

Despite the institutional nature of the internment camp, someone was able to enjoy something sweet from the outside world, a society hard candy. Recovered in the lab, a candy wrapper tells us not just that internees or guards were enjoying sweet treats but we can also consider why and how. In the decades leading to the internment years, advertisers had began a campaign to not just entice women with chocolate and candies but to also include men, a campaign that succeeded at the all male Kooskia Internment Camp. This poster will display the analysis of the candy wrapper and possible tin can related artifacts together with archival purchasing records and pictures of the camp canteen in attempts to show who was purchasing the candy. This analysis will show that regardless of circumstance and place of birth, Americans have an insatiable sweet tooth.

[T7a] Henry, Shea (University of Idaho), Heather Sargent (University of Idaho), Tracy Schwartz (University of Idaho), and Rachel Stokeld (University of Idaho) “Bottles, Boxes, Cans, Oh My!: Recycling and litter among new Greek Row fraternities at the University of Idaho” [symposium]

The United States undeniably has a trash problem; and, despite their Greek names, there seems to be nothing more American than fraternities. The University of Idaho is striving towards becoming a more sustainable campus, but examining the waste of four fraternity houses on “New Greek Row” shows that these efforts seem to be absent. An examination of artifacts collected and with the observation of contents in the dumpsters, it quickly becomes clear that easily, and in some cases profitably, recyclables are being sent to landfills. Artifact patterns indicate that members of the community are contributing to decay that could easily be prevented. Finally, food and drink artifacts reflected activities conducted by modern day college students. Our research suggests that expansion of campus trash and recycling programs to this area is necessary to increase sustainability on the University of Idaho campus.

[T1] Hodges, Charles (Pacific Geoarchaeological Services) “Geoarchaeological Investigations Along the I-5 Crossing, Puyallup Delta, Tacoma, Washington: A combined lithostratigraphic and allostratigraphic approach” [symposium]

Recently, a proposal has been made to characterize Quaternary glaciogenic deposits using a stratigraphic system called CUAL (*Combined Use of Allostratigraphy and Lithostratigraphy*) (Räsänen et al. 2009, and references therein). Though intended to solve the problem of mapping highly heterogeneous glaciogenic deposits in the northern European and northern North American shield areas, the focus on characterizing, mapping, and predicting small-scale variability typical of glacial deposits has potential to be generalized and applied to geoarchaeological investigations on certain types of landforms in the Pacific Northwest. Under sponsorship of the WSDOT Tacoma/Pierce County HOV Program, and in conjunction with CH2M Hill and ICF International, PGS recently had the opportunity to apply this approach at both reconnaissance- and site-level investigations along the I-5 bridge crossing of the Puyallup Delta using continuous core data retrieved by sonicore drilling. Although the approach required some conceptual fine-tuning to make it amenable to the needs and limits of CRM-driven archaeological and geoarchaeological research, the results are encouraging and should be investigated further.

[FP2] Hofkamp, Anthony (Portland State University) and Virginia L. Butler (Portland State University) “Ground Truthing”: The use of radiographic analysis of annular growth rings for age determination in Pacific salmon (*Oncorhynchus* sp.) [poster]

Since the 1980's, radiographic methods (x-rays) have been employed for age determination and species identification of Pacific salmon (*Oncorhynchus* sp.) vertebrae from Northwest Coast archaeological sites. This method involves counting incremental growth structures, which hypothetically represent one year of growth. Our study tests this approach using modern vertebrae from two species of Pacific salmon (*O. kisutch* and *O. tshawytscha*) with known ages-of-death based on tag ages. Age estimates based on growth increment counts from vertebrae are compared to known ages and call into question results of radiographic age determinations.

[S3] Holmberg, James M. (South Puget Sound Community College) “An Analysis of Archaeological Recovery, Conservation, and Identification of Clam Drying Sticks Found at the Qwu?gwe Cultural Site”

In August of 2009 at the cultural site Qwu?gwe 45TN240 eighteen sticks were excavated from square N22E13. The eighteen sticks were photographed, recorded and removed for conservation. The artifacts were then placed into a Polyethylene glycol (PEG) 400 solution for conservation until January 2011. Three of these artifacts were removed, measured, and monitored for stability from January 25th through the 1st of February 2011. The artifacts proving stable permission was granted by Dr. Dale Croes to remove the artifacts from the PEG 400 solution. The purpose of this paper is to document the process of measuring and cataloging the eighteen clam stick artifacts. Identification of species of wood used will be shown at a microscopic level. The drying process that allowed this abundant shell fish resource to be preserved

and traded and the clam sticks role in the food preservation process is addressed. Recommendations for curation and display are presented.

[S2] Holschuh, Dana (Portland State University) “The Archaeology of Capitalism: Ideology in the material culture of Kanaka Village”

Fort Vancouver was a frontier outpost of the Hudson’s Bay Company (HBC) from 1829-1860. The HBC was a profit-driven organization that ran on the labor power of a multi-ethnic workforce comprised of Native Hawaiians, Europeans, Americans and members of over thirty Native American tribes; all of whom lived adjacent to the for in Kanaka Village. In order to maintain smooth function, the HBC fostered an ideology of individuality that masked the exploitative labor relations inherent in capitalist organizations. The ideology is manifested in the material culture recovered from over sixty years of archaeological work at the Fort Vancouver and Kanaka Village sites. The present study examines ceramic assemblages from two households within Kanaka Village as a measure of how enmeshed those households were in the capitalist ideology perpetuated during their occupation.

[T3] Horton, Beth (National Park Service, Washington State University) “Foodways within Captain Jack’s Stronghold During the 1873 Modoc War”

Nineteenth century Euro-American settlement of Northern California brought about significant social changes in the lifeways of the Modoc People. Comprehending the impact of these changes on the subsistence patterns of the Modoc requires understanding their historical trajectory, particularly during the 1872-73 Modoc War with the U.S. Army. For the majority of the war, the Modoc held their traditional defensive position in the lava beds on the south shore of Tule Lake, now known as Captain Jack’s Stronghold, currently in Lava Beds National Monument. The Modoc acquired a small herd of cattle for consumption, and disposed the bone refuse into crevasses within the stronghold. Faunal analyses of several faunal caches provide an insight not only into the daily lives of the Modoc, but into the social processes at work amongst a people under siege.

[T1] Huber, Edgar (Statistical Research, Inc.), Robert Wegener (SRI), Kevin Bartoy (WSDOT), and Sarah Van Galder (SRI), “Deep Explorations in the AWWRP North Access Area, Seattle” [symposium]

This paper focuses on the methods and results of SRI’s recent explorations in support of WSDOT’s Alaska Way Viaduct Replacement Program. The project area is the North Access portal located in a Seattle DOT maintenance yard in the South Lake Union of Seattle. As part of the exploratory plan development, we examined relevant geotechnical coring data generated in and around the SDOT yard to understand the location and depth of glacial, Holocene, and historical-period fill deposits. We also created detailed GIS layers showing their depth and location, and overlaid these with relevant Sanborn’s and Metzker maps to identify former historical-period structure locations. Combined, these data were used to construct a detailed exploration plan that incorporated the judicious use of deep trenching, drilling, and shoring to access deeply buried deposits that could not be effectively characterized using the limited and often ambiguous information provided by sonicore exploration.

[T4] Jankowski, Stephen Todd (Central Washington University) “Methods in Archaeological Data Collection: A field recordation form for rock features”

Limited research within the last decade has begun to address rock features in archaeological landscapes resulting in interesting data and interpretations. Regardless, there are many types that have been documented in the American West. While interpreting the utility or function of rock features is difficult and culturally sensitive, systematic approaches for their recordation have not been demonstrated. In particular data collection standards have never been defined or formally determined. A field data recordation form is presented. Issues as well as applications pertaining to measurement, construction, varnish, lichens, alignments, and orientations are addressed.

[S4a] Jatel, Nelson (University of British Columbia Okanagan) and John Wagner (University of British Columbia Okanagan) “Addressing the Wicked Problem of Water Governance: The Okanagan Basin Water Board, a case study of distributed multi-level governance”

This paper aims to accomplish three objectives. First, we review some of the key terms now being used to describe collaborative, decentralized approaches to water governance (nested, polycentric, distributed, multi-level) and then evaluate the utility of those approaches in relation to the “wicked problems” often associated with common pool water resource governance in settings where population growth and climate change exacerbate existing problems. Second, we explore the case study of the Okanagan Basin Water Board, located in the semi-arid Okanagan valley of British Columbia; where collaboration, negotiation and consultation involving multiple levels of government and community actors provides value to water managers and civil society. Third, we argue that there should be an increased emphasis on using inductive social science research methods, including ethnography and grounded theory, as a means to develop, advance and enhance a practical water governance narrative that supports the sustainable management of common pool resources.

[F6] Jenkins, Chris (Tribal Relations Specialist Seattle District, USACE) “Working with the Corps' Regulatory Branch-Things you need to know”

Conducting Section 106 compliance for Regulatory Branch of the US Army Corps of Engineers entails a unique set of challenges. This is a consequence of primarily two factors: The Regulatory Branch is charged with authorizing permits for the River and Harbors Act and the Clean Water Act and the Corps has its own Federal Regulations, 33 CFR 325, Appendix C, for implementing Section 106. This paper focuses on differences between the Branch's regulations and the 36 CFR 800 regulations, implications for conducting cultural resources assessments in support of permitting actions, and how to make the process less painful.

[T4] Jerofke, Linda (Eastern Oregon University) and Erik Harvey (U.S. Forest Service) “Camp Carson Mining District: A cooperative archaeological project between the Wallowa Whitman Forest and Eastern Oregon University”

This presentation documents the first two years of the cooperative project between the Wallowa Whitman National Forest (Forest) and Eastern Oregon University (EOU) on the Camp Carson Mining District. The initial activities have concentrated on the formation of a working relationship between the two entities through the development of a Memorandum of Understanding (MOU). It is a means of developing a relationship between the Forest Service and the local community as well as a way to conduct a greater range of research. The highlight of the two years involved the relationship between the EOU Anthropology and Sociology and the Forest's Archaeology Programs. The focus has been on providing field experiences to university students while gaining important historical information concerning this mining camp. In fall 2009, EOU and Forest personnel were able to conduct an initial survey of the Camp Carson site as well as outlying associated features. Intensive research continued in summer and fall 2010, which included oral histories with local residents, systematic excavation of the town site, federal and state records search, as well as detailed mapping of the town.

[T3] Kenmotsu, Nancy (Geo-Marine Inc.), Rose Ferri (Yakama Nation), and Kelsey Doncaster (US Bureau of Reclamation) “Controlling Water – Understanding Settlement, The Impact of *Small Irrigation Systems in the Yakima Valley*”

Historic settlement patterns in the Yakima Valley were influenced by a variety of factors. This paper explores the role of small irrigation systems as a significant ingredient in those settlement patterns and explores the driving forces behind these irrigation systems. Data from recent surveys of the Naches-Selah Irrigation District and the files of the US Bureau of Reclamation are used to illustrate the settlement patterns and how they evolved through time.

[F6] Kester, Lindsey (SWCA Environmental Consultants), Nicci Barger (SWCA Environmental Consultants), and Tanya Johnson (SWCA Environmental Consultants) “Developing Methods for Assessment of Visual Impacts to Cultural Resource Sites in Utah”

As part of the mitigation measures employed for the Milford Wind Corridor project, SWCA, in consultation with BLM archaeologists, has developed methods and procedures for assessing visual effects on cultural resource sites. These methods and procedures may provide a resource to be considered in the development of future statewide guidelines for assessment of visual effects in Utah. The visual assessment was performed on a variety of sites of types that are common in the project area, and it consisted of applying a scoring system that considers the scenic values of a site's integrity, as well as the degree of visual impact. Impact was measured by evaluating its individual components such as distance between project and site, proximity to public observation, obstructive effect, and aesthetic compatibility. Although the results proved effective for identifying and rating visual impacts on cultural resources, the conclusions pinpoint areas in the procedures that need refining.

[SP] Kienholz, Mary (University of Idaho), Molly Swords (University of Idaho), and Amanda Haught (University of Idaho) “Hot Off the Press: The printing plates of Sandpoint, Idaho” [poster]

At the turn-of-the-century, Americans relied heavily on printed materials, such as newspapers, to spread information about important events. Artifacts associated with printing, such as printing plates, can help to elucidate the details of day-to-day life of the people living during this time period. Excavations at Sandpoint, Idaho resulted in the recovery of several printing plates. This poster will display some of the plates recovered as well as discuss the important information that can be gleaned from them.

