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**“Anthropologists Connecting”**  
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## Organized Sessions/Panels

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**Bernick, Kathryn (Royal British Columbia Museum)**

***Emerging Trends in Northwest Coast Wet-Site Archaeology***

Wet sites and waterlogged wood artifacts are showing up at an accelerating rate in the Pacific Northwest and challenging the prevailing assumption that they are rare. Archaeological fieldwork in a region where wet sites abound requires attention to the possibility of water-saturated deposits and readiness to recover, analyze, and curate waterlogged perishable materials. The papers in this symposium address practical aspects of wet-site archaeology and give examples of important research that can be accomplished with modest investigations. Recent everyday finds and small, unpublished or under-reported projects illustrate that wet sites are not only for specialists and not only about spectacular objects. They are what every CRM or Research archaeologist working in the region might encounter on their next field expedition. In addition to their legendary potential, wet sites are an integral component of Northwest Coast archaeology. [Session 28, 29]

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

***Disturbed is Not Destroyed: The Pit Road Recovery Project Oak Harbor, Washington***

In June of 2011 the City of Oak Harbor inadvertently disturbed an archaeological site during a road and utility upgrade project and the material from that archaeological site was redeposited with over 5000 yards of material from other concurrent road projects at multiple locations. This symposium gives the results of the 14 months of screening the material that may have been associated with the archaeological site 45IS45. Although the historic and pre-contact material from the road project was disturbed numerous times both during this project and in the past, there is still plenty of data to be gleaned from the assemblage and the construction reports. Some spatial relationships were rebuilt during the analysis to confirm that not all disturbance destroys the stories that can be told about past human lifeways here on the shorelines of the Pacific Northwest. [Session 8]

**Griffin, Dennis (Oregon State Historic Preservation Office) and Matthew Diederich (OSHPD)**

***Connecting with the Past: Techniques to Assist in Site Identification and Evaluation***

Work in archaeology today continues to be dominated by CRM activities with a primary emphasis on identifying and evaluating archaeological sites that may be impacted by proposed projects. Such an emphasis highlights the importance of using every technique possible to identify the location of possible sites as well as placing them in a historic context of past land use. This symposium highlights several basic technologies that are gaining acceptance in CRM, useful in locating buried sites without relying solely on the excavation of subsurface probes. In addition, discussions on the importance of basic data collecting techniques are emphasized to assist efforts in site evaluation. [Session 26]

**Holthoff, Carolyn (Washington State Department of Transportation) and Scott S. Williams, (Oregon State Department of Transportation),**

***Historic Roads, Waterfronts, and Communities: The Year in Transportation CRM***

As a result of the extensive construction and infrastructure work conducted by both state Departments of Transportation in Oregon and Washington, both agencies maintain large cultural resources programs. ODOT and WSDOT archaeologists and consultants present some of the highlights of the past year's cultural resources management activities undertaken by the two agencies. [Session 14]

**Hushour, Jen (Tierra Right of Way) and Katherine M. Kelly (Tierra Right of Way)**

***Reconstructing Monte Cristo: research in a historic mining district in Snohomish County, Washington***

Within the narrow confines of the mountain walls and the slimmest margin of time, Monte Cristo encapsulates our national struggle between the fierce drive toward industrialization and the equally passionate urge to conserve the natural wonders of the American West. Monte Cristo's 30-year lifespan as a boomtown was short lived, truncated by rising production costs, the collapse of the silver market, and an often catastrophic misunderstanding about the natural forces at play in the valley. The story of Monte Cristo is derived from myriad resources, ranging from oral history to formally recorded feature coordinates to surveys by environmental engineers, and represents the wildly disparate activities of people who converged on Monte Cristo from places as far flung as Japan and Cornwall. These diverse approaches to evaluating the landscape have resulted in multilayered histories of the town, often contradictory and endlessly fascinating. [Session 20]

**Johnson, Paula (Environmental Science Associates)**

***Take a Tip from Us in Seven Minutes or Less***

Many of us have tricks of the trade, things we have figured out over the years through experience, the quirks of a project, or because we are big nerds. This fast-paced, informal series of presentations will cover our top tips, reminders, and lessons-learned-the-hard-way on a variety of topics. None of these should take more than 7 minutes to present and audience questions are encouraged.

- Tips on taking meaningful monitoring notes.
- Tips for repurposing typical hardware store purchases into field curation supplies
- Tips on photographing/capturing video using a micro drone
- Tips for developing and implementing an effective monitoring and discovery plan
- Tips on drawing profiles
- Tips on identifying freshwater mussel shell
- Tips on distinguishing human and non-human bone
- Tips on using illustration vs. photography for artifact figures
- Tips on using online mapping resources [Session 32]

**Kelly, Katherine M. (Tierra Right of Way)**

***Archaeology and Environmental Restoration (wicked problems, unintended consequences, and righteous solutions)***

Wicked problems, such as those commonly encountered by biologists, engineers, agencies, archaeologists, and resource managers working on environmental restoration projects, are rarely “textbook,” instead they are large, messy, complex, and systemic. Wicked problems, even the small ones, seem overwhelming; each part of the problem seems to require an uneven mix of contradictory solutions and untenable choices. The most successful strategies developed to untangle wicked problems tend to rely on inclusive, collaborative, and innovative strategic approaches. As practiced as archaeologists are at crossing interwoven social, ecological, and economic systems, we occupy unique positions on restoration management teams, and are often presented with opportunities to step out of our traditional roles. [Session 35]

**Kniseley, Marinel (Western Washington University) and Duane Kahler, (WWU)**

***Exploring Collective Approaches: Co-constructing and Applying Anthropological Research in Migrant Communities***

This symposium explores the process, experience, and applied dimensions of research involving migrant communities, with particular emphasis on practical steps for design and initiation of research, building partnerships, and fostering dissemination and positive impact beyond the research endeavor itself. The value of the anthropological perspective is evident in the way it inhabits and promotes the intersection of local, global and academic interests. How research can speak to the perceived needs of communities with whom we are co-constructing knowledge is essential for an ethical and applied anthropological endeavor. Participants span various stages of the graduate research process from preliminary framing to establishing relationships and methodology, synthesis and writing, and finally, to post-degree applications. Contributors will address commonalities across their particular research directions, as these relate to issues of resiliency, inclusion and long-term prospects for members of groups who are frequently marginalized by legal, cultural, and economic borders. [Session 17]

**Lewarch, Dennis E. (Suquamish Tribe, Association for Washington Archaeology)**

***Perspectives on Federal and State Laws and Regulations: A Panel Discussion Hosted by the Association for Washington Archaeology***

Cultural resource management professionals in the private sector work with an array of federal, state, county, and local agencies as well as Indian Tribes. This panel discussion hosted by the Association for Washington Archaeology will include agency and Tribal representatives who will summarize their perspectives on federal and state laws and regulations, explain how they interpret and apply the regulations, and outline their expectations when dealing with private contractors. The session will provide an opportunity for a dialog among agency, Tribal, and consulting archaeologists. [Session 33]

**Major, Maurice L. (Washington State Department of Natural Resources)**

***Mission Possible: Salvage at the Mission Spit Site, Olympia, Washington***

What happens when an archaeologist feels like a site is significant, but the proponent and the regulatory agencies decide it is not, and damage to that site benefits natural resources including salmon? This session explores what happened when the Mission Spit site (45-TN-450), bisected by channel excavation done to restore an estuary in Olympia, Washington, became the focus of a salvage project run by volunteers from universities, contract archaeology firms, agencies, and the local

community. We will report on the process of obtaining and screening a large sample of the site, as well as the results. Ongoing analysis shows that while the site may not be the best we could hope for, it does reflect a Contact era site associated with the first Catholic Mission on Puget Sound, with ample evidence of Native American occupation and a few surprises. [Session 9]

**Marcotte, Jacqueline (Environmental Science Associates)**

***Maritime Heritage – Preserving, Conserving, and Sharing***

In keeping with year's conference theme, the maritime symposium focuses on connecting with the public and sharing our research with the community, and with each other. Presentations highlight volunteer maritime heritage oriented projects in the Pacific Northwest, their methods, and the strides these organizations are currently making towards documenting and preserving the coastal, submerged, and extant maritime history of the region. This symposium also shares a range of current research regarding pre-contact and historic cultural resources found in coastal and submerged settings throughout the Pacific Northwest. In the course of the presentations we will explore: conservation of previously submerged carronades (wood and metal), shoreline geomorphology; the archaeology of submerged cultural resources, new methods for recording historic vessels, as well as nautical archaeology and the restoration of historic vessels. [Session 24]

**Miller, Bruce G. (University of British Columbia)**

***Anthropology of the Skagit Valley***

Recent research in the Skagit Valley combines methods archaeological, ethnographic, ethnohistorical, and oral historical, to create new interpretations of the Indigenous peoples and a move away from ahistorical representations. In this session, papers are concerned with the issues of community cohesion in light of historical forces of colonialism, at different time scales and with varying theoretical orientations. A community leader/intellectual (Schuyler) focuses on the critical role of anthropology in preserving tribal culture today, an ethnohistorical paper (Miller) concerns legal and political issues, an archaeological paper (Angelbeck) addresses settlement patterns, another (Mierendorf) uses distinctive toolstones to define geographic patterns in its circulation across watersheds and an ethnographic paper (Malone) advances a waterscape notion of orientation. [Session 31]

**Pederson, Nora K. (University of Alberta)**

***Connections in Context: A panel in honor of the work of Daniel Boxberger***

This year, as Dr. Daniel Boxberger steps down as chair of the Department of Anthropology at Western Washington University, we hold this symposium in honor of an important elder. In his three decades of service, Dr. Boxberger has contributed immensely to the field of anthropology in the Northwest, both as a professor and applied anthropologist, and as an advocate for indigenous rights. Dan's emphasis on the importance of understanding the contexts of data for analysis, and connections between the past and the present continues to influence many students and colleagues. This symposium's topic reflects his attention to "connections in context". Paper presentations will be followed by some time to speak directly about Dan and his work. If you, or your practice, have been influenced by the work of Dr. Boxberger, please consider joining us for this symposium. [Session 7]

**Pouley, John (organizer) (Oregon State Historic Preservation Office), Catherine Dickson (Confederated Tribes of the Umatilla Indian Reservation), Dave Ellis (Willamette Cultural Resources Associates, Ltd.) and Rick McClure (U.S. Forest Service, Gifford Pinchot National Forest)**

***Applying the National Register Criteria: Assessing Eligibility of Pre-contact Archaeological Sites under Criteria A, B and C***

As a holistic discipline, archaeology has the ability to serve both the academic community and the living communities that have ancestral connections to the places archaeologists explore. In fact, under the National Register of Historic Places (NRHP), pre-contact archaeological sites can be viewed as significant for more than or aside from the ability to answer academic research questions. While pre-contact archaeological sites are less often determined or recommended eligible under Criteria A, B or C than under Criterion D, evaluations should still assess eligibility under all four. Understanding all characteristics of a historic property that qualify it for the NRHP assist with assessing adverse effects and how they may be mitigated. It is therefore additionally important for the archaeologist to incorporate different cultural views relating to the importance of a place when assessing eligibility. This forum will discuss applying Criteria A, B, and C to pre-contact archaeological sites with examples. [Session 16]

**Rossi, Mary (Eppard Vision-APT Program)**

***CRM and the State Environmental Policy Act (SEPA): What's the Connection, What's New in 2014, and Why It Matters***

In 2012, the State Legislature passed Senate Bill 6406 directing the Department of Ecology to modernize the rules guiding state/local agency SEPA reviews; the purpose of the modernization is to bring SEPA in line with current land-use planning and development regulations, including the Growth Management Act and the Shoreline Management Act. As required by the bill, Ecology convened an Advisory Committee of various interest groups to provide input on two rounds of rule updates and to serve as informal liaisons to others with an interest in SEPA. The first round of updates became effective January 28, 2013. A second and more comprehensive update will be adopted in early March 2014. Join panelists from Ecology's Advisory Committee, DAHP, and the Yakama Nation for a discussion about the SEPA rule updates and how they will affect CRM in Washington State. Learn how to use SEPA policies to enhance your CRM work. **[Session 2]**

**Shannon, Donald (Willamette Cultural Resources Associates)**

***The Future of Ethnographic Research in the Pacific Northwest; Compliance and Academic Models***

This session will highlight the importance of ethnographic research with Tribes in the Pacific Northwest, and to show how the Federal compliance process can generate ethnographic work. Panelists will represent Federal Agencies who fund ethnographic research, academicians who work with regional Tribes, staff from Tribal cultural resource programs, and private sector cultural resource consultants. We will discuss some of the differences between academically driven ethnography and compliance ethnography, both through consultants and research done by Tribes. Compliance ethnographic work highlights the living culture of Tribes in the Pacific Northwest, exemplified by issues such as: cultural adaptation to a new riverine ecology; restricted use of traditional homelands to hunt and gather culturally significant plants; the complex dynamics of access to salmon and salmon fishing; and many more. The importance of ethnographic research, specifically related to Traditional Cultural Properties, is increasingly acknowledged in management documents generated by land-managing agencies. **[Session 3]**

**Steinkraus, Sarah (Central Washington University), Steven Hackenberger (CWU), and Robert Sappington (University of Idaho)**

***Poster Symposium: Columbia Plateau Homelands, Households and Habitats***

Archaeological investigations of households continue to develop at several levels: regional synthesis; feature analysis and activity patterns; collections inventory and analysis; site mapping, scanning, and sensing; and analyses of soils, residues and microstratigraphy. Demographic models are undergoing refinement, and greater variation in settlement patterns is now recognized within and between regions. Fuller inventory, mapping, and protection of house features and sites are in progress. Minimally destructive approaches for studying sites and house features are becoming practical and affordable. **[Poster Session I]**

**Stevenson, Alexander (Historical Research Associates, Inc) and J. Tait Elder (ICF International)**

***Collaboration and Competition: Working Together to Address Challenges and Further our Shared Goals***

As archaeologists, historians, and ethnographers, we strive to make meaningful contributions to our chosen fields of study. Regional meetings and professional associations provide opportunities for us to share ideas, discuss challenges, and explore topics that interest us in business and in our technical fields. When the conferences and meetings are over, it is rare that this collaboration carries over into our technical work, especially in a competitive marketplace. However we believe that this insular orientation is detrimental to the field and to our clients' interests. It is our goal in this session to identify and discuss real world factors that drive our collaboration, or lack of it, and discuss approaches that will aid us all in realizing our professional and personal goals without undermining the financial success of our companies. It is our intent to create discussion not only among our panel members but ideally among session attendees. **[Session 1]**

**Swords, Molly E. (SWCA Environmental Consultants) and Mary Petrich-Guy (University of Idaho)**

***Making Public Connections: Public Archaeology in Practice***

Over the last several decades, the meaning of "public archaeology" has evolved. Ethics of stewardship and public interest demand archaeologists continue to approach archaeology and cultural resource management with communities in mind. Now also referred to as "community archaeology," this domain is approached through a variety of contexts, including mitigation, community empowerment, museums, research, digital media, and collaboration between educators and archaeologists. Archaeologists must also take into consideration such issues as protecting site locations and data. In this symposium, we will examine some recent archaeology projects practicing community-based engagement and education throughout the Pacific Northwest. **[Session 10]**

**Taub, Alex A. G. (Wenatchee Valley College) and Dr. Julia Smith (Eastern Washington University)**

***Applying Anthropology to Teaching Anthropology***

How are we currently applying the methods of anthropology to improve our classroom outcomes? How are we using participant-observation, excavation methodologies, or biological studies to improve our classroom environments and measuring the outcomes? This symposium will present a few methods used by instructors and students in their own programs. It will end with an open discussion and sharing of ideas and approaches between panel members and audience. **[Session 4]**