[F8] Kisling, Breanne (SWCA Environmental Consultants) “Childhood Treasures: The toys of Sandpoint, Idaho” [symposium]

Children's toys recovered from Sandpoint, Idaho offer an intimate look into the lives and experiences of the town's children around the turn-of-the-century. Toys not only indicate a presence of children in an archaeological site, but also offer insight into the children themselves. Used primarily for entertainment, toys can also reinforce social mores and gender

specific roles. This paper examines the toys recovered from Sandpoint and highlights the often overlooked demographic of children in the American West.

[T8] Koziarski, Ralph (University of Wisconsin-Milwaukee/Drayton Archaeology), Garth Baldwin (Drayton Archaeology), and Stephanie M. Neil “New Insights on the Old Cordilleran: Recent advances in early Holocene archaeology in Northwestern Washington”

The Old Cordilleran Cultures (approx. 8500-4400 BC) visible from Vancouver, British Columbia to the Oregon coast, and inland east of the Cascade Mountains, is the earliest of the well documented cultural traditions in the southern Pacific Northwest. In northwestern Washington State, the tradition is manifest in the Olcott Complex first described by Kidd in 1964. Subsequent archaeological investigations of Olcott Complex sites have been infrequent, and the cultural tradition remains poorly defined. Recent compliance driven work in northwestern Washington State has identified a series of Olcott sites which can significantly contribute to our understanding of the tradition. This synthesis seeks to provide an update on the Olcott complex and suggest a settlement model for early foragers living on the Salish Sea.

[S4b] Lapoint, Elwyn C. (Eastern Washington University) “Prolegomena to a Heideggerian Anthropology”

Few contemporary anthropologists have so far mined the riches of the twentieth-century German thinker, Martin Heidegger. And of those few, not all have viewed him in a favorable light. My remarks today offer a counterpoint to Heidegger’s critics. They draw upon the arguments of this philosopher and especially on those contained in his masterwork, *Being and Time [Sein und Zeit]* (1962). Their aim is to pose the questions whether there can be a genuinely Heideggerian anthropology and, if so, what might be gained by the formulation of such a theory. In answering these questions, I hope to show that anthropologists may profitably build upon the foundation created by Heidegger’s understanding of the ontological and historical uniqueness of humankind.

[T3] Lee, Kelsi (University of Idaho) “Alcohol Consumption at the Kooskia, Idaho, Japanese Internment Camp (1943-1945): Historical artifact analysis”

Between the years of 1943 to 1945, the Japanese Internment Camp in Kooskia, Idaho was a working and thriving, all-male internment camp during World War II. Internees came from various parts of America as well as Japanese Latin Americans who were kidnapped from their own countries and brought into America by the U.S. government. This camp was set apart from its brother camps in that the internees came by voluntary willingness and were paid for their hard labor. One of the Kooskia camp’s inner features included a cantina where the internees could receive rations of alcohol, for example beer, as part of their leisure activities. My focus will be on the artifacts retrieved from the camp that collaborate with the alcoholic consumption within; i.e. glass and metal alcohol-containers and their analysis, including a brief history on the camp itself, specific alcohols consumed and their origin, historical documents that pertain to alcohol and the camp, and the leisurely activity of alcohol consumption within the camp itself.

[F5b] Leaf, Francesca (Western Washington University) “Foca, Bosnia-Herzegovina: Wartime rape and the stigmatized identity of victims”

During the 1991-1995 war in Bosnia-Herzegovina rape was utilized by the Bosnian Serb, Serb and Montenegrin forces as a weapon of war; resulting in the sexual assault of between 20,000 and 50,000 girls and women, the majority of them Bosnian Muslims. Utilizing the April 1992 siege and subsequent occupation of the municipality of Foca, Bosnia-Herzegovina as a case study, this paper explores the social stigma that is attached to being a rape victim/survivor. Through applying discourse analysis to the Kunarac et al. “Foca” case trial transcripts from the International Criminal Tribunal for the former Yugoslavia (ICTY) and existing interviews with Foca rape survivors the paper investigates the stigmatized identity of rape victims within three contexts: 1) directly following the trauma, 2) while testifying at the ICTY, and 3) within the long term recovery process. The paper concludes with a discussion of the implications this has for survivors of rape.

[TP1] Leeds, C. A., A. Davis, M. Jensvold, and D. Fouts (Chimpanzee and Human Communication Institute, Central Washington University) “Evidence for Menstrual Synchrony in Captive Chimpanzees” [poster]

The existence of menstrual synchrony in humans is debated but social proximity does seem to positively correlate with this phenomena. Female free-living chimpanzees spend relatively little time together and have a lack of menstrual synchrony. We hypothesized that chimpanzee who live in close proximity may cycle synchronously like humans. We examined menstrual synchrony in three captive female chimpanzees over two non-concurrent years. In the first year Washoe and Tatu ($r = -0.259$, $p < 0.5$) and Tatu and Moja ($r = 0.280$, $p < .05$) exhibited a significant correlation in their cycles. In the second year Washoe and Tatu ($r = 0.161$, $p < .05$) and Moja and Washoe ($r = 0.262$, $p < .05$) exhibited a significant correlation in their cycles. Results show evidence for menstrual synchrony in captive chimpanzees, however, a larger study population should be examined for future studies.

[T2a] Lewarch, Dennis (Suquamish Tribe) “Suquamish Tribe Historic Preservation Office Overview” [symposium]
The history, current status, program operating procedures and policies of the Suquamish THPO.

[TP2] Lewarch, Dennis E. (Archaeology and Historic Preservation Program, Suquamish Tribe), Stephanie E. Trudel (Archaeology and Historic Preservation Program, Suquamish Tribe), and Leonard A. Forsman (Archaeology and Historic Preservation Program, Suquamish Tribe) “Updating Thompson’s Settlement Model: Clustering Central and Southern Puget Sound assemblages” [poster]

Gail Thompson (1978) developed an artifact classification system that documented an increase in the range of site types and diversification of tool kits in Northern Puget Sound over the past 6,000 years. The explicitly functional classification is comprised of 20 classes based on artifact shape, material type, and use-wear. Thompson’s original data set is updated and extended to Central and Southern Puget Sound using over 70 excavated assemblages from 40 archaeological sites. New analyses corroborate the general utility of Thompson’s model and point to additional artifact classes that will provide insights into functional organization.

[T5a] Lewis, David (Confederated Tribes of Grand Ronde Cultural Resources) and Daniel L. Boxberger (Western Washington University) “Grand Ronde Ceded Lands Research” [symposium]

Ongoing research into the ceded lands of the twenty-seven tribes which compose the Confederated Tribes of Grand Ronde analyses the heirs of succession to the seven western Oregon treaties. Divided into three separate analyses we have finished the Heirs of Succession to the Willamette Valley Treaty, the Heirs of Succession to the Umpqua, Kalapuya and Molalla Treaties and are ready to embark on the Heirs of Succession to the Rogue River and Chasta Costa Treaties. Research has demonstrated a complex pattern of pre and post-removal movements of tribes that is further complicated by the years of termination the Grand Ronde community endured.

[T8] Lewis, Patrick C. (Central Washington University), Patrick T. McCutcheon (Central Washington University), and Kevin A. Vaughn (Central Washington University) “Intra-Site Analysis at the Sunrise Ridge Borrow Pit Site (45PI408)”

Continued research of the Sunrise Ridge Borrow Pit Site (45PI408) assemblage has led to questions about intra-site variability. Stratigraphic analysis of sediments from shovel test pits has defined two cultural components, one located below Mt Rainier C tephra (ca. 2,300 BP) and the other stratigraphically above. To answer questions about the site’s internal variability across space and through time artifact frequencies were compared across components. While most of the artifacts from the upper component come from a discrete area of the site landform, the majority of artifacts from the lower component show very little intra-site structural variation and are more widely distributed. The results suggest a number of new research questions for upland archaeologists and perhaps will reorient future research in similar mountain environments.

[S1] Lockwood, Chris (Paragon Research Associates) “Digging Danger: Doing archaeology amid hazardous waste” [symposium]

Archaeologists and historic preservation specialists potentially face significant hazardous chemical threats during fieldwork. While the risks of chemical exposure may be well understood for some projects, such as those involving environmental remediation, they may be less readily apparent for others. This paper reviews the major pathways by which fieldworkers may have contend with hazardous chemicals, and strategies for self-protection, including appropriate training, safety planning, and use of personal protective equipment. A case study from a recent remediation project at the former Hardel Plywood site in Thurston County, Washington is presented.

[F6] Lohse, E.S. (Idaho State University) “Sites and sites: Making sense and assigning significance”

Normative archaeology today stands astride a theoretical and methodological divide wherein pragmatic innovations in data recovery and increasingly robust interpretation bump into traditional strictures embedded in standard practice. We have available to us suites of computer applications and high tech analyses designed to yield more and more rich data, yet most of us are mired in well entrenched but outdated standards of practice in analysis, publication, report writing and general information dissemination. I am willing to argue that we must now pay particular attention to revising theory and method to amplify the value of these high-tech innovations. This paper cites our efforts at building knowledge models based in knowledge elicitation case studies involving archaeological experts: we are examining how archaeologists do archaeology as part of refining archaeological classifications and analyses in the field and in the lab.

[F7] Lohse, E.S. (Idaho State University) “Where are the Early Paleoindian Sites? Building a Predictive Model for Late Pleistocene Site Encounter”

Research on the Columbia Plateau continues to produce evidence of Clovis, Pre-Clovis or Windust occupations in excess of 13-14,000 years ago. This paper introduces a multidisciplinary, collaborative project with the expressed goal of modeling Paleoindian economic systems on the Late Pleistocene landscape in GIS. This model will be used to predict locations of invisible sites based on reconstructions of past landforms and resource arrays. Surface finds cannot simply be mapped, we must predict buried site locations based upon our understanding of how these societies moved across the landscape, exploiting primary, secondary and tertiary resource targets. We intend to use this model to identify specific resource areas, model the past environment, and then build site encounter profiles to direct testing and survey.

[F7] Longstaff, Laura (University of Idaho), Robert Lee Sappington (University of Idaho), and Bruce Ellis (Clearwater National Forest) “Preliminary Results From the Kelly Forks Work Center Site, Clearwater National Forest, North Central Idaho”

University of Idaho conducted an archaeological field school in summer 2010 at the Kelly Forks Work Center, a multi-component site (10CW34) at the confluence of Kelly Creek and the North Fork Clearwater River on the Clearwater National Forest. A suite of ten radiocarbon dates, with calibrated ages beginning 12,820 years B.P. documented evidence of recurring occupations from the Windust phase into the Cascade phase and on through the historic period. Concentrations of flaked lithic tools, cobble tools including an anvil and a net weight, and debitage, as well as fire modified rocks, indicate diverse onsite activities including tool manufacture and modification, fishing, hunting, and processing game animals. Protein residue analysis has identified bison, rabbit, human, and beaver/porcupine antisera. Results of obsidian sourcing are pending. These and other ongoing investigations indicate that the Kelly Forks Work Center site has one of the most significant prehistoric occupations on the upper North Fork.

[F2b] Luttrell, Charles T. (Washington State Parks) “Did They or Didn’t They: Spokane Indian farming to 1887”

This paper documents the evolution of plant cultivation and animal husbandry among the Spokanes from ca. 1816 to 1887, the year a treaty with the federal government forced the relocation of free-ranging natives to one of several reservations. At first, gardening and farming may have been minor add-on components to the seasonal round, but over time horticulture-agriculture became a significant activity that incrementally expanded and added value to the native subsistence system. According to tribal elders in 1916, the Spokane bands learned cultivation from fur traders at Spokane House. Potatoes were grown at Spokane House in 1816 and probably earlier. By 1872, Spokanes reportedly derived one-third of their annual subsistence “from cultivating the soil.”