**Taylor, Laura (Western Washington University)**

***Why Heritage Matters***

As defined by Gregory Ashworth, heritage can be viewed as a process, whereby objects, events, sites, performances, and personalities derived from the past are transformed into experiences in and for the present. The way heritage is manifested is telling of the culture it represents. These papers explore heritage and tourism: what it is, whom it is for, and who benefits (or who is hindered) by its presence. Highlighted in this discussion are issues of authenticity, place identity, and multi-vocality in walking tours of Whatcom County, Washington, tourism and activism in the Occupy Movement, and speculation, promotion, displacement, and documentation of petroglyphs in Roosevelt, Washington. **[Session 23]**

## Papers

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**Adams, Ron (Archaeological Investigations Northwest, Inc.) and Nicholas Smits (AINW)**

***From Wide-Open Town to Chinatown: Investigations at Site 35WS453 in The Dalles, Oregon (Part I)***

In 2013, AINW conducted archaeological testing at site 35WS453 for the proposed Granada Block Redevelopment project in downtown The Dalles. The City of The Dalles, in partnership with private developers, plans to build a hotel on city property within site 35WS453, which encompasses half of a city block. Historically, the businesses that occupied the block between the 1850s and 1870s were part of the city's earliest commercial district. Between the 1880s and 1930s, the northern half of the block was the center of The Dalles' Overseas Chinese community, anchored by stores, boardinghouses, and laundries. The stratified archaeological deposits at site 35WS453 are associated with commercial and residential occupation between the 1850s and 1950s, and the site's complex depositional history can be traced through multiple floods, fires, and episodes of building construction and demolition. This presentation introduces the project, the archaeological site, and AINW's field methods and results. [Session 21]

**Adams, Martin E. (Paleoinsect Research)**

***Evidence for Late-Pleistocene to Early-Holocene Cricket Consumption at the Paisley Caves Site, Lake County, Oregon***

The most common use of insects by humans is as a source of food, and Orthoptera (grasshoppers, crickets, katydids, locusts) are the most consumed of all the insect orders worldwide. Archaeological and ethnographic evidence of Orthoptera consumption by hunter-gatherers in western North America is plentiful, and the chronology for this consumption extends to approximately 5,000 years ago. Results of an archaeoentomological analysis conducted at Cave 2 of the Paisley Five Mile Point Caves Site (35LK3400) suggest that Jerusalem crickets (*Stenopelmatus* sp.) and Mormon crickets (*Anabrus simplex*) were consumed by humans there as early as 11,500 years ago. This may represent the oldest such record in North America, and the hypothesis of cricket consumption at Paisley Caves will be discussed in this context. [Session 38]

**Alapisco, Dawn Marie (Oregon State University)**

***The Skeleton in the Closet: An Historic Forensic Case from Scio, Oregon***

In August of 2011, Jenny Minten came across a coffin, complete with a skeleton, in the Independent Order of Odd Fellows (IOOF) Scio lodge. Utilizing a multi-disciplinary anthropological approach, the analysis of this individual had many significant findings. The coffin was dated to 1855-1870, the skeleton had been preserved in an arsenic heavy solution, and had likely been used as a medical model. This skeleton was determined to be male, over 40 years old at time of death, of European ancestry, and between 5'7" and 5'10" in height. The individual likely died of tuberculosis as determined by lesions on the skeleton. An interesting aspect of this project involved learning the history of the IOOF and exploring both questions and answers as to how and why the remains were in a closet. Oral histories obtained state that the remains were used in rites representing a symbolic acceptance of one's own mortality." [Session 34]

**Ames, Kenneth M. (Portland State University), Andrew Martindale (University of British Columbia), Bryn Letham (UBC), Kevan Edinborough (University College London), Kisha Supernant (University of Alberta), Susan Marsden (Museum of Northern British Columbia), Thomas J. Brown (Portland State University), Aubrey Cannon (McMaster University)**

***Sea Levels, Oral Traditions, and Settlement Pattern Dynamics in Prince Rupert Harbor: A Report on Recent Research***

In 2012, a joint University of British Columbia-Portland State University project initiated field work in Prince Rupert Harbor, BC. The project's goals include: linking archaeological data with the *adawx* (Tsimshian oral traditions) and developing a regional demographic and settlement history, including formation and development of the harbor's massive middens and villages. Accomplishing these requires developing a harbor-specific Late-Pleistocene-Holocene sea level curve, and an extensive and intensive radiocarbon dating program, necessitating refining the Delta-R correction values for the harbor for dating marine shell. Our landscape-oriented methodology includes limited augering, extensive coring, and mapping of selected villages using modern mapping technology. After two field seasons, work is advancing on the sea level curve and marine reservoir correction; 32 sites and localities are cored or augered, and approximately 150 samples dated or submitted, permitting some preliminary statements. The work with the *adawx* indicates important congruence between the archaeological and oral records. [Session 38]

**Ames, Kenneth M. (Portland State University)**

***The Social Lives of Projectile Points: Inter and Intrahousehold Variation in Projectile Point Forms in Lower Columbia River Plankhouses***

Macroscale temporal and spatial variation in projectile form is of keen interest to North American archaeologists. Investigating microscale variation is often hindered by small samples. Two adjacent communities on the Lower Columbia River floodplain with a combined sample of ca. 3200 points have strong multilevel, microscale variation in projectile point form. The two are contemporary (ca AD 1400-1830), 8 km apart and occupied by the same ethnic group. As previously shown, the sites contain the same projectile point types in significantly different proportions. At Cathlapole, Houses 1 and 4 have different frequencies of types (House 4 has the same type as Meier), while the three excavated compartments of House 1 display very different frequencies of points among them, including rare points virtually absent elsewhere. These households and segments differ in status and while there was community level production specialization, there was production fluidity at the household and household levels. [Session 36]

**Angelbeck, Bill (Douglas College)**

***Expressions of Power on the Landscape: Examining the Dispersed Settlements of Upper Skagit Peoples***

Coast Salish peoples often maintained a strident sense of local autonomy, as bands and as households. While they often did act collectively, they still anchored sociopolitical power within each household. In this way, they often exhibited a decentralized or heterarchical form of power. Here, I examine how this Coast Salish form of sociopolitical organization as manifested materially in sites across the landscape in settlement patterns archaeologically and historically. Autonomous expressions of power is most clearly expressed among Upper Skagit peoples. Their "villages," for instance, often did not refer to one particular place with a concentration of houses; rather, a village often involved households dispersed for kilometres along bends of a river. While this has been detailed ethnographically, the implications for archaeologists have not been fully explored. Moreover, this Upper Skagit settlement pattern reveals further aspects about how their notions of power and autonomy play out on the ground. [Session 31]

**Archer, David J.W. (Northwest Community College) and Christine S.G. Mueller (NCC)**

***Recent Archaeological Investigations at an Early Holocene Site on the Lucy Islands, near Prince Rupert, British Columbia***

Early Holocene sites have now been identified along the entire Northwest Coast, and yet they remain elusive due to changing sea levels in post-glacial times. Archaeologists in various locations are now working to identify local patterns more precisely, and the result has been a slowly growing list of Early Holocene sites. Recent archaeological work on the Lucy Islands, located approximately 20 km west of Prince Rupert on the north coast of British Columbia, provide an example of this process. At the Lucy Island site (GbTp-1), four discrete areas of shell midden have been identified with varying ages depending on their elevations. Radiocarbon dates suggest an unusually long overall occupation, from about 9500 to 1500 BP. The findings from GbTp-1 further our understandings of early Holocene sea level changes in the area, while providing useful insights into the long-term occupation history of the site. [Session 38]