[F6] MacDonald, Doug (University of Montana) and Elaine Hale (Yellowstone National Park) “The Montana Yellowstone Archaeological Project”

The Montana Yellowstone Archaeological Project is a cooperative effort of the University of Montana and Yellowstone National Park. Now entering its fifth year, the project engages undergraduate and graduate students at every level of cultural resource management projects so they are prepared for careers in the field. In so doing, UM facilitates the completion of Yellowstone’s CRM responsibilities in a fiscally-prudent manner and generates research for UM faculty and students.

[T4] Mace, Timothy (University of Idaho) “Archaeological Techniques for Understanding Metallurgy and Why We Care”

Metallurgy has had an enormous impact upon the development of human technology. There are many different techniques that have been used to create metal tools. Understanding and identifying the metallurgy techniques through archaeology has required multiple different approaches. These different analytical tools can inform us about a wide variety of information that can help improve understanding of various cultures. Methods for studying archaeological metallurgy range from studying the microstructure of metal objects to chemical analysis of metal slag. Information that can be learned range from learning the specific techniques in producing the object to sourcing the metals. This information can then be used to study subjects such as trade routes and differences in production from various sites.

[S4b] Maier, Kadence C. (Washington State University) “Caught Between Two Worlds: The contribution of traditional practice in defining modern Hawaiian identity”

In the present context of late-modernity, individual identity is constantly under question and pressure as it is continuously forced, shaped, and defined by daily conscious and unconscious decisions. This constant questioning, compiled with societal and cultural expectations, often surrounds identity with pressure and may lead to identity uncertainty. For adolescent Pacific Islanders, who are caught between the modern and traditional worlds, it can be especially challenging to define identity.

I hypothesize that adolescent Pacific Islanders participate in the traditional artistic practice of *hula* which allows them to combine both the modern and traditional parts of self as a response to identity uncertainty. This project is based on research conducted with the *Hui Hau'oli 'O Hawaii* at Washington State University during fall 2010. This research project provides explanation for how the traditional artistic practice of *hula* provides the necessary tools for clearly defining and affirming Hawaiian identity for adolescent Hawaiians.

[S2] Manion, Mollie (Oregon State University) “Still Worth Digging After All These Years: Excavations at Fort Hoskins 2010”

In the summer of 2010 the Oregon State University Field School returned to Fort Hoskins more than thirty years after formal excavations were first undertaken at the site. OSU had two major areas of investigation regarding Fort Hoskins for the 2010 field season. The first was to try and locate the root cellar and powder magazine. These were areas not previously explored at Fort Hoskins. Both the powder magazine and the root cellar have the potential to shed quite a bit of light on weaponry in the far western forts, as well as information on food procurement. The second goal of the season was to explore issues of site taphonomy at a 150-year-old historic site, specifically looking at decay rates of metal artifacts within the site.

[T7b] Manning, Cassandra (Portland State University) "The Role of Salmon in Middle Snake River Assemblages: A re-examination of the Hetrick site"

On the Columbia Plateau, the origin of the Winter Village Pattern has long been a focus of research. Intensification of resources such as salmon, roots, and local aquatic resources is often cited as the cause of declining mobility. To address this question in the middle Snake River region, I have re-analyzed fish remains from the Hetrick site (10WN469; Weiser, ID), with occupations spanning the Holocene. Expectations from foraging theory and paleoclimate data are used to address whether salmon and other fish use changed over time and if such changes are correlated with the development of the Winter Village Pattern or environmental change.

[F2a] Marchand, Amelia (Confederated Tribes of the Colville Reservation) “Native Ground: Collaboration efforts to preserve a century-old sweatlodge site” [symposium]

The Confederated Tribes of the Colville Reservation (CCT) interdisciplinary team is composed of resource specialists from the CCT and Bureau of Indian Affairs (BIA) who evaluate the impacts of a wide variety of natural resources projects, from forest management endeavors to stream rehabilitation. This presentation reviews the impacts, issues and mitigation measures for the 21 Mile Natural Resource Project and focuses on the efforts of the CCT and BIA to protect, enhance and document the continuing cultural significance of the Twenty-Three Mile Creek Sweatlodge site (45FE423).

[S2] Marcotte, Jacqueline (East Carolina University) “Maritime Archaeology in the Columbia River: The Fort Vancouver waterfront”

The 2007 survey of the Fort Vancouver Waterfront in the Columbia River aided site condition assessment for Fort Vancouver National Historic Site. Aside from providing site condition data, the survey brought local divers and archaeologists together to work toward a common goal of protecting submerged archaeological sites. The partnership was designed to foster awareness of the public’s non-renewable, historic resources, and stem potential looting. The submerged waterfront site contains components that represent uses of the waterfront from Pre-Contact through the Industrial Era associated amongst the cultural materials of the current era. The survey revealed a large, multi-component site containing a variety of artifacts, including ceramics, bottles, bone, and other cultural materials. Evidence suggests contiguous disposal in a large area to the south of the shoreline occupied by the Hudson’s Bay Company (HBC), Fort Vancouver, and the U.S. Coast Guard (USCG). Artifacts recovered during survey date primarily to the late 19th and early 20th centuries.

[T2b] Maschner, Herbert (Idaho State University) “An Introduction to the Biocomplexity of the Western Gulf of Alaska” [symposium]

The Aleut have inhabited the western Gulf of Alaska for at least 7000 years. The rich shoals, reefs, and tidal areas of this archipelago have been the focus of extensive prehistoric, historic, and modern exploitation by peoples who have shaped the local ecosystem while adapting to the dynamics of climate change, volcanism, and tectonic instability. Extensive village deposits record a dynamic history of demographic expansion and contraction, changes in economic focus, impacts on terrestrial and marine resources, and social development that can be juxtaposed against paleoecological data that show distinct shifts in marine productivity, climate, coastal geomorphic processes, and shifts in the distributions of key economic/subsistence resources.

[T6] Maschner, Herbert (Idaho State University) “Prolegomenon to Arctic Prehistory: Or why the North Pacific matters to the origins of the Eskimo and Aleut” [symposium]

The origins of Arctic peoples have been a contentious area of investigation for over a century. Some of the debate has revolved around a priority of origins rather than an integrated chronology of the Arctic. Many of these scenarios violate principles of chronology, spatial association, and meaningful artifact comparison. Using geographic models of spatial association, linguistic and genetic reconstructions, and new data on the first wide-spread coastal societies in the greater Bering Sea region, a revised scenario for Arctic and Subarctic ethnogenesis is developed. This model finds that those researchers who have taken a macro-regional approach to Arctic prehistory (Dumond and McGhee), come to different conclusions than those who take a micro-regional approach to the northern past.

[T6] Maschner, Herbert (Idaho State University), Matthew Betts (Canadian Museum of Civilization), Corey Schou (Idaho State University), Robert Schlader (Idaho State University), Nicholas Clement (Idaho State University), and Jonathan Holmes (Idaho State University) “Democratizing Faunal Analysis: The virtual zooarchaeology of the Arctic Project” [symposium]

Osteological comparative collections are a crucial tool in archaeofaunal analysis, but most reference collections lack a broad range of taxa or multiple individuals per taxon – a problem faced directly by the initiation of the Sanak Biocomplexity Project. The Virtual Zooarchaeology of the Arctic Project (VZAP), is developing a comprehensive virtual reference collection for the skeletons of northern vertebrates. VZAP is designed to assist with identifications in the lab or field and provides significant educational value, for both classroom demonstration and personal consultation. The website presents high-resolution 2D images and 3D models of skeletal elements via a revolutionary graphical user interface, the Dynamic Image Engine, designed to mimic the visual experience of a real archaeofaunal analysis. VZAP delivers multiple images on a platform that allows for real-time point to point measurements, cross-sections, morphological labels, and anatomical orientations.

[F6] Mawhirter, Matthew (Washington State University) “Federal Agency Cooperation and Cultural Influence in the CCC”

The Civilian Conservation Corps (CCC) started in 1933 as one of President Franklin Roosevelt's first work relief programs. Specifically aimed at youths 18-25 the program put young men to work in national forests, parks and range lands. The work and contribution of the CCC have been well documented but the men's experiences in the camps and how the influence of the different federal agencies shaped those experiences has received little attention. By comparing the ten camps that existed in the Gifford Pinchot National Forest, a picture of the culture and influences of the two federal agencies within the camps can be recreated. This project demonstrates collaborative nature of the CCC between federal agencies and reveals the hidden history of an important piece of Northwest federal activities.

[FP1] McClure-Mentzer, Kari (Eastern Washington University) and Jerry R. Galm (Eastern Washington University) “The Case for a Single Period of Late Paleoindian Occupation at the Late Sentinel Gap Site” [poster]

The Sentinel Gap site (45KT1362) consists of a well-bounded distribution of cultural materials radiocarbon dated to the Late Paleoindian period contained within a c. 8-cm-thick deposit of eolian sands and silts. Interpretations formulated at the time of excavation included the contention that a small group of hunter-gatherers occupied the site area over a single season or over a very limited number of visitations. This interpretation is revisited using new information compiled since the excavation. Multiple lines of evidence derived from the site record argue for a single period of use.

[T8] McCutcheon, Patrick (Central Washington University) and Kevin A. Vaughn (Central Washington University) “Tool Stone Extraction and Resource Density in the Saddle Mountains, Grant County, Washington”

Since 1998, Central Washington University, in cooperation with the Bureau of Land Management, has recorded 665 archaeological localities during pedestrian survey of 4,100 acres in the Saddle Mountains. Using a geodatabase, each locality was classified by assemblage characteristics and environmental variables. Statistical tests show that localities are non-randomly distributed with respect to several of these variables. Evidence for tool stone extraction appears to be embedded with other resource extraction activities. For instance, not all localities associated with an interbed contain evidence of tool stone extraction. In order to understand the distribution of tool stone extraction, the co-occurrence of other resources must be considered.

[F6] McDonald, Stan (Oregon-Washington BLM) “Cultural Resource Management on Public Lands in the Northwest: A status report”

Abstract: Within the states of Washington and Oregon, the Bureau of Land Management (BLM) manages approximately 16 million acres of federal (public) lands including the archaeological and historical properties situated upon those lands. This paper will provide a status report of BLM's federal cultural resource management program in the Northwest by presenting a statistical summary of cultural resource management activities on public lands over the last decade or so. In so

Washington**[F6] General Session: Archaeology and the Public Sector**

Chair: Stan McDonald (Oregon-Washington BLM)

- 1:20-1:40 Kester, Lindsey (SWCA Environmental Consultants), Nicci Barger (SWCA Environmental Consultants), and Tanya Johnson (SWCA Environmental Consultants) "Developing Methods for Assessment of Visual Impacts to Cultural Resource Sites in Utah"
- 1:40-2:00 Jenkins, Chris (Tribal Relations Specialist Seattle District, USACE) "Working with the Corps' Regulatory Branch-Things you need to know"
- 2:00-2:20 McDonald, Stan (Oregon-Washington BLM) "Cultural Resource Management on Public Lands in the Northwest: A status report"
- 2:20-2:40 Mawhirter, Matthew (Washington State University) "Federal Agency Cooperation and Cultural Influence in the CCC"
- 2:40-3:00 MacDonald, Doug (University of Montana) and Elaine Hale (Yellowstone National Park) "The Montana Yellowstone Archaeological Project"
- 3:00-3:15 **Break**
- 3:15-3:35 Poetschat, George (Oregon Archaeological Society), James D. Keyser (USDA Forest Service Retired), and David A. Kaiser (Oregon Archaeological Society) "Making Order out of Chaos. The Bear Gulch and Atherton Canyon Data Base"
- 3:35-3:55 Lohse, E.S. (Idaho State University) "Sites and sites: Making sense and assigning significance"
- 3:55-4:15 Campbell, Bethany Hauer, (University of Montana) "A Collective History: The curation 'crisis' and the emergence of a new paradigm"
- 4:15-4:35 Henebry-DeLeon, Lourdes (Central Washington University) "Columbia Plateau NAGPRA Database: A cultural affiliation resource"
- 4:35-4:55 Discussion

Palouse**[F7] General Session: Idaho Archaeology**

Lee Sappington (University of Idaho)

- 1:20-1:40 Griffith, Tabitha (Geo-Marine) "Contextual Approaches to Cultural Resources Management in Southern Idaho"
- 1:40-2:00 Lohse, E.S.^{KP} "Where are the Early Paleoindian Sites? Building a Predictive Model for Late Pleistocene Site Encounter"
- 2:00-2:20 Frederick, C. D. (Consulting Geoarchaeologist) and T. L. Griffith (Geo-Marine, Inc.) "Geoarchaeological Investigations on the Owyhee Plateau, Idaho"
- 2:20-2:40 Gilbert, Hollie K. (Idaho National Laboratory) "Italian Immigrants Baking Under the Desert Sun"
- 2:40-3:00 Altman, Julia (University of Idaho) "Shield Bearing Warriors in Idaho Indian Rock Art"
- 3:00-3:15 **Break**

protect traditionally held land use rights. This paper highlights the steps the Colville Tribes are taking to maintain traditional connections to land still perceived as common ground.

[T6] Misarti, Nicole (Oregon State University), Herbert (Idaho State University), Kelli Barnes (Idaho State University), Spencer Wood (Stanford University), and Bruce Finney (Idaho State University) “Exploring Changes in Stable Isotope Ratios of Sea Otters over Thousands of Years on Sanak Island, Alaska” [symposium]

The health of sea otters and kelp forest ecosystems is a continuing focus of research in the North Pacific. Here we present carbon and nitrogen isotope data from 230 individual sea otters over 4000 years combined with climate data, abundance indices, and modern intertidal food webs to determine the influence of top-down (in this case human forced) versus bottom-up (climate change) effects on sea otter ecosystems in the Sanak Archipelago. Long term data sets such as these can help to determine a “baseline” that incorporates human influences on the landscapes they have inhabited for thousands of years against which we can compare the current state of ecosystems in the North Pacific.

[F8] Mitchell, Joseph C. (SWCA Environmental Consultants) “Developing an Artifact Coding System and Database for Blacksmith/Machine Shop Sites: A case study from Sandpoint, Idaho” [symposium]

Recent archaeological excavations of an industrial blacksmiths shop/machine shop in Sandpoint, Idaho have led to the recovery of approximately 250 cubic feet of industrial metal artifacts. Currently there is only a very small array of existing literature on cataloging metal artifacts and even less on industrial metal artifacts. Existing methods in Industrial Archaeology tend towards those found in architectural history rather than historical archaeology. The Sandpoint archaeology team developed a method of cataloging industrial metal artifacts that more closely follows the methods found in historical archaeology. This method is based on identifiable artifacts and material types, methods of manufacture, and descriptions of artifacts representing relics of manufacturing processes. This paper describes how this method works using the Sandpoint collection as a case study.

[F2b] Mueller, Emma Jean (Washington State University) “Controversies of Native Art Appropriation in the Puget Sound Region”

Caught in the cultural momentum of the 1960s, Native style art in the Puget Sound region experienced revitalization; but in the galleries, newspapers and literature it was the work of non-Native artists that dominated. Working with both Native and non-Native artists residing in the Puget Sound, this paper examines fundamental issues of cultural appropriation and asks “what is being sold: blood or art?”

[S2] Mullaley, Meris (Portland State University and ICF International) “Architectural Variation and Community-Building in Fort Vancouver’s Village, ca. 1829-1860”

In the mid-19th century, the Fort Vancouver employee Village was one of the most diverse settlements on the Pacific Coast. Trappers, tradesmen, and laborers from Europe, North America, and Hawaii worked and lived within a highly stratified colonial social structure. Their homes have been the site of archaeological research for nearly 50 years, but the architectural features and artifacts have received limited attention. This paper presents the life histories and layouts of five Village houses—including the four houses discovered in the 1960s and one discovered in 2001. The architectural analysis relied on feature data, square nails, window glass, and bricks. The resulting architectural interpretations have been synthesized to explore the larger vernacular landscape of the Village and investigate whether the houses reflect processes of creolization and community development, or distinction and segregation among the Village residents.

[FP2] Oliver, Kali D. V. (University of Idaho) “Kooskia Japanese American Internment Camp Medical Standards and Safety Research Project” [poster]

This poster focuses on the medical standards, practices and safety procedures at the Kooskia Internment Camp in Idaho, with some comparison to other internment camp site reports. Detainees at Kooskia were volunteer-based workers for construction of a roadway, from May 1943-1945, during World War II. Due to the hasty transformation of the facility from a federal prison to an internment camp within a month’s time, coupled with medical personnel being switched within a short period, several things posed health dangers to the internees. At a particular point an internee from another camp was even able to fake his identity and pose for a few weeks as a doctor at Kooskia. With the nearest hospital 60 miles away and safety standards being minimal if any, the adequacy of safety and basic medical care the internees received is questionable.

[T8] O’Neill, Brian (Museum of Natural and Cultural History, University of Oregon) “The Pre-Mazama Component at the Williams Creek Site, Southwest Oregon”

The Williams Creek site is a multi-component prehistoric occupation of a volcanic ash-covered terrace at the confluence of the creek and North Umpqua River in the Western Cascades of southwest Oregon. A dense pre-Mazama component lies in the paleosol beneath the ash. Radiocarbon dating and obsidian hydration indicate episodic occupations perhaps as early as

11,000 years ago. This paper presents the results of ancillary studies of the materials recovered from these early Holocene deposits and offers a comparison of this site with the nearly dozen other pre-Mazama components in the Umpqua Basin.

[T1] O'Neill, Brian (Museum of Natural and Cultural History, University of Oregon), Paul Baxter (Museum of Natural and Cultural History, University of Oregon), and Christopher Ruiz (Museum of Natural and Cultural History, University of Oregon) "The Harris Homestead: A rogue Indian war battle site in Southwest Oregon" [symposium]

The mid-19th century Rogue Indian War pitted recent Euroamerican immigrants against Native people in southwest Oregon. The final and particularly violent spasm of that conflict began in October 1855 when militia attacked a village near Table Rock Reservation killing many women and children, prompting immediate Indian reprisals. One of the homesteads caught up in this conflagration was that of George and Mary Harris. While gaining immediate National attention at the time, the location of the homestead was subsequently lost. In late summer 2010, UO Museum of Natural and Cultural History archaeologists, working in concert with a local historical group, rediscovered the remains of the homestead in the vicinity of the Chancellor Quarry along Interstate 5 north of Grants Pass where ODOT had planned to expand operations and establish a batch plant. Small-scale archaeological investigations coupled with archival research have begun to reveal the nature and extent of the homestead and how it might compare to contemporary pioneer settlements.

[F1] Osienksy, Whitney S. (Western Washington University) "Tracing the Stone: Microphenocryst analysis as a sourcing approach for dacites and other CVRs" [symposium]

Crystalline volcanic rocks (CVR) are a primary raw material used in the production of flaked stone artifacts on the Northwest Coast. In Washington State the majority of CVR flaked stone tools have been identified as dacite. Multiple dacite volcanoes exist in the Cascade Range, but only one source location has been identified: Watt's Point, B.C. Previous research on CVR artifacts has identified the source using primarily trace elemental composition analysis. I propose the use of mineralogical analysis of microphenocrysts in dacite as an additional method that can be utilized in determining raw material sources. Microphenocrysts in dacite samples from Watt's Point, B.C. and Mt. Baker, WA are compared to dacite artifacts from the Sumas site (45WH4) in western Washington in order to identify the most likely source. Mineralogical composition of microphenocrysts is identified through the use of Energy-Dispersive X-Ray analyses, and Back Scatter Detection in a Scanning Electron Microscope.

[TP1] Ozbun, Terry (Archaeological Investigations Northwest, Inc.) "Beyond Pretty Colors: Technological and functional qualities of Oregon obsidians for ancient stone tool production" [poster]

Oregon obsidians are known for their variability in color, chatoyancy, and patterns of flow banding and phenocrysts. While these attributes make them attractive to modern rock collectors and lapidary workers, ancient aboriginal knappers prized more utilitarian attributes of the obsidians they selected for making stone tools. Shape, size, and durability of obsidian materials conditioned prehistoric tool manufacturing strategies and functional uses of obsidians. Archaeological analyses and replicative obsidian knapping experimentation reveal sophisticated materials science and engineering in ancient technologies. A case study in Paleoindian Clovis obsidian technology demonstrates some of the material science principles employed by the ancients.

[F1] Palmer, Jamie (Western Washington University) "A Fresh Look at an Old Artifact: A new interpretation of edged cobbles at Cherry Point, WA" [symposium]

On the Northwest Coast, edged cobbles (a.k.a. cobble choppers) are commonly associated with wood-working activities during the Locarno Beach phase (3500-2400 BP). Edged cobbles from Cherry Point (3300-1300 BP), a prehistoric Gulf of Georgia site, exhibit extensive edge damage not likely associated with wood-working activities. Preliminary results from experimental research suggest that these tools may have been used to work stone. At Cherry Point, stone fishing implements such as perforated weights and girdled sinkers have been found in various stages of production in close proximity to edged cobbles; this type of gear is well-documented as playing an integral role in Coast Salish fishing economies. Using experimental archaeology, in conjunction with ethnographic and historic literature on Coast Salish fishing technologies, I will demonstrate that edged cobbles were likely used in the manufacture of stone fishing implements at Cherry Point.

[S1] Parvey, Michele (Northwest Archaeological Associates, Inc.) "This Site Stinks, Dealing with Petroleum Contamination from the Field to Lab" [symposium]

Archaeologists working in urban and industrial environments are often confronted with sediments contaminated with petroleum products. Hydrocarbon contamination poses health and safety concerns that must be addressed not only in the field but in the lab. This paper presents a case study outlining the problems encountered and solutions developed during data recovery operations at an historic site contaminated with kerosene. Because of continued exposure to contaminated sediments, NWAA has developed a field safety protocol, including use of personal protection equipment, sanitation

requirements, use of vapor suppressant and hydrocarbon degreaser, as well as, a lab protocol for cleaning and processing contaminated artifacts.

[T5a] Pederson, Nora K. (University of Alberta) “ ‘Heirs not determined’: Inheritance and allotments at Grand Ronde” [symposium]

In 1887 the General Allotment Act allowed the U.S. government to divide reservations into individual allotments, and to sell the remaining land to private businesses and settlers. For the residents of the Grand Ronde reservation the act clarified and reaffirmed allotment policies that agents had been inconsistently implementing for decades. Some of their treaties included provisions for breaking up reservation land into individual allotments, and tribal leaders had been demanding allotments with legal title to back up Indian claims to ownership for years in an attempt to ensure a permanent land base for their tribes. Unlike previous allotment policies implemented at Grand Ronde, the General Allotment Act required standardized inheritance laws and family relationships based on those conceived by European Americans and theorized by state laws. This paper will examine the relationship between inheritance law and practice, and the diminishment of the Grand Ronde reservation during the allotment period.

[T7a] Petrich-Guy, Mary (University of Idaho), Kyle Parker-McGlynn (University of Idaho), and Joe Redden (University of Idaho) “Zone 8: Tailgating in Kibbie Dome parking lot #57” [symposium]

Not surprisingly, tailgating produces large quantities of material culture that is often considered a by-product of sporting celebrations. The disassociation between people and consumer goods once the goods have fulfilled a primary use is being challenged by University of Idaho Sustainability Center in their efforts to integrate a recycling program into campus life. Findings by anthropology students studying the deposition of material culture from tailgating support the notion that there are many challenges that face the integration of this program. Trash, recyclables and insidious articles such as bottle caps and cigarette butts must be approached differently because they are not thought of in the same way. Tactics that transform recycling into a normative concept are proposed based on ethnoarchaeological findings.

[S1] Phillips, Laura (Burke Museum of Natural History and Culture), Steven Denton (Burke Museum of Natural History and Culture), Kelly Meyers (Burke Museum of Natural History and Culture), and Megon Noble (Burke Museum of Natural History and Culture) “Inherited or Inherent Vice?: Archaeological collections that pose a harm” [symposium]

Museums are supposed to care for artifacts in perpetuity, but what happens when artifacts pose a threat to the rest of the collections and the staff? The Burke Museum presents several surprising case studies to address preservation solutions for a variety of hazardous materials. Affected artifacts include charcoal from Seattle, a soil sample and bone artifacts from the Columbia River, unexploded ordinances from North Cascades and medicinal bottles from a Northern Puget Sound privy.

[T2a] Pleasants, Camille (Colville Confederated Tribes of the Colville Reservation) “Colville Confederated Tribes Historic Preservation Office Overview”

The history, current status, program operating procedures and policies of the Colville Confederated Tribes THPO.