**Ayala, Tiffini (Western Washington University)**

***A Nation Away: Coping with Parental Migration in Mexican Public Schools***

In the social migration process, children are often described as baggage: "brought along," "sent for," or "left behind" by sojourning parents. Their participation in decisions to migrate has been little considered, and they are often excluded from this important social process. I feel it is necessary to provide emotional support as children learn to deal with the changes that inevitably occur with parental migration. One of the practical implications of my research includes the possible development of formal assistance programs, in order to relieve some of the burden of teachers, as well as provide support for students with migrant parents. Close and supportive peer relationships can provide emotional support, help provide a sense of security, and promote confidence in social interactions. I explore how the social process of migration is addressed in Mexican school settings, and its effects on a child's educational performance; both topics which are scarcely discussed. [Session 17]

**Bajdek, Brennan P. (Archaeological Investigations Northwest, Inc., Texas A&M University)**

***Gunning For the Shark: The Conservation of the Arch Cape Carronades***

The discovery of two 18-pounder carronades on the Oregon coast near Cape Arch in 2008 has given rise to speculation that these were armaments of the USS Shark, a naval schooner which wrecked in the mouth of the Columbia River in 1846. Since 2009, the Conservation Research Laboratory at Texas A&M University has been building the evidence through its conservation efforts. From identifying maker's marks and serial numbers, to scouring records in the National Archives in London, to a single copper bolt from a shipyard in New York, each step in the conservation process has revealed something



new and fascinating about the guns. This paper will serve as an update on the efforts currently taking place at Texas A&M University while also presenting new evidence for the identification of the Arch Cape carronades." [Session 24]

**Barlow, Kathleen (Central Washington University)**

***Enchantment and Seduction: Outrigger Canoe Voyaging and Gender Ideology on the North Coast of Papua New Guinea***

Up until the late 1980's, Murik, a fishing and trading people of Papua New Guinea, sailed outrigger canoes on trade voyages that were replete with a dialogic symbolism about male and female power in dynamic relation to each other. These canoes express the importance of canoes as symbols of community and their role in bringing resources to the community, expressed in idioms of sexual desire, acquisitiveness, and the ability to charm trade partners into giving more than they might have intended. [Session 12]

**Barrett, Christopher (Western Washington University) and Joan Stevenson (WWU)**

***Diagnostic Trajectories to Celiac Disease and Gluten Sensitivity, Symptom Levels and the Gluten Free Diet: Persisting Challenges***

Objectives: The survey was conducted to assess participant and participant's friend's compliance to a gluten-free diet (GFD) in response to a celiac disease (CD) diagnosis in what is believed to be a motivated convenience sample. Methods: The questionnaire is constructed with the leadership of the Bellingham Gluten Information Group (BGIG). Participants are recruited from BGIG, snowball, and online sampling. The survey covers material including frequency of wheat consumption, gastrointestinal complications, and diagnosis. Participants evaluated frequency of symptoms before and after GFD. Results: Sample pool: predominately European descent, ages 20 to 80, highly educated, and over 50% making more than 50 thousand dollars a year, indicating capability of affording cost of GFD. Conclusion: The participants are highly motivated, reporting significant reduction in symptom frequencies on GFD. Newly diagnosed individuals should know of health ramifications the diagnosis and educate family members on significance of being tested for CD given increasing global frequencies. [Session 18]

**Beauchamp, Douglas (Independent Arts Consultant)**

***Glyphland: The Story of the Century-long Speculation, Promotion, and Unlikely Journey of the Roosevelt, Washington, petroglyphs.***

In the early 1920s an Oregon newspaper announced discovery of "Picture Writings" near Roosevelt, Washington, on the Columbia River. A popular 1921 volume, Oregon, provided drawings of petroglyphs from the site. The Oregon State Motor Association promoted it as destination for vacationers, via ferry from Arlington, Oregon. Thus began "Glyphland" and nine decades speculation, promotion, displacement, and documentation. The John Day Dam project in the 1950s and 1960s sparked relocation of 27 of the riverside basalt boulders to a civic park near Roosevelt. After forty years and visits by thousands, neglect motivated a 2003 move under the auspices of the Army Corps of Engineers, in consultation with tribal and park representatives, to Horsethief State Park. In 2012 these 27 boulders joined other petroglyphs displaced by The Dalles Dam in the 1950s to become part of the Temani Pesh-wa Trail. Today this display, along with the nearby Tsagiglalal petroglyph, is a popular heritage attraction." [Session 23]

**Becker, Rory (Eastern Oregon University)**

***LiDAR Applications in Applied Archaeology***

Light Detection and Ranging (LiDAR) technology can be a useful tool in both the identification and management of historic properties. High resolution Digital Elevation Models (DEMs) generated through LiDAR data can inform our understanding of past human activities expressed on the surface both at the site and landscape levels. LiDAR data has been used successfully in the mitigation of adverse effects to historic sites in Oregon and as our familiarity with the technology grows so too will its potential uses within cultural resource management and archaeological research. This paper provides a brief discussion of how LiDAR works, presents information on obtaining LiDAR data and DEMs in the Pacific Northwest, and details some of the potential benefits it may provide to archaeology and cultural resource management projects. [Session 26]

**Bernick, Kathryn (Royal British Columbia Museum)**

***Introduction: Pacific Northwest Wet-Site Archaeology in Global Perspective***

The international circle of wetland archaeologists knows the Northwest Coast primarily for intertidal fishing features, basketry, hydraulic excavation, apt ethnographic analogy, and persistent use of the term "wet site." And Ozette. In contrast, wetland archaeology in Europe and Asia features lake dwellings, watercraft, trackways, burials, and geomorphic context. The latest European trend is to abandon the concept of wetland archaeology as a distinct sub-discipline. In the Pacific Northwest, wet sites are defined by the presence of waterlogged vegetal cultural material and their scope is vast and

multifaceted. It is the practical aspects that lead archaeologists to share field and lab procedures. In that sense, we have been a step ahead from the start. [Session 28]

**Bippes, Brandy (Eastern Washington University)**

***Anthropological Inspiration: Applying Anthropological Foundations Across the Curriculum***

Educational professionals in training are employing Eastern Washington University's studies in anthropology as foundational skills in teaching across the curriculum. Explore rural Washington State, Cuba, China, Germany, Austria, Finland, Switzerland, Luxembourg, France, Canada, and England, as they become an essential springboard for teaching English composition, Teaching English as a Second Language, technical communication, public relations, and international language preservation. The thread of anthropology creates a common fabric across the curriculum in higher education, inspiring student success. [Session 4]

**Black, Marielle (Boise State University)**

***Using XRF to Assess Variance in Obsidian Source Distribution in Southern Idaho***

Using XRF to assess variance in obsidian source distribution in Southern Idaho

For the last 35 years X-ray fluorescence spectrometry (XRF) has been used to assess the geochemical signature of obsidian lithics in California, the Great Basin, and the American Southwest. XRF studies allow for the differentiation between obsidian sources and the inference of Euclidean distance between the start and end of a lithic resources' conveyance. XRF measures trace element abundance of volcanic glass against known obsidian source profiles and is used in archaeology as a proxy for the measurement of prehistoric hunter-gatherer mobility. XRF results are often used to support conclusions of prehistoric hunter-gatherer mobility behaviors without a technical understanding of the underlying XRF analysis process. XRF analysis is based on the assumption that different obsidian sources have unique geochemical signatures. While volcanic glass has geochemical signatures unique to each obsidian flow, multiple flows can occur in the same area over time, therefore the various concentrations of elements can closely resemble other known and unknown resources, as well as vary within the same locale. For a thorough obsidian XRF analysis study it becomes necessary to consider: how obsidian source reference profiles were constructed, the XRF process and instrument used for obsidian artifact analysis, and the statistical methods for assigning an artifact to an obsidian source group. Additional required steps include: 1) to determine the applicability of obsidian source reference profiles for artifacts found at a local or regional level and 2) determine to what extent reference profiles from different XRF labs are interchangeable. For the Southern Idaho region, obsidian source reference profiles from the Idaho Museum of Natural History are highly differentiated on a local level while the Northwest Research Obsidian Studies Laboratory differentiates source profiles on a more regional level. Although the obsidian source reference profiles are not perfectly interchangeable statistically, using both sets of profiles enables a researcher to assign artifacts to obsidian sources more thoroughly than an individual set of source profiles alone. [Session 19]