[F6] Poetschat, George (Oregon Archaeological Society), James D. Keyser (USDA Forest Service Retired), and David A. Kaiser (Oregon Archaeological Society) “Making Order out of Chaos: The Bear Gulch and Atherton Canyon data base”

The Bear Gulch Complex (neighboring Bear Gulch and Atherton Canyon sites in central Montana) has an important set of Plains Rock Art Shield Bearing Warriors. Together there are more than 1000 shield images at this Complex while all the rest of the Northern Plains has approximately 400. These images show various shield designs, weapons, headdresses, and other accoutrements. Additional images include other humans, animals, and cultural items. In our analysis we extracted these images from the nearly 1000 panels, so that they could be available to anyone involved in Plains Rock Art studies. Hence, we have developed a simplified data base of all panels, shield figures, and other images which will be available on a CD.

[T8] Purdy-Silbernagel, Sarah (Natural Resources Conservation Service) “Preliminary Results of the Pro-Bono Archaeological Investigations at 35MA278, Talbot, Oregon”

In 2009, private landowners uncovered a deeply buried hearth feature and prehistoric artifacts while attempting to construct an entrance ramp/escape route into their basement. The landowners halted construction and contacted the Oregon SHPO. 35MA278 is a deeply buried site and may provide important information on early Willamette Valley prehistory. In an attempt to determine if significant site deposits were present within the site boundaries, archaeological testing was required. Since the landowners had limited funds and needed to finish their project for safety purposes, the entire excavation project became a pro-bono effort. Requests were made for volunteers for fieldwork, report writing, curation preparation, field supplies, curation supplies, and curation space. The response was overwhelming and volunteers consisted of both

Rorabaugh, Adam N. (Washington State University) "Paying Lip Service: Labrets, identity, and defeats of hierarchy on the Southern Northwest Coast"

Yamamoto, Christopher (Northwest Archaeological Associates) and Brian Boggs (Northwest Archaeological Associates) "Exploratory Lithic Investigations at Pussyfoot Creek: 45-KI-938"

Meetings

4:00-5:00pm Northwest Anthropological Association, Presidential Suite (first floor)

5:10-7:00pm Association of Oregon Archaeologists, Palouse Room

Reception 5:30-8:00pm, no-host bar, Silver and Gold Room

Friday Morning, April 22

Registration 8:00am-4:30pm, Convention Center Lobby

Book Display 8:30am-5:00pm, Idaho Room

Sessions

Empire	[F1] Current Perspectives on Technological Organization and Social Complexity Symposium Organizer and Chair: Adam Rorabaugh (Washington State University)
9:10-9:30	Williams, Justin (Washington State University) "Debating the Complexity of Clovis: Insights into the complexity paradigm"
9:30-9:50	Rorabaugh, Adam N. (Washington State University) "Keeping Things in Line: Modeling the impacts of demography on social learning in the Pacific Northwest"
9:50-10:10	Osiensky, Whitney S. (Western Washington University) "Tracing the Stone: Microphenocryst analysis as a sourcing approach for dacites and other CVRs"
10:10-10:25	Break
10:25-10:45	Dolan, Patrick (Washington State University) "The By-Products of Production: Lithic debitage from a Marpole-phase plank house"
10:45-11:05	Safi, Kristin (Washington State University) "Assessing Prehistoric Salt Processing and Small Scale Production in Minimally Specialized Ground Stone Technology"
11:05-11:25	Palmer, Jamie (Western Washington University) "A Fresh Look at an Old Artifact: A new interpretation of edged cobbles at Cherry Point, WA"
11:25-11:45	Discussion
Palouse	[F2a] Meaningful Consultation, Anthropological and Archaeological Research and Results: Managing cultural resources within the traditional territories of the Colville Confederated Tribes Symposium Program Manager and Tribal Historic Preservation Officer: Camille Pleasants Organizer and Chair: Jon Meyer (Confederated Tribes of the Colville Reservation)
8:30am	Marchand, Mary (Confederated Tribes of the Colville Reservation) "Prayer and Opening Remarks"

[T1] Rose, Chelsea (Southern Oregon University Laboratory of Anthropology) and Katie Johnson (Southern Oregon University Laboratory of Anthropology) “On and Onwards’: Finding and mapping the Applegate Trail” [symposium]

In June, 2010 the Oregon Department of Transportation (ODOT) hired Southern Oregon University Laboratory of Anthropology (SOULA) to undertake a comprehensive study of the Applegate Trail where it intersected with the Interstate-5 corridor in southern Oregon. During this study, SOULA encountered several features believed to be intact sections of the original emigrant road. The opening of the Applegate Trail was a formative moment in American history. What began as an alternative route to the Oregon Trail, would later prove a vital piece of infrastructure for the settlement and development of the Oregon Territory, helping to secure a lasting American presence on the Pacific Coast. Named after Jesse Applegate, captain of the South Road Company that established the route in 1846, the section of the Applegate Trail falling within the project area served both as an emigrant route, and as a vital link between Oregon and California.

[T1] Ruiz, Christopher L. (University of Oregon-Museum of Natural & Cultural History) and Thomas J. Connolly (University of Oregon-Museum of Natural & Cultural History) “The Archaeology of a 19th Century Pre-allotment Native Homestead on the former Klamath Indian Reservation, Beatty, Oregon” [symposium]

The Beatty Curve archaeological site (35KL95) is located just east of the town of Beatty, in the Sprague River Valley of south-central Oregon. Following extensive consultation with the Klamath Tribes and numerous design changes, a mitigation plan, including archaeological data recovery, was approved in 2007; this work, and construction monitoring continued through the fall of 2010. The site has a long history of occupation spanning some 8000 years to the present-day, including a post-reservation pre-allotment Native homestead.

[T2b] Russell, Roly (Sandhill Institute), Spencer A. Wood (Stanford University), Amber Tews (Idaho State University), Dieta Hanson (Cal Poly Pomona), and Herbert Maschner (Idaho State University) “Uniting Ancient Midden Archaeology and Modern Intertidal Ecology: Patterns of the Intertidal Ecosystem of Sanak Island, Western Gulf of Alaska over 5,000 years” [symposium]

Merging the insights of archaeological and ecological research on the Sanak Island archipelago in the western Gulf of Alaska, our data imply that the structure and dynamics of the intertidal ecosystem have had a strong influence on human history on Sanak Island, and conversely, humans appear to have played a relatively minor role in influencing the structure of the intertidal ecosystem. Our data indicate that (1) the intertidal ecosystem could nutritionally support substantial human populations on the island and humans on Sanak Island appear to have potentially relied heavily upon the intertidal for food resource needs, (2) there is little evidence of long-term trends in the intertidal communities over the 5,000 year midden record, and thus no indication that the intertidal system changed substantially through this window of time, and (3) that evident differences between modern intertidal communities and historical midden assemblages appear to potentially be driven by preferential harvesting and may not reflect structural shifts in intertidal communities.

[F1] Safi, Kristin (Washington State University) “Assessing Prehistoric Salt Processing and Small Scale Production in Minimally Specialized Ground Stone Technology” [symposium]

In addition to being a critical dietary resource, salt has an ethnographically documented importance in the ritual, political, and economic activities of several prehistoric societies. When salt sources are locally available, archaeological evidence of intensive salt processing is generally manifested by specialized ground stone technology and distinct production areas. The scale of salt production visible through the degree of specialized ground stone can, therefore, play a role in understanding prehistoric socioeconomic organization, particularly in the context of recognizing integrated communities. However, how do we reconcile instances when an ethnographically-known salt source was well integrated into regional mythology and ritual activities, and yet archaeological evidence of salt processing remains equivocal? This pilot analysis presents a series of methods to assess the nature of small-scale salt production in ground stone assemblages in which functional differentiation in tool type is limited, and where direct evidence of large scale specialization is lacking.

[S2] Sargent, Heather (University of Idaho) “Bullets, Buttons and Beads: The history and archaeology of Fort Spokane, Washington”

The US military created Fort Spokane in 1880. Located in Northeastern Washington, the fort has served many purposes, including military occupation, an Indian boarding school, headquarters for the Colville Indian Agency, a tuberculosis sanatorium and a hospital. This paper discusses the complex history of Fort Spokane from 1880 to 1929. In addition, it presents a summary of past archaeological work done at the fort and an overview of the 2010 excavations. The recent work focused on the Indian boarding school period, a period that has not been extensively studied but is an important chapter in the history of the region.

- 3:35-3:55 Clement, Nicholas (Idaho State University), Herbert Maschner (Idaho State University), and Corey Schou (Idaho State University) “Virtual Repositories: Discussing methodologies for integrating access to museum collections”
- 3:55-4:15 Benson, Buck (Idaho State University) and Herbert Maschner (Idaho State University) “Geochemical Analysis of Volcanic Materials from the Lower Alaska Peninsula: A study of comparative techniques and human demographics”
- 4:15-4:35 Maschner, Herbert (Idaho State University) “Prolegomenon to Arctic Prehistory: Or why the North Pacific matters to the origins of the Eskimo and Aleut”
- 4:35-4:55 Discussion

Empire [T7a] Cultivating Sustainability through Archaeology: The University of Idaho’s campus trash project symposium

Organizer and Chair: Stacey Lynn Camp (University of Idaho)

- 1:20-1:40 Camp, Stacey Lynn (University of Idaho) “Teaching with Trash: Archaeological insights on university waste management”
- 1:40-2:00 Allen, Josh (University of Idaho), Elaine Rose Bayly (University of Idaho), Jamie Capawana (University of Idaho), and Meaghan Jones (University of Idaho) “Waste Not Want Not: A study of indoor campus trash”
- 2:00-2:20 Galbraith, Sara (University of Idaho) and Clay Pleasant (University of Idaho) “Waste Not Want Not: The University of Idaho Arboretum and Botanical Garden”
- 2:20-2:40 Henry, Shea (University of Idaho), Heather Sargent (University of Idaho), Tracy Schwartz (University of Idaho), and Rachel Stokeld (University of Idaho) “Bottles, Boxes, Cans, Oh My!: Recycling and litter among new Greek Row fraternities at the University of Idaho”
- 2:40-3:00 Petrich-Guy, Mary (University of Idaho), Kyle Parker-McGlynn (University of Idaho), and Joe Redden (University of Idaho) “Zone 8: Tailgating in Kibbie Dome parking lot #57”

3:00-3:15 **Break**

Empire [T7b] General Session: Faunal Analysis in the Northwest

Chair: Daniel Gilmour (Portland State University)

- 3:15-3:35 Tierney, Angus (Western Washington University) “Reconstructing Canopy Cover Over 5,000 Years Through Stable Isotope Analysis of Elk”
- 3:35-3:55 Gilmour, Daniel M. (Portland State University), Virginia L. Butler (Portland State University), Douglas J. Kennett (University of Oregon), Brendan J. Culleton (University of Oregon), and Edward Byrd Davis (University of Oregon) “Chronology and Ecology of Extinct Mammalian Fauna of the Pleistocene/Holocene Transition in the Northern Willamette Valley, Oregon”
- 3:55-4:15 Stevenson, Alexander E. (Portland State University), Virginia L. Butler (Portland State University), Jessica A. Miller (Oregon State University), Donya Y. Yang (Simon Fraser University), Camilla F. Speller (Simon Fraser University), and Nicole Misarti (Oregon State University) “Anadromous salmonids in the Upper Klamath Basin? Identification of Pacific salmonid (*Oncorhynchus* spp.) species and life history through mtDNA and geochemical analysis”

[T6] Schlader, Robert (Idaho State University), Nicholas Clement (Idaho State University), Herbert Maschner (Idaho State University), Corey Schou (Idaho State University), and Matthew Betts (Canadian Museum of Civilization) “The Virtualization Process at the Idaho Virtualization Laboratory: Making the physical digital” [symposium]

Before an object can be included in a Digital Repository or a Digital Museum Exhibit, that object needs to be made Digital, or "Virtualized." We have established an optimized process for scanning objects that not only produces archival digital copies of the original but ensures the least impact to the object possible. Utilizing in house non-contact laser scanners, external CT scanners, and 2D Photography we produce as complete of a digital record of the objects as possible. High resolution digital photographs and high resolution 3D models are combined to produce a full color, life-like digital reproduction that is fully measurable and which can be manipulated. In this presentation we will describe the process we use to do this, from the initial paperwork, through data capture, editing, and production of the final full color high resolution model. This process is an integral step in the creation of northern virtual collections and repositories.

[T4] Schneider, Brian (University of Idaho) “From Work to Play: An examination of a 18th/19th century work complex at James Madison’s Montpelier”

During the 2002-2005 field season the James Madison’s Montpelier Archaeology Department carried out a series of investigations within the area of a Madison-era work complex. This project was a mitigation project for the new Visitors Center. The use of metal detectors allowed for the identification of large concentrations of metal artifacts that relate to the 18th/19th century occupation of the property by James and Dolley Madison. It is believed that this area represents a part of a larger 12 acre complex, and was utilized by slaves living in the adjacent field slave quarter site (44OR333). The exciting part of this investigation is prior to the surveys being performed it was believed that the duPont family had erased any trace the Madison period as this area had been the location of a swimming pool, skeet shoot area, tennis court and dog kennel.

[SP] Schuster, Katrina (Western Washington University) “The Spatial Analysis of Chipped and Ground Stone Artifacts at 45-WH-4” [poster]

Archaeological site 45-WH-4 in Sumas, Washington in northern Whatcom county has evidence of the systematic manufacture of slate knives; an important regional artifact type (Ames and Maschner 2000). My research focuses on the spatial analysis of the 1,586 chipped and ground-stone artifacts collected with point proveniences via surface collection by Keith R. Montgomery (1979). Utilizing the quantitative spatial analyses methods Hodder and Okell's A-tests for association (Hodder and Orton 1976) and k-means cluster analysis (Kintigh 1998) I have determined that there were 8 clusters of chipped-stone artifacts and 8 clusters of ground-stone artifacts suggesting separate specialized manufacturing areas.

[F2a] Shannon, Donald (Confederated Tribes of the Colville Reservation) “Salish Place Names on the Eastern Slopes of the Cascades” [symposium]

Cumulative research at the Colville Tribes History/Archaeology Program has given us the opportunity to conduct a great deal of applied ethnographic work. An aspect of this work has been the ability to compile Salish language place names along the eastern slopes of the Cascades, in the traditional homelands of the tribes now represented by the CCT. This has occurred with funding from sources as diverse as proponents of wind power, hydroelectric, and Federal Agencies. The results will be discussed in this presentation.

[SP] Simons, Noah D. (Central Washington University), Joseph G. Lorenz (Central Washington University), Lori K. Sheeran (Central Washington University), Megan D. Matheson (Central Washington University), R. Steven Wagner (Central Washington University), and Li, Jinhua (Anhui University) “Methods and Implications of the Noninvasive Collection of Saliva from Nonhuman Primates” [poster]

Cryptic and endangered fauna, including many primate taxa, pose particular challenges when it comes to the noninvasive collection of their biomaterials. For this reason the application of noninvasive genotyping to primates has been limited to the use of low quality samples (i.e. degraded DNA). We present a successful method for the noninvasive collection of saliva from habituated, free-ranging monkeys. The method and apparatus were used in the collection and successful extraction and amplification of the Cytochrome B and MHC-DR1 genes (used in phylogenetic and kinship studies) in 18 individuals from a population of Tibetan macaques (*Macaca thibetana*) in Huangshan, China. The collection of high-quality saliva samples from individuals in free-ranging primate populations could have a wide-range of implications for future analyses in areas such as epidemiological studies, hormonal analyses of HPA Axis functioning, pathogen screening, behavioral genetics and non-invasive genotyping.

[SP] Snyder, Charles (Washington State University) and Keri B. Snyder (Washington State University) “Aces in their Places: The role of the anthropologist in collaborative praxis” [poster]

Collaboration across disciplinary boundaries is essential to addressing complex social issues of interest to applied anthropologists. This paper will examine three case-study examples – zoological park curator, international health and

safety instructional designer, and university community service project manager – highlighting the practice of collaborative anthropology toward shared goals. Considerations for training future anthropologists and the role of education in applied anthropology will also be discussed.

[TP1] Steingraber, Aubrey (Western Washington University) “Identifying Salmonid Species Using Vertebral Morphology at 45WH34 and 45SK46” [poster]

In fall 2010, two other students and I implemented a new identification method described by Huber and co-authors (2011) which uses the morphology of salmonid vertebrae to identify species. This method is innovative because it is both cost effective and comprehensive. We applied this method on two archaeological assemblages to test its utility: 45WH34 near Ferndale, WA and 45SK46, at Deception Pass. Originally, we predicted to find a high diversity of salmonid species at Ferndale and a low diversity at Deception Pass. After analyzing 391 vertebrae, we discovered that both assemblages had unexpectedly high diversities, possessing five of the seven salmonid species. However, there are overlapping ranges in vertebral morphology of each species which may cause potential issues in the accuracy of identification. This project will be expanded later this spring to test the sensitivity of the method using part of the salmonid assemblage from 45WH1 at Cherry Point, WA.

[FP1] Sterling, Sarah (Portland State University), Kristine Bovy (University of Rhode Island), Virginia Butler (Portland State University), Sarah Campbell (Western Washington University), and Michael Etnier (University of Washington) “Beyond the Palimpsest: Using high resolution excavation techniques to evaluate household scale economic strategies and earthquake response on the Northwest Coast” [poster]

Differences in rank and economic specialization among precontact NW Coast households have been demonstrated using the spatial distribution of artifacts and subsistence resources within and between houses, but tracking the stability of social strategies for allocation of resources over time has proven difficult because of palimpsest formation in long-lived house structures. High resolution excavation employed at Tse-whit-zen (45CA523) Washington state, isolated short-term cultural events (floor surface formation, construction and dumping events). Evidence for regionally-recognized seismic events over the past 2000 years was also found, allowing for review of changing social dynamics and resource allocation in response to extreme environmental change.

[T7b] Stevenson, Alexander E. (Portland State University), Virginia L. Butler (Portland State University), Jessica A. Miller (Oregon State University), Donya Y. Yang (Simon Fraser University), Camilla F. Speller (Simon Fraser University), and Nicole Misarti (Oregon State University) “Anadromous salmonids in the Upper Klamath Basin? Identification of Pacific salmonid (*Oncorhynchus* spp.) species and life history through mtDNA and geochemical analysis”

High-level policy decisions to remove four Klamath River dams depend on establishing that anadromous salmonids migrated into the upper basin prior to hydro-development. The case for pre-dam salmonid distribution has been based on ambiguous and contradictory species identifications from historic records and informant testimony. Recent study of archaeological fish remains from six sites located in the Upper Klamath Basin documents over 7,100 identified fish specimens representing multiple species of sucker, minnow and salmonid. Specialized analysis (mtDNA, Strontium-Calcium ratios) was carried out on 57 specimens drawn from all sites and temporal contexts. Analysis of mtDNA from the salmonid remains identified *Onchorhynchus mykiss* (steelhead/redband trout) and *O. tshawytscha* (Chinook salmon). Analysis of Strontium-Calcium ratios provided information on fish migratory history (ocean-going vs. resident freshwater): the majority of tested specimens represent anadromous fish. Geochemical signals did not appear to be influenced by deposit age, local ground water or other factors.

[FP2] Stokeld, Rachel (University of Idaho) “Good for One Fare: From Tacoma’s Japanese Town to Kooskia Internment Camp” [poster]

The inspiration for this poster is a token from the Tacoma, Washington streetcar system recovered in archaeological excavations at the Kooskia Internment Camp in Kooskia, Idaho which held Japanese-Americans during World War II. Topics to be investigated include: the Tacoma Japanese community in the mid-20th century, Tacoma residents interned at Kooskia, and the Tacoma public transportation system. The intent is to place these internees in the context of common citizens of Tacoma prior to the internment era. Internment camp archives will be utilized to identify Tacoma residents among the internees. Historic maps and resources will be utilized to identify the streetcar lines, areas of Tacoma associated with the Japanese community, and the effects of internment on Tacoma’s Japanese residents.

[F8] Swords, Molly (SWCA Environmental Consultants) “Smoking Allowed: An examination of tobacco usage in historic Sandpoint, Idaho” [symposium]

Leisure activities associated with saloons and brothels often come to mind when discussing the American West. There is historical evidence that individuals living in Sandpoint, Idaho filled their time with these leisurely indulgences, such as,

- 10:45-11:05 Mace, Timothy (University of Idaho) "Archaeological Techniques for Understanding Metallurgy and Why We Care"
- 11:05-11:25 McFarland, Doug (Pacific Northwest National Laboratory) "Magnetic Susceptibility: Sediments and compliance with geophysical science"
- 11:25-11:45 Schneider, Brian (University of Idaho) "From Work to Play: An examination of a 18th/19th century work complex at James Madison's Montpelier"
- 11:45-noon Discussion

[TP1] Posters 8:30-noon, Convention Center Hallway

Amador, Raquel (University of Idaho) "The Arrow Beach Affair"

Corn, Tyrone (Idaho Power Company) "The Possible Link Between Solar Radiation and the Selection of Talus Pit Storage Feature Locations"

Dampf, Steven (Historical Research Associates, Inc.), Leonard Kempf (Geo-Marine, Inc.), Jennifer Gilpin (Historical Research Associates, Inc.), and Todd M. Ahlman (Historical Research Associates) "Frontier and Border Archaeology of the Old Boundary Townsite (45ST632), Stevens County, Washington"

Galm, Jerry R. (Eastern Washington University), Tiffany Fulkerson (Eastern Washington University), and Stan Gough (Eastern Washington University) "Revisiting the Haskett Complex in the Pacific Northwest: New perspectives from the Sentinel Gap Site"

Leeds, C.A. (Chimpanzee and Human Communication Institute, Central Washington University), A. Davis (Chimpanzee and Human Communication Institute, Central Washington University), M. Jensvold (Chimpanzee and Human Communication Institute, Central Washington University), and D. Fouts (Chimpanzee and Human Communication Institute, Central Washington University) "Evidence for Menstrual Synchrony in Captive Chimpanzees"

Ozbun, Terry (Archaeological Investigations Northwest, Inc.) "Beyond Pretty Colors: Technological and functional qualities of Oregon obsidians for ancient stone tool production"

Steingraber, Aubrey (Western Washington University) "Identifying Salmonid Species Using Vertebral Morphology at 45WH34 and 45SK46"

Wendel, Ryan E. (University of Montana) and Maggie E. Schirack (University of Montana) "Victorian Secrets: What outhouse artifacts reveal about the gender and class spaces of an early 1900's mining camp"

Noon-1:20 Lunch

Thursday Afternoon, April 21

Sessions

- Palouse** **[T5a] Tribal Initiated Ethnohistorical Research in the Northwest Symposium**
Organizer and Chair: Daniel L. Boxberger (Western Washington University)
- 1:20-1:40 Boxberger, Daniel L. (Western Washington University) Introduction
- 1:40-2:00 Pederson, Nora K. (University of Alberta) " 'Heirs not determined': Inheritance and allotments at Grand Ronde"

the terrace. Periods of human occupation extending back ~2500 years have been identified between flood events and correlate laterally within the flood stratigraphy.

[S4b] Tyllas, Nicole (Washington State University) “Understanding Each Other: A phenomenological exploration into human sociality”

Human social relationships and conscious processes are inseparable from each other. When compared to other species, it is our unique conscious processes that allow for the kinds of social relationships we exhibit, and vice versa. Human social relationships have been unpacked across academic disciplines as having two attunements: cognitive or “perspective-taking” and affective or “emotion-feeling”. Recently scholars have been reading our relationships in light of Edmund Husserl’s early 20th century formulation of intentional conscious processes, going so far as to argue that consciousness as Husserl discusses it should be taught as an umbrella concept uniting not only the branches of anthropology but all disciplines within academia with a common conception of the human social condition. This paper argues, based on philosophical critique and original ethnographic research, that Husserl’s formulation of intentionality is limited to the “perspective-taking” conscious attunement. Thus, if we are to use Husserlian intentionality as a blueprint of conscious processes, as some have suggested, we should acknowledge its limitation toward said goal. In effort to support such an undertaking, however, this paper suggests subsequent phenomenological theory could be used to illuminate conscious processes that are more affectively attuned.