**Blukis Onat, Astrida R. (Blukis Onat Archaeological Services, Inc.)**

***My Friends, Edith and Jean***

Edith Bedal and Jean Bedal Fish were Sauk women who gained knowledge about the mountains from their mother, Susan Wawetkin Bedal. Father James was a prospector and logger, as was brother Harry. The family homesteaded upriver, in the territory of their grandparents, Sauk leader John Wawetkin and his wife Mattie. The personal history of this family mirrors the historic trends in Cascade Mountains and includes interaction between mountain tribes and newly arriving non-Indian people. Wawetkin led surveyors over the Cascade Mountains in the 1870s. James and Harry were early miners and shingle-bolt loggers. Jean married Russell Fish and helped his parents operate the Monte Cristo Lodge. Susan, Edith, and Jean served as guides for recreational climbers. Both Edith and Harry worked for the United States Forest Service. In the 1970s, during the Sauk-Suiattle tribe's struggle for acknowledgment, Edith served as Historian and Jean served as Chairman. [Session 20]

**Bojakowski, Katie (Ashford University; Atlantic World Marine Archaeology) and Piotr Bojakowski (Ashford U, AWMARI)**  
***The Many Lives of the Equator***

Throughout its long career, the pygmy schooner Equator was chartered by Scottish author Robert Louis Stevenson to the South Pacific. It was employed as a copra trader to South America, a steam tender for the Alaskan salmon canneries, a diesel survey vessel for NOAA, and finally as a tugboat in the Puget Sound where it was eventually discarded. The many lives of the Equator demonstrate how traditionally built wooden hulls were often adapted to new purposes as economic forces transformed the maritime trading environment at the turn of the 19th and 20th centuries. Although the vessel is listed on the register of historic places, the schooner is dry-docked in the Port of Everett, Washington and has never been

recorded or analyzed. The Equator is one of many unexplored shipwrecks in the Pacific Northwest that have the potential to connect local communities with their rich maritime heritage through archaeology. [Session 24]

**Boswell, Sharon (SWCA Environmental Consultants) *Bringing it Home: Archaeology, History and Mitigation Alternatives in North Idaho***

Many archaeological projects contain community outreach components, which are generally used to provide excavation results or mitigate damage to a site. But how effective are these activities in “bringing home” information to the public? This presentation discusses several different approaches to “community archaeology” that resulted from major transportation projects in North Idaho. Examples of a museum exhibit, book and brochure provide a starting point for discussions of whether or not they are appropriate and effective ways to involve the public or provide meaningful benefits for the loss of an archaeological site. [Session 10]

**Bowden, Bradley S. (Historical Research Associates, Inc.), Thomas E. Becker (Applied Archaeological Research, Inc.), Lindsay Ponte (HRA), and Michael D. Falkner (HRA)**

***A Debitage Analysis Sampling Protocol***

Historical Research Associates, Inc., Applied Archaeological Research, and Southern Oregon University Laboratory of Anthropology performed National Register evaluations of 34 archaeological sites for the Pacific Connector Gas Pipeline. Throughout all field investigations, 1/8th inch screen was used, resulting in the collection of tens of thousands of pieces of lithic micro-debitage. Field inspection and preliminary laboratory analysis revealed that a high percentage of the micro-debitage was flake fragments and small pressure flakes with seemingly limited research value. Analysis of much of this debitage was achieved via a sampling protocol designed to ensure representativeness of the collections. This paper describes the sampling process, reports on its results, and discusses the benefits and shortcomings of the technique. [Session 13]

**Bowden, Bradley S. (Historical Research Associates, Inc.), Natalie K. Perrin (HRA), and Nicole I. Vernon (Pacific Consulting Services, Inc.)**

***Photogrammetric Recordation of a Stacked Rock Feature: A Test Case from Southern Oregon***

A recent cultural resources survey conducted by Historical Research Associates, Inc., resulted in the recordation of several stacked rock features. Following the initial recordation, photogrammetry was used to capture the resource in three dimensions. The image can be explored in Adobe Acrobat, in Google Earth, and in other applications. The process of recording the resource, processing the data, and developing a final product will be discussed, as will the various ways the product can be used to record and interpret stacked rock features. [Session 13]

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

***More Than Just - "It's the Law"***

This presentation is for people in Cultural Resource Management that want to go from good to great, who want to wake up every morning excited about what they do. Do you spend even part of your time justifying your work to hostile or ambivalent clients or land owners and want to be able to say more than “because you are required to”. Inspire your clients to get excited about your work- To be happy when they write that check. If you want to make sure that cultural deposits, features, objects and buildings have a chance to get older because you and your clients protected them, then step up to the front line. Consider the thousand small moments that through insight and hard work you line up in the right direction to inspire people to save something that they may not have even known existed. This paper is about finding ways to get agencies, clients, tax payers and each one of us excited about heritage preservation. [Session 11]

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

***What Are the Levees Hiding? The Story of the Fisher Slough Basketry, Skagit River Delta, Washington***

Levees have proven to be complex cultural features to manage or protect. It is especially important to understand the taphonomy and the nature and character of levees with regard to wet site potential. As levees by their nature are prone to harboring buried water-saturated deposits, the probability that waterlogged cultural material might be present should be considered when planning projects that involve modifications to existing levees. A fortuitous find from a buried flood deposit under the levee along Fisher Slough in the Skagit River delta illustrates the point. The find, a basketry fragment recovered by ERCI archaeologists in 2012 from 45SK438, was packed in local mud for transport to the Katzie Development Corporation's Perishable Artifact Conservation Lab in Pitt Meadows, British Columbia. After a tour of the affected tribes, the artifact is now held in trust at the Burke Museum of Natural History and Culture in Seattle, Washington. [Session 28]

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

***Wrap Up: Cost-Benefit Analysis and Lessons Learned***

Many of the costs associated with a project of this nature that has a high profile unanticipated discovery become public knowledge when they are associated with public funds. However the associated local staffing and support costs and the intangibles are also key to analyzing the overall cost of encountering archaeological material during construction. This paper explores the costs of a survey/mitigation structure versus a monitoring/mitigation model from a risk management perspective. I'll also discuss briefly the things we would do differently next time and the tactics that proved brilliant in this project. [Session 8]

**Butler, Virginia L. (Portland State University), Dylan Clark (PSU), Lyssia Coffey (PSU), Alyssa Kudray (PSU), Adrienne Nelson (PSU), and Danielle Thompson (PSU)**

***Developing a Model for Public Outreach: the Archaeology Roadshow in Portland, Oregon***

Portland State University's Department of Anthropology supports a class, "Public Archaeology," that provides a setting for faculty and students to focus on the many ways the interests of archaeology and the public converge. Students analyze case studies in heritage management, education, heritage tourism, ethics, and social justice-- to learn some of the practical challenges and "payoffs" associated with public engagement. In 2012 and 2013, students gained real world practice through organizing the Archaeology Roadshow, a 4-hour public outreach event at the term's end that included an artifact identification component and an exhibit portion—where students and community partners created hands-on activities and posters to give adults and children a deeper understanding about archaeology and local projects. The overall success of the Archaeology Roadshow (as measured by high visitor turn-out; positive reviews from survey data; and enthusiastic support from community partners and students) suggests this approach to public engagement has great potential for galvanizing public support for archaeological heritage, among other values. Here we review some of our experiences, with hopes of encouraging others to develop their own "Roadshows" to fit their local communities. [Session 10]

**Card, Judith R. (Washington State University)**

***The Nuclear-Shaped Family: New Trends in American Kinship Ideologies***

Conventionally seen as the intersection of the biological and social, kinship has attracted the interest of anthropologists since the birth of the discipline. In America, biological kinship has traditionally been privileged over social and legal kinship. Based on survey and interview data I gathered in Fall 2013, I argue that there is a current shift in American kinship ideologies. Inspired by theological beliefs about God as their adopted father, American Evangelical Christians are shifting from seeing the "real" family as biologically related to the "real" family as stable, permanent, loving, and nuclear-shaped—regardless of biological relatedness. [Session 12]