[S4a] Trusler, Kate (University of Leicester) “Downpipes and Sanitation: Indications for population dynamics, urbanization and household behavior in Pompeii”

Excavations at the site of Pompeii have provided valuable information about the lives of ancient Romans that are unique and thus far have not been attainable through investigations at other sites. This important resource is still providing new research opportunities nearly three hundred years after excavations were initiated. This paper examines the results of a recent survey of the latrines and sanitation systems in the. The author became involved with this research in 2006 and has since developed a theory involving the development and implications of downpipes and their connection to latrines, waste management in general and urbanization in the Roman world.

[T3] Valentine, David (Idaho Power Company) "Condoms in the Countryside"

The condom is a venerable device, manufactured and used for centuries. Condoms were and are made from a variety of materials, including fabric, intestinal linings, and rubber. During the early years of the twentieth century, the condom was also the most widely used birth control and prophylactic device used in the United States. In spite of its antiquity and popularity, few examples of condoms are found in the archaeological record. This is most likely the result of the fragile nature of the materials used to make condoms. During the early twentieth century, condom packaging was sometimes made of more durable materials, including small cans. This paper will present some clues on how to recognize these cans in the archaeological record.

[T8] Vargas, Estanislado (Central Washington University) “Radiocarbon Chronology for the Hole-in-the-Wall and French Rapids Archaeological Sites, Middle Columbia River”

Artifact assemblages from archaeological sites 45KT12 and 45KT13 were analyzed for suitable radiocarbon samples. Contents of the original field journals from 1961 and 1962 were digitized and used to create updated soil profiles that include the occupation layers described in Robert Kidd’s 1964 report. 8 samples were selected for radiocarbon dating with the intent of contributing to the chronology of house settlement along the Middle Columbia River. The results indicate a possible change in resource availability, as noted by the presence of *Bison bison* remains (dated to 1850 BP) in the lower levels of the house pit, and their subsequent absence from the assemblage above those levels. The radiocarbon results present interesting implications for house settlement as related to climate change in the Vantage region.

[T2a] Wagner, Jill Maria (Coeur d’Alene Tribe) “Introduction to Tribal Historic Preservation Offices” [symposium]

Introduction to the history of the THPO program at NPS and the present status of THPOs.

[T2a] Wagner, Jill Maria (Coeur d’Alene Tribe) “Coeur d’Alene Tribe Historic Preservation Office Overview” [symposium]

The history, current status, program operating procedures and policies of the Coeur d’Alene THPO.

[F8] Warner, Mark S. (University of Idaho) “Status in a Box(car): Consumer culture in Sandpoint, Idaho” [symposium]

Turn of the century America was a period of exploding access to goods – goods that people acquired for functional *and* symbolic reasons. In much of the United States this was a time where the abundance of things provided unprecedented

avenues for self expression, for affirming group identity or for masking/challenging established social norms via the spectacle of mass consumer culture. What is largely unrecognized in discussions of this mass produced consumer utopia is how smaller communities in the west participated in this transformation. The scale of the materials recovered from the Sandpoint excavation represents an opportunity to explore how western communities participated in this fundamental social transformation

[S1] Weaver, Robert (The Environmental History Company) “Looking for a Job?: Opportunities for applied archaeology in the environmental industry” [symposium]

For the past 25 years, there has been a booming business in identifying and cleaning up all sorts of contaminated sites thanks to Superfund legislation and equivalent state laws. The work has been done primarily by engineers (geotechnical, hydrogeological, and chemical). All they have done is reinvent archaeology (with hazardous wastes as artifact) without the archaeologists. Little has been done to take advantage of a century of American archaeological practices; even now, their methodologies are enough to drive a good archaeologist crazy. Engineers don't understand history. Breaking into the engineering “club,” however is difficult; from personal experience, however, the achievements can be quite rewarding. Opportunities to integrate archaeology with engineering are increasing as major firms lock into CRM as a viable discipline. This paper will explore the opportunities available and suggest ways to promote and apply archaeology as a valuable interdisciplinary addition to the environmental industry.

[F8] Weaver, Robert M. (Environmental History Company) “Why the heck dig there? - Targeting cultural resources in an urban environment” [symposium]

Successful resource identification and data recovery in an urban environment presents many challenges that are commonly not recognized by archaeologists...even those trained in history. The reality is that many ancillary factors such as extensive landscape modifications, complex engineering plans, short- and long-term threats to resources, and politics of working with non-archaeologists, are all part of a thoughtful approach to urban archaeological investigations. These are issues that begin well before fieldwork. Intensive background research and development of conceptual models of urban patterns (physical and behavioral) are essential in order to maximize our return on investment. Project efficiencies and effective coordination with other disciplines avoid furthering a reputation of cultural resources as “always getting in the way and costing too much.” This paper uses the Sand Creek Byway Project as a case study on how these issues can be addressed and what other lessons have been learned, with the assumption being that the challenges archaeologists face will only increase as the country addresses long-overdue infrastructure issues and changes in the urban landscape.

[F8] Wegars, Priscilla (SWCA Environmental Consultants) “The Chinese in Sandpoint, Idaho” [symposium]

The first Chinese people to arrive in Sandpoint were undoubtedly workers for the Northern Pacific Railroad, whose construction crews reached there in 1881. Following completion of the railroad in 1883, and until the 1920s, some Chinese people settled in Sandpoint. There the men became railroad section gang workers and filled a variety of other occupations; the lone Chinese woman was a servant. Although the Sandpoint Chinese were few in number, they nevertheless made important cultural, economic, and historical contributions to the larger community. The Chinese in Sandpoint did encounter prejudice from Caucasian residents, but they were never “run out” as they were in some nearby towns. In fact, they persevered to make productive lives for themselves in Sandpoint. Archaeological excavations, together with historical research, have combined to provide a more complete picture of Sandpoint's Chinese community. These pioneers from China deserve to be remembered equally with Sandpoint's early Euroamerican settlers.

[TP1] Wendel, Ryan E. (University of Montana) and Maggie E. Schirack (University of Montana) “Victorian Secrets: What outhouse artifacts reveal about the gender and class spaces of an early 1900's mining camp” [poster]

The archaeology of Victorian culture in the American West has been a topic of intense study by historical archaeologists for years. Numerous gender-influenced archaeological studies have analyzed how men and women acted out their everyday lives while subscribing to Victorian ideals and practices. These studies have examined and challenged the long held beliefs about how men and women are perceived in the historical record. This poster will examine how using data collected from outhouses at an early 1900s Montana mining community, The Comet, gender and socioeconomic diversity can be expressed on the community landscape. The artifact assemblages at the individual outhouses excavated, illustrates the close relationship between the adherence to Victorian cultural ideals, social class, and gender in a small western mining community setting.

[F3] Wescliff, Julie B. (Central Washington University), Megan D. Matheson (Central Washington University), Lori K. Sheeran (Central Washington University), R. Steven Wagner (Central Washington University), and Jinhua Li (Anhui University) “How Close is Too Close? Spatial Proximity Dynamics of *Macaca thibetana*”

Close proximity, while frequently mentioned in primatological field work, is rarely consistently defined. Research across the primate order offers ranges from mere centimeters to multiple meters as close proximity measures. While various

distances more aptly apply to different genera and species, the array of measures used in studying only the genus *Macaca* represents the need to examine proximity as an independent variable to discern what proximity distance is important to the study population. Focal and scan sampling was used to record behavior and proximity (touching, arm length, 1, 2, 3 and 4 meters) to neighboring individuals of 13 adult *Macaca thibetana* living at an eco-tourism site at Mt. Huangshan, Anhui Province, China. Self-directed and aggressive behaviors were tallied throughout focals and behaviors and distances are being examined across dominance, kinship and age class. Preliminary analyses reveal a significant difference in proximity relations during provisioned times compared to non-provisioned times.

[S4b] Whalen, Thomas B. (Gonzaga University) “Interaction, Negotiation, and Emergence: A multidisciplinary approach to cultural ontology”

This theory proposes that cultural ontology and as a byproduct the ontology of society, the economy, and other social institutions and structures are emergent from social interaction and individuals acting on and reacting to the environment. Each interaction contains an element of interpretation, evaluation, and negotiation. With each interaction, there is a continual reinterpretation, renegotiation, and reevaluation, however small or large. Even if the result is no change, reinterpretation, renegotiation and reevaluation takes place. There is a continual emergence of social constructions including culture. This theory combines the framework of the complex adaptive systems model (Axelrod & Cohen, 2000; Holland, 1995) with the work of theorists from several different disciplines. These include Mead’s (1932, 1934, 1938) social theory, Strauss’ negotiated order theory (1978), and to a lesser extent the work of Barth (1966), Berger and Luckmann (1966), Blumer (1969), Chase (2006), Giddens (1979, 1984), Harris (1974, 1979), Reed (1996), Ricoeur (1976), and Searle (1995).

[S4a] Wieland, Josef (Portland State University) “Agendas and Ontologies: ‘Dietary governmentality’ in Oaxaca, Mexico”

This paper explores how Mexican state-sponsored and NGO nutrition intervention programs in Oaxaca, Mexico facilitate control over indigenous populations through dietary self-regulation. Beyond examining the intersection of food practices and political economy, I use a critical anthropological perspective to explore how nutrition interventionists systematically disregard indigenous ontologies in the process of creating guidelines, instructions, and trainings around dietary norms. I suggest that the processes by which ‘good’ foods are promoted, and ‘bad’ foods are discouraged, are best understood through the Foucauldian concepts of ‘biopower’ and ‘governmentality’. By showing how biomedical epistemologies are propagated by public health practitioners and NGO workers in Oaxaca, this paper addresses how power and ideologies are experienced and reproduced at the site of the body. I argue here that a “critically applied nutritional anthropology” is crucial for decoding modernist projects facilitated by global health professionals engaged in nutrition interventions in historically marginalized communities.

[F1] Williams, Justin (Washington State University) “Debating the Complexity of Clovis: Insights into the complexity paradigm” [symposium]

At the risk of sounding cliché there may be more definitions and ideas on what complexity is than there are archaeologists who have considered it. Could complexity have existed within a given society without material evidence of it? Using the Clovis culture of North America, this paper seeks to examine this question. Within this paper four different sets of complexity requirements are used. Clovis culture is considered and logical assumptions are made about Clovis. This is done in order to better understand the potential of the Clovis culture to have been representative of a more complex culture than previously thought. It is found that Clovis peoples could have been more complex than they are typically regarded to be. In addition this study promotes the idea that archaeologists should perhaps not be asking how complex a culture was but instead ask in which ways was a given culture complex.

[FP1] Williams, Louise (Simon Fraser University) “Refitting the Locarno Beach Site (DhRt-6): A spatial and temporal analysis of previous collections” [poster]

The Locarno Beach site is important to NW Coast archaeology and Gulf of Georgia culture history as the type site for the Locarno Beach phase (ca. 3500 to 2400 BP). Located within the City of Vancouver, the site is impacted frequently by urban development. Numerous salvage excavations on various portions of the Locarno Beach site have resulted in over a dozen reports, with minimal integration of data among them. Thus, our understanding of DhRt-6 as a whole remains vague. This situation also precludes a full representation of the Locarno Beach type site in regional studies focused on sub-regional variability and evaluations of the chronology classification scheme. To address these issues, my current research concentrates on reconciling existing Locarno Beach site data. Exploring intrasite spatial and temporal variability of the lithic artifact data and revisiting the classification of the Locarno Beach phase at the type site are key aspects of my research.

[S1] Williams, Scott S. (Washington State Department of Transportation), “Cultural Material or Hazardous Waste? What to Do When Your ‘Site’ is Both” [symposium]

We all know archaeological sites are the accumulated materials of past discard behaviors, and their materials can span periods of time up to and including modern materials. Unfortunately, some discarded materials of the recent past are hazardous materials, and archaeological sites can be contaminated with petroleum products, solvents, chemicals, PCB's, and a host of other toxic or harmful substances. This is especially true in urban areas and on military properties. This paper will explore ways archaeologists can protect themselves from, and continue to investigate, sites and materials that may be HazMat sites in addition to archaeological sites.

[T1] Williams, Scott S. (Washington State Department of Transportation) “Challenges in Transportation CRM” [symposium]

Cultural resources management (CRM) is full of challenges, and CRM for transportation projects is no different. This paper will serve as the introduction to the symposium and will highlight some challenges experienced on WSDOT projects over the last year, including conflicts between natural and cultural resources concerns (e.g., endangered species vs historic properties), declining state budgets, and the push to “streamline” or repeal environmental and cultural protection regulations.