**Carner, Amanda L. (Central Washington University) and Mary Lee Jensvold (CWU)**

***Gesture Sequence in Captive Orangutans (*Pongo pygmaeus*)***

Social communication is ubiquitous across many of species. The most flexible form of communication may be gestures used by large body apes. The current study focused on gesture sequence in five captive orangutans at Woodland Park Zoo. We observed 305 gestures with 185 gestures (60.65%) occurring in 61 sequences in 2,482 minutes of data. Overall, orangutans used 272 tactile gestures (89.18%), 29 visual gestures (9.50%) and 4 facial expressions (1.31%). In sequence, orangutans used 176 tactile gestures (95.14%), 7 visual gestures (3.78%), and 2 facial expressions (1.08%). When the recipient was not attending, orangutans used tactile gestures significantly more than visual gestures  $\chi^2(1, N=298)= 4.91, p=0.027$ . When the partner was not attending, visual gestures occurred significantly less often than expected  $SD= -1.87$ . These findings support other research that orangutans frequently use gesture sequences, make high use of tactile gestures, and use them appropriately to the attentional state of the partner. [Session 37]

**Carroll, Marna A. (Central Washington University)**

***Written in the Stars and on Stone: Drawing On Native American Oral Tradition to Answer Archaeological Questions***

For two decades, archaeologists have debated how to incorporate Native American oral traditions into interpretation of data and concepts of culture history. The incompatibility between the linear Western conceptualization of time, and Indigenous conceptions of cyclic time, and a spatial organization of events frustrates researchers attempting to integrate traditional knowledge and archaeological data. An alternative approach foregrounding indigenous conceptualizations of space, time and memory can lead to a stronger interpretation of a data set and a better understanding of the regional cultural progression. It also integrates the archaeological record and Native American tradition, reconciling points of departure. This approach is applied in the reconsideration of a petroglyph excavated in Titicut, Massachusetts from a

Middle/Late Archaic context. The petroglyph references Algonquian tradition, reflecting ritual connected to site activity and to the petroglyph's owner. [Session 30]

**Cavender, Bailey (University of Idaho)**

***Where the Railways Ran: Transportation, Commerce and Sandpoint, Idaho, 1880-1935***

The railroad impacted the course of United States' development in a major way. By allowing the easier and often safer transportation of goods and people across the country, the national economy grew rapidly. Raw materials from places like the Pacific Northwest were sent east. Regional cities and towns began to use goods from all over the world, not just ones produced locally. Due to this increased ease of transport, railroad towns grew and began to prosper. Sandpoint, Idaho, is an example of such a town in the American West. This study traces the history of Sandpoint and the impact of the railroad on town development from the time Northern Pacific Railroad surveyors sited the line in 1880 until 1935. [Session 21]

***Creating a Comprehensive Research Tool: The Wah Lee Letters***

Wah Lee, Chinese American, received letters throughout his service in the American Army Air Corps, including during World War II. A collection of these communications dating from 1945-1955 are now part of the Asian American Comparative Collection (AACC), housed at the University of Idaho's Alfred W. Bowers Laboratory of Anthropology in Moscow, Idaho. In a project funded by the University of Idaho's Office of Community Partnerships, Wah Lee's individual history is being studied, and an online research tool, for those unable to access the AACC due to physical, geographical, or socioeconomic constraints, is also being produced. The results of this grant are being presented in several public forums to also raise further awareness of the artifact and archival resources held by the AACC for public research. This paper will discuss the AACC, the Wah Lee letters, and how the Lab's new online addition can be utilized as a public research tool. [Session 10]

**Charles, Theodore (University of Idaho)**

***Applied Archaeology in the Silver Valley of North Idaho***

In the mining rich environment known as the Silver Valley, two projects over the past year have sought to apply archaeological methods specifically to public engagement. While no actual excavation occurred, analysis of artifacts and oral history has shed new light on North Idaho's past. The towns of Murray and Wallace were both instrumental in the earliest gold and silver booms of the area. One project focused on analyzing and cataloging bottles in a museum collection in Murray, while the other utilizes a spatial approach to understand how saloons moved through the years on the landscape of Wallace. Each undertaking began with the premise of identifying what the community needed and then applied archaeological knowledge to the task. [Session 10]

**Cheung, Yu Ling (Hong Kong Archaeology Consultant Ltd.)**

***Cultural Resource Management in Hong Kong***

The practice of the American cultural resource management (CRM) is known as cultural heritage conservation in Hong Kong. Hong Kong is a city composed by islands and shore areas with a land mass of 426 sq mi and a population of seven million people; that is, slightly smaller than the Seattle Metropolitan Area but with the same population size as the State of Washington. Given the long occupation history from the Neolithic era through the beginning of the British Colonial administration in the mid-19th century. The City is rich in pre-historic, historic and colonial cultural resources. The Antiques and Monuments Ordinance was enacted in 1976 to regulate the practice of CRM within city boundary. The presentation discusses the development and practice of CRM; and the integration of Chinese and British methodology in the post-colonial period from the first-hand experience of the presenter who also has the background of an American anthropological-archaeological education and CRM practice. [Session 11]

**Churchill, Thomas E. (Archaeological Frontiers)**

***Bridges of Time: The Use of Photography in Archaeology***

When was the last time you took a photograph of a site or artifact? Photographs collect stories and are packages of time. The past is captured by the lens and then described by the time traveler to bridge the gap between the past and the present. A brief overview of the historical use and types of photography in archaeology is explored. Also a critique of the current use of photography as an archaeological tool is presented. [Session 26]

**Cohen, Jenny (University of Victoria)**

***Paleoethnobotanical Investigations of Berry Seed Concentrations and Wooden Artifacts from the Kilgii Gwaay Wet Site***

Kilgii Gwaay is an intertidal archaeological site dating to 10,700 cal BP, located in southern Haida Gwaii, British Columbia. Worked wood artifacts revealed the site's significance as one of the earliest known examples of preserved plant usage on the Northwest Coast. Further excavations and work as part of my thesis research has added considerably to the known

plant technologies and local paleoecology. Anatomical and morphological analyses of waterlogged material indicate the use of several species by ancestral Haida, including Sitka spruce (*Picea sitchensis*), Western hemlock (*Tsuga heterophylla*), alder (*Alnus* sp.), salmonberry (*Rubus spectabilis*), and red elderberry (*Sambucus racemosa*). These preliminary findings are consistent with local resource use and provide further detail to paleoenvironmental records for the region. [Session 28]

**Connolly, Thomas J. (University of Oregon Museum of Natural & Cultural History), Julia A. Knowles (U of O MNCH), Christopher L. Ruiz (U of O MNCH)**

***Overland through the Columbia River Gorge: The Dalles-Sandy River Wagon Road***

From The Dalles, most Oregon Trail immigrants elected to either raft their wagons down the Columbia River or travel overland via the Barlow Road around the south side of Mt. Hood. Following statehood, and the discovery of gold in eastern Oregon, overland travel through the Gorge became an increasing priority, and the state appropriated resources in 1872 for construction of a wagon road from The Dalles to the Sandy River. Construction progressed throughout the 1870s, but due to treacherous slopes, steep grades, and the building of a rail line through the Gorge by the early 1880s, the road's promise was never fully realized. Nonetheless, it was an important initial step by the state to manage a multi-county transportation project, anticipating the later and more successful Columbia River Highway built between 1913 and 1922. The wagon road's surviving grades remain as tangible examples of early road engineering, and are an important part of the state's transportation history. [Session 14]

**Copp, Stan (Langara College), Tanja Hoffmann (Simon Fraser University), Emily Wilkerson (Sunstone Archaeological Consulting)**

***Blueberry Fields Forever (Not!) – The Carruthers Site, Lower Fraser Valley, B.C.***

The Carruthers site (DhRp 11) is a large wetland habitation and food-processing site situated in the Pitt Polder area of Pitt Meadows, British Columbia. Several of the large mound features that characterize the site were excavated by Simon Fraser University in the early 1970s. However, since that time the site has been heavily impacted by commercial agricultural activities that include diking, ditching, and leveling of the mound features. Excavations conducted by Langara College some 30 years later focused on surviving basal cultural deposits, which include wet-site components. We emphasize how, despite the fact that much of the site has been obliterated by commercial development, even a small window into the past via a water-saturated deposit can be used to refine interpretations of site function. [Session 28]

**Croes, Dale (Pacific Northwest Archaeological Services and Washington State University) Symposium**

**Discussant: *Wet-Site Archaeology in the Pacific Northwest—40 Years Since We Formally Discussed “Why Dig ‘em?,” at the 28th Annual NWAC, Seattle.* [Session 29]**

**Cullon, Deidre (University of Victoria, Laich-Kwil-Tach Treaty Society) and Heather Pratt (Golder Associates Ltd.)**

***Saratoga Beach Wooden Stake Fishing Structures: A Northwest Coast Example of Longshore Weirs***

Close inspection of site DISg-5 at Saratoga Beach on the east coast of Vancouver Island reveals the presence of ten longshore weirs. Currently most Northwest Coast wooden-stake-fishing features are associated with riverine or estuarine environments making these longshore features unique in the current record. These longshore weirs span approximately 800 metres of beach and are positioned in the lower third of the intertidal area. They range in preservation from a single stake to 135 stakes, the better preserved features offering only hints about their original shape as lines both parallel and perpendicular to the tide line or as a rounded enclosure on the shore. Currently the only DISg-5 longshore weir radiocarbon date falls within or is close to the range of dates from a wooden-stake riverine feature likely associated with Black Creek (also on Saratoga Beach). Its date range is 1140 cal. BP to 920 cal. BP. [Session 29]

**Cummins, Andrea K. (Cummins Botanical Consultants)**

***The Interplay of Biology and Archeology in Environmental Restoration***

Current environmental restoration projects are often expansive, expensive, and time-consuming undertakings with many disciplines involved. In a perfect world, all specialists would be brought in for planning on day one, but that's rarely the case. What stage the project is in when you're asked to participate varies widely. Understanding where you are in the process (planning, damage control, etc.) and becoming more familiar with the roles of other specialists will help you navigate the project and fine-tune a strategy to achieve the best possible outcome. Biologists and archeologists often face similar but different challenges and should work to develop better understanding of each other's needs/requirements for a restoration project. Why dig two holes when you can dig one for both investigations? Becoming more familiar with each other's roles in these complicated projects is essential to developing outstanding solutions to wicked problems. [Session 35]

**Coyote, Arrow (Confederated Tribes of the Colville Reservation)**

***Recording Traditional Cultural Properties: Wallowa Case Study***

Traditional Cultural Properties (TCPs) can be difficult to record. Identification depends on consultation with the affected community, and the community may be reluctant to share information. Boundaries are difficult to define and may extend outside the projects' Area of Potential Effect (APE). The project proponent needs to justify the recording of the TCPs but keep the information and location confidential. This presentation provides an example of how TCPs were recorded in the Wallowa Valley using the Confederated Tribes of the Colville Reservation (CCT) methods of conducting TCP investigations. [Session 30]

**Daniels, Phoebe (University of Washington)**

***Long Term Shellfish Harvest and Resource Stability in the San Juan Islands of Washington State***

Hunter-gatherer societies on the central Northwest Coast of North America sustained large, semi-sedentary populations for thousands of years. Dynamic relationships between culture and biotic resources would have been necessary to support these cultures over such long periods of time. In this paper taxonomic and size analyses of archaeological shell remains from two large winter villages in the San Juan Islands, WA provide insights into the human-shellfish relationship over time. The results indicate that clam populations were not only stable over time but might have actually improved. However, the results do not indicate that the shellfish habitat was actively managed, though management strategies not tested for in this study may have been in place. [Session 27]

**Davis, Mary Anne (Idaho State Historical Society), Ann Ferguson (ISHS), and Matthew Russell (National Park Service)**

***Underwater Archaeology in Idaho: The Lake Pend'Oreille Dugout Canoe***

In 2004, sport divers located a submerged wooden artifact in Lake Pend'Oreille in northern Idaho. This artifact appears to be a short dugout canoe. Archaeologists from the Submerged Resources Unit at the National Park Service recorded the dugout canoe and took samples for species identification and dating purposes. The on-going research by the authors suggests the canoe is historic and possibly associated with the fur trade era. The project also highlighted the need to clarify ownership of submerged artifacts in Idaho's navigable waters. [Session 24]

**Dewey, Chris (Beeswax Wreck Maritime Archaeologist)**

***Cooperative Connections: Professional Archaeologists Team-Up with Volunteer Divers***

This paper presentation examines the benefits and challenges of working with volunteer divers on underwater archaeology projects, as well as coordination efforts with state archaeologists. The paper looks at successful projects around the United States and Canada in order to determine the best practices for future efforts in the Northwest. The result of this research is a guide to developing a community based underwater archaeological program. [Session 24]

**Dinubilo, Shaun (University of Idaho)**

***Lithic Reduction at Bernard Creek Rockshelter, Idaho***

The examination of bifacial thinning and stone tool curation, when used in combination with descriptive statistics of lithic debitage, can demonstrate evidence of past behavior in the archaeological record. Bernard Creek Rockshelter, an archaeological site located in Hells Canyon National Recreational Area in Idaho, was tested in 1976. Bernard Creek Rockshelter contains a wide variety of lithic debitage ranging from primary to terminal flakes. Dates from this rockshelter range from contact period to about 7125 years before present. The re-analysis of lithic material from this site will help the University of Idaho Alfred W. Bowers Laboratory of Anthropology to revitalize the site collection and will shed light on a site that has potential to better understanding of the Cascade archaeological phase. [Session 5]

**Daschbach, Alissa Bronwyn (Western Washington University)**

***Inflammation, Poverty and Type II Diabetes***

Poverty suffered early in life leaves the human body in a vulnerable state, exposing the sensitive biological system to inflammation; a crucial immune response to injury or infection. Longitudinal population studies have established a direct correlation between lower socioeconomic status and inflammation. Further, growing evidence suggests that inflammation is a potential pathway linking stress to pathogenesis of chronic diseases (i.e. cardiovascular disease, neurodegenerative disorders, and Type II Diabetes). American Indians and Alaska natives have the highest rates of poverty and Type II diabetes in the nation. The medical system and federal government fail to serve the health needs of the Native American community in the face of this epidemic. In looking at local patterns of poverty, health and prevalence of Type II Diabetes among the Coastal Salish; I will show that social suffering in the face of poverty and historical trauma is a clear link to diabetes causality and prevalence. [Session 37]

**Eichelberger, Justin E. (Oregon State University)**

***Studying Up' at Fort Yamhill: The Historical Archaeology of Officer's Row***

Nestled in the eastern foothills of the Oregon Coast Range 30 miles west of Salem, Oregon Fort Yamhill (1856-1866) was established by the U.S. Army to guard the Coastal Indian Reservation. Charged with controlling traffic in and out of the northern part of the reservation the post served as a post graduate school for several officers who would later become high ranking generals during the American Civil War. During their service these men, often affluent and well educated, held the highest social, economic and military ranks at these frontier military posts. This paper examines the material culture of these elite men recovered during seven Oregon State University archaeological field schools which focused on the excavation of three officers houses including the commanding officer and two subaltern officer's houses. The preliminary results of these projects suggest that the material culture of these officers reflected their high social, economic and military status within the United States Army and mid-19th century America. [Session 21]

**Ek, Jerald (State University of New York at Albany) *The Exception Proves the Rule: A Case Study of Collapse and Resilience from Champotón, Campeche, Mexico***

The end of the Classic Period was characterized by political upheaval, endemic warfare, the abandonment of cities and regions, demographic movements, and major long-term changes in human-environmental interactions across much of the Central Maya Lowlands. Despite over a century of research focusing on the Classic Maya collapse, there has been very little consensus on the causes, chronology, and aftermath of historical dynamics during this period. Recent archaeological research within the Río Champotón drainage has provided a regional view of these processes in an area that survived the collapse and flourished through the Postclassic and Colonial Periods. This paper examines the Classic to Postclassic transition in the Champotón region by adopting a dimensional approach to understand the complex interplay between political, economic, social, and ecological change during this period of upheaval. Drawing on theoretical and conceptual frameworks from resilience theory and complex systems theory, the results of this research helped identify the factors that facilitated the sustainability and resilience of populations in the Champotón region during a period of political and social upheaval. The Champotón case study provides insight into both an important transitional period in this unique regional setting while also helping to contextualize the very different dynamics of collapse and abandonment that took place within neighboring areas. [Session 19]

**Elder, Tait J. (ICF International), Daniel M. Gilmour (Willamette Cultural Resources Associates Ltd.), Virginia L. Butler (Portland State University), Sarah K. Campbell (Western Washington University), and Aubrey Steingraber (WWU) *Look Inland, Look Deeper: Insights from an Analysis of the Fish Weirs of Washington***

Using the recently augmented coastal fish weir record in Washington State, which includes data from 22 sites and 36 radiocarbon dates, we systematically consider how a range of geomorphic and anthropogenic factors affect the visibility, accessibility, and preservation of fish weirs. Our analysis indicates that delta progradation, anthropogenic landscape alteration, and archaeological research design appear to have a strong effect on the distribution of documented fish weirs along the Washington coast. Other factors, such as sea level rise, isostatic rebound, basin fill, and coseismic subsidence have a more limited effect on the distribution of documented fish weirs along the Washington coast. The insights gained from our analysis highlight the importance of developing sampling methods that appropriately consider the local and regional geomorphic context when designing archaeological investigations and interpreting the distribution of archaeological resources in coastal environments. These considerations are applicable to any archaeological resource located along the coastal margin, particularly wet sites. [Session 29]

**Eldridge, Morley (Millennia Research Ltd.)**

***Wet Sites: The Dummies Guide to Finding Them***

Relatively few archaeologists, from either the academic or consulting worlds, have a record of regularly identifying, investigating or managing wet-site components during their careers. Many consider wet sites to be very rare, hard to find, and even harder to test, excavate, or deal with the ensuing conservation issues. None of these points is true, although certainly there is some specific knowledge required. This paper provides guidelines for recognizing circumstances where wet site material has high potential to be present, and how to find it. Testing, excavating, and conservation are briefly addressed. Examples drawn from the dozens of wet sites I have recorded in British Columbia and Alaska illustrate the geomorphological attributes of wet sites, the types of natural and cultural changes that are likely to expose or damage them, and the specific steps that led to finding them. [Session 29]



**Elliott, Patrick (Environmental Science Associates) and Tyler Graham (Washington State Department of Transportation)**  
***The Great Wall of Harrison Street: An Unanticipated Discovery at the North Portal Access of the SR99 Bored Tunnel Project***

An Unanticipated Discovery Plan or Inadvertent Discovery Protocol (UDP/IDP) is an important tool to handle the unexpected discovery of cultural resources during a construction project. UDP or IDP is put into place to protect cultural resources; however the chance of actually using the protocol can be few and far between. This paper will explore one such example of an unanticipated discovery of an historic period retaining wall that took place at the AWV Bored Tunnel Project during North Portal Access excavation. Topics will include initial discovery of the wall and protocols for construction crew to ensure security of the wall and its related components within the sensitive area, supplementary background research of the area to better understand the discovery and compile evidence for the site form, as well as the mapping and documenting during and after the exposing of the historic-era infrastructure. [Session 14]

**Endacott, Neal (Central Washington University)**

***Medium and Small-Sized Mammals from the Sanders Site, Yakima County, WA as Paleoenvironmental Indicators***

The Sanders site (45KT315) located on the U.S. Army Yakima Training Center, was excavated by Dr. William Smith during two Central Washington University archaeological field schools in 1971 and 1972. Excavations produced large collections including abundant lithic and faunal remains. The majority of specimens are deer-sized but the assemblage also contains numerous medium and small mammal taxa. This study explores the potential of medium and small mammals from the Sanders site to provide insights into past upland settings. Of particular interest are temporal changes in *Lepus* spp. (jackrabbits), *Sylvilagus cf. nuttalli* (mountain cottontail), their paleoenvironmental significance, and the osteometric data used to distinguish them. [Session 5]

**Epperson, Megan (Central Washington University)**

***Stories Affecting Stories: The Convergence of Native American Folklore and Nonfiction Literature***

There are a number of contemporary Native American writers, such as Leslie Marmon Silko, Winona LaDuke, and N. Scott Momaday, who draw upon their own traditional culture, incorporating tribal stories and oral traditions into the structure and content of their work. This integration of traditional folklore into modern fiction has become a recognized form in the postcolonial literary tradition. However, the use of Native American traditional stories within the genre of nonfiction, particularly in the construction of the autobiographical narrative merits further analysis. How are contemporary Native American authors informed by their cultural heritage and associated tribal stories and texts? What are the responsibilities and critiques of dominant society that emerge from these orally transmitted values? Using narrative analysis, this paper proposes that tribal stories and cultural heritage have an impact on contemporary Native American nonfiction. Specifically, I will address the development of autobiographical identity and writings. [Session 6]

**Evans-Janke, Leah (University of Idaho, Alfred W. Bowers Laboratory of Anthropology), Ariana Burns (U of I, ABLA), and Dakota Wallen (U of I, ABLA)**

***Florence, Idaho: Fabulous but Soon Forgotten***

As interpreters of the recent past, we strive to overcome the romanticized version of the "Wild West". Unfortunately, hours spent dismantling the myth do little to prepare us for that moment when we confront an archetypical Hollywood mining town. Florence is maddening in its ability to be one of the most predictable and yet outlandish mining communities in Idaho. Florence predictably boomed, waxed and waned, and its 9,000 residents faded into nothing more than an indistinct memory within 60 years. What was not expected were wild tales featuring fallen women, gunfights, rampant crime and vigilantes. Naturally, the tall tales are just about all that remain of Fabulous Florence and have secured the town as a place of legend in Idaho history. [Session 22]

**Ferry, Joy D. (Central Washington University) and Dr. Patrick McCutcheon (CWU)**

***A Diachronic and Synchronic Comparison of Sites 45PI0429, 45PI0438, 45PI0406, and 45PI0408, at Mount Rainier, WA***

Synchronic comparisons across archaeological components are only possible when lithic classifications are comparable. For this study, the 45PI0429 assemblage from Mount Rainier was analyzed using a similar paradigmatic classification scheme to previously analyzed assemblages (45PI0438, 45PI0406, and 45PI0408). A consistent stratigraphic marker (Mt. Saint Helens Yn tephra, ca. 3500-2900 RCYBP) was used to define components for comparison. The Yn component includes lithics excavated from the Yn tephra marker bed and post-Y paleosol. Later and earlier components consist of lithics excavated from below and above the Yn component. Diachronic comparisons within 45PI0429 were made across components, and synchronic comparisons between sites were restricted to the Yn component only. Dimensions compared consist of

fragment type, raw material, reduction trajectory, and thermal alteration. Initial results indicate significant variability in the distribution of these dimensions among sites and within the Yn component. [Session 19]

**Ficca, Jodie (University of Idaho)**

***The Occupy Movement, Materialism, and Tourism***

After participating in the Occupy Movement in Seattle and Philadelphia during 2011-2012, I will explain the dark tourist's need for the authentic day-to-day life experience in urban situations through a Post-Modern and Neo-Marxist lens