[S2] Wilson, Douglas C. (National Park Service) "Exploring the Roots of Diversity In the Far Northwest: The National Park Service Public Archaeology Program and Fort Vancouver's Village"

Fort Vancouver, Colonial “Capital” of the Pacific Northwest during the fur trade era (ca. 1825-1845), sported a multiethnic village of 600-1000 occupants. The exploration of culture contact, colonialism, and identity has been an important element of studies of the Village since the 1960s. Landscape data collected over the past decade provide new means of exploring this Creole community. This paper highlights results of excavations and explores relationships between groups and the rapidly changing political, technological, and social landscape of the 19th century Far Northwest. Historical archaeology at the site has been used to develop new understanding and interpretation of the lives of the villagers.

However, past conflicts between colonial powers and American Indians continue to pattern modern perceptions of the site. Public archaeology is seen as a means to better inform on these sometimes competing views of the past to explore identity, diversity, and globalism, while protecting this internationally-significant site.

[FP2] Wilson, Erin (University of Idaho) “GET TO THE POINT: Challenges with predicting relative age using projectile point technologies at the Weitas Creek Site” [poster]

The Weitas Creek Site (10-CW-30), located in the Clearwater River Region of north central Idaho, was investigated in 1970. At that time it was determined that the site was likely to possess considerable cultural resources; therefore the site was selected for further excavation by the Idaho State Field School in 1972. The resulting artifact assemblage included over 200 projectile points and tools that are typically known to have been utilized for hunting, butchering, and hide-working, indicating that the site was likely once an upland hunting camp. Since that time there have been advances in the body of knowledge regarding that region. Sappington's dissertation (1994) opened a dialogue about the use of projectile point chronologies for relative dating. He suggested that such analyses are unreliable in the Clearwater River region based on anachronistic tools discovered there. This presentation will highlight the difficulty in predicting relative age through projectile point chronologies using the Weitas Creek Site as a test model.

[S1] Wilson, Katie (Paragon Research Associates) “When the Bottle Isn't Empty: A case study from the King Street Station Monitoring Project, Seattle” [symposium]

The Seattle Department of Transportation is rehabilitating the King Street Station, a historic landmark in Seattle, King County, Washington. The Station was built between 1904 and 1906 and is listed on the National Register of Historic Places and Washington Heritage Register. Archaeological monitoring in 2010 resulted in a small collection of historic artifacts which included an unmarked, still corked bottle containing an unknown liquid. Analysis completed by the Mass Spectrometry Center at the University of Washington not only identified the bottle's contents, but was able to suggest a temporal range. This paper presents PRA's process for keeping both the artifact and the people working with it safe, including our handling procedures, the process to coordinate analysis, and steps to prepare the bottle for eventual curation at the University of Washington's Burke Museum of Natural History and Culture.

[FP1] Wilson, Katie (Paragon Research Associates) and Jackie Ferry (Samish Indian Nation)

“Making the Most of Collections: Revitalization of the Samish Indian Nation's Archaeological Collections” [poster]

The Samish Indian Nation's Cultural Resources Department maintains a curation repository for archaeological collections associated with the Samish or other closely related Northern Straits tribes. As of January 2011 the collection contains approximately 30 cubic feet of materials. In 2009 the Samish Tribe was awarded a grant from the Institute for Museum and Library Services to upgrade the collections: original artifact bags and boxes were replaced with archival storage materials,

diagnostic objects were photographed, and the collections were cataloged into PastPerfect. An exhibit was developed based on feedback from a Tribal member survey. This poster will share the successful collaboration between the Samish Indian Nation and Paragon Research Associates to complete this project.

[F3] Winters, Sandra (Central Washington University), Noah D. Simons (Central Washington University), and Joseph G. Lorenz (Central Washington University) “Comparative Analysis of Length Polymorphisms in the Promoter Region of the Serotonin Transporter Gene (SLC6A4) in Cercopithecidae”

The serotonin transporter gene (SLC6A4) is a critical component in the serotonergic system (Murphy et al. 2001). Sequence variation in SLC6A4, particularly length polymorphisms in the promoter region, have been associated with a number of neuropsychiatric-related phenotypes in humans (Lesch et al. 1998) and behavioral phenotypes associated with stress and aggression in rhesus macaques (Barr et al. 2006). Here we present a comparative analysis of length polymorphisms in the promoter region of SLC6A4 in 27 species across 13 genera within the family Cercopithecidae (n=306). Our results indicate length polymorphisms in 35.7% (n = 10) of species, which is more variation than previously thought. In polymorphic species there are long (L) and short (S) alleles; while allele frequencies vary across polymorphic species, the average allele frequencies are 48.7% and 51.3% respectively. The (S) allele is associated with reduced transcription efficiency, therefore these results have implications for our understanding of inter-species behavioral variation.

[F3] Winters, Sandra (Central Washington University), Megan D. Matheson (Central Washington University), Lori K. Sheeran (Central Washington University), R. Steven Wagner (Central Washington University), and Jinhua Li (Anhui University) “Social Recruitment in Tibetan Macaques (*Macaca thibetana*) at Mt. Huangshan, China”

In order to navigate their social world, primates must have an understanding of the social network in which they live. Recruitment decisions made during altercations can be used to examine individuals' knowledge and use of social relationships. This study examines social recruitment in a semi-free ranging group of Tibetan macaques at Mt. Huangshan, China. Recruitment decisions are analyzed based on affiliative, dominance, and kinship relationships. Preliminary analysis suggests that dominance is the primary determinant of recruitment, with individuals almost exclusively recruiting an ally that is dominant to their opponent. This indicates that Tibetan macaques understand and utilize social information when making recruitment decisions.

[F3] Winters, Sandra (Central Washington University), Lori Sheeran (Central Washington University), Megan Matheson (Central Washington University), Jinhua Li (Anhui Normal University) and R. Steven Wagner (Central Washington University) “The Influence of Infant Physical Disability on Mother-Infant Attachment: A case study of limb loss in an infant Tibetan macaque (*Macaca thibetana*)”

Primates tend to exhibit strong mother-infant attachment, however individual differences influence this relationship. Here we present a case study demonstrating the impact of infant limb loss on mother-infant attachment in Tibetan macaques. The mother of the injured infant was compared across time to another female with infants of similar ages. Following infant injury, the mother remained closer to her injured infant but was not more likely to hold him. Experience with an injured infant also appeared to influence the mother's attachment to her next infant, who she was much more likely to hold. However, after that year, her holding rates returned to normal. These results indicate that past experience may influence mother-infant attachment in primates.

[T7b] Wojcik, Kathryn (Portland State University) and Shoshana Rosenberg (Portland State University) “Using Vertebral Morphometrics to Determine Salmonid Species (*Oncorhynchus* spp.) at Two Archaeological Sites on the Lower Columbia River”

The remains of salmon species (*Oncorhynchus* spp.) are common in archaeological sites throughout the Northwest Coast and Columbia Plateau. However, osteological similarities within the species have precluded direct identification to the species level. To understand the differing traditional uses, native ranges, and life histories of each species, an affordable, non-destructive technique to reliably identify the species is necessary. A new statistical model allows for the separation of salmonid vertebrae into four species groups. We used this model to analyze vertebrae from two Columbia River archaeological sites: Cathlapotle (45CL1), and Meier (35CO5). Our analysis showed Chinook salmon to be the most numerous in both assemblages, with a decrease in favor of the Chum/Coho/Steelhead group after European contact. The species level identifications allowed us to identify relative patterns of species abundance between Meier and Cathlapotle, and to explore explanations behind changes in species abundance that are present between the two sites.

[F2b] Wood, Rebecca (University of Montana) “Developing Community Relationships and the Pursuit of Language Socialization Understanding Among the Salish”

For my anthropological dissertation research, I plan to conduct an ethnographic study of the Salish-Pend d'Oreille community to understand how children become socioculturally knowledgeable and active members of their society through language use. The Salish are undergoing a process of language shift, with fewer than 50 fluent Salish speakers remaining.

My project will determine the contexts that Salish language is still used to socialize children to sociocultural ideologies, practices, and identities of the community and what may or may not be lost when English is the language of choice. The development of relationships with community members has been a crucial aspect in the preparation of this study. Through continuous communication with these individuals, I have established a solid understanding of the current sociocultural environment on the Flathead Indian Reservation, and more importantly, developed a research framework that encompasses both the desires of the tribe and my own research interests.

[T6] Wood, Spencer (Stanford University), Jennifer Dunne (Santa Fe Institute), Roly Russell (Sandhill Institute), Herbert Maschner (Idaho State University), and Nancy Huntly (National Science Foundation). “Food-webs as Tools for Understanding Historic and Prehistoric Roles of Humans as Consumers in Marine Ecosystems” [symposium]
Humans lived on Sanak Island, near the tip of the Alaska Peninsula, continuously for over 6000 years. This fact motivated us to assemble a food-web describing the trophic interactions among species in the marine ecosystems of the Sanak Archipelago, integrated over thousands of years, based on a combination of field observation, experimentation, zooarchaeology, and ethnographic data. Our analyses suggest that humans are unique consumers, compared to other species, in terms of both their topological position and their feeding dynamics within the food-web. Humans are strong generalists and omnivores, feed on many taxa across all trophic levels, and have the potential to influence the persistence and stability of marine ecosystems. We will discuss these results and ways that generic food-web analyses can inform research on the ecology of humans in marine ecosystems.

[TP2] Yamamoto, Christopher (Northwest Archaeological) and Brian Boggs (Northwest Archaeological Associates) “Exploratory Lithic Investigations at Pussyfoot Creek: 45-KI-938” [poster]
45-KI-938 is a prehistoric lithic scatter located on the Muckleshoot Reservation in Western Washington State. The site contains a variety of lithic materials represented within the debitage and locally accessible raw material. Larger examples of the CCS toolstone at the site are generally not uniform, having several different colors present in the same piece; one core can produce a variety of different colored flakes. The high degree of variation in raw material classes could be from a high number of different reduction episodes or could be a product of differing raw materials available to the inhabitants of the site. The goal of this study was to establish a minimum and maximum number of reduction episodes based on the different material types represented in one excavation unit. A range of reduction episodes can be calculated from the minimum and maximum ratio and potentially be applied to the remainder of the assemblage.

[T3] Yunker, Trevor (South Puget Sound Community College) and Cassandra Johnson (South Puget Sound Community College) “Foster Railroad, A Look Into Our Campus’ Past”
In spring 2010, the South Puget Sound Community College archeology class began surveying what was believed to be the remains of a logging railroad line that ran the length of the campus and down to a long chute used to skid the logs to what is now Capitol Lake in Olympia, Wa. This land was once owned by a man named George Foster, who had the rail line put in to haul timber logs throughout his property between 1882 and 1888. The survey found an extensive berm that signified the place in which Foster’s railroad would have existed, along with other culturally significant materials in the surrounding area. Discovered in our survey were industrial railroad products of the time period. Our college’s CAD and survey classes are mapping the entire section, in preparing to do a 100:1 model of the line. Analysis of these materials has provided those involved with a picture of the history of our campus, early logging and Olympia itself.

[F3] Zager, Lindsay (Central Washington University) and Mary Lee Jensvold (Central Washington University) “An Experiment in Zoo Visitor Education: Encouraging friendly chimpanzee behaviors”
Zoological parks provide a venue for humans to observe and interact with nonhuman exotic animals. Although most zoo visitors note education as a secondary motivator for attending, interactive educational experiences can provide an opportunity for substantial scientific learning. In this study, data were collected on zoo visitors visiting the chimpanzee (*Pan troglodytes*) exhibit at The Zoo Northwest Florida in Florida during summer 2009. Researchers implemented three conditions of visitor education at the chimpanzee viewing platform: a graphic sign, a trained docent, and a control condition with no intervention. The sign and the docent encouraged visitors to use friendly chimpanzee behaviors. Visitors were significantly more active in the graphic sign condition and significantly less active in the docent condition. The control condition did not affect visitor activity levels. They used friendly behaviors that were demonstrated in each condition. These results suggest that both graphic signs and docent interaction affect visitor behavior.

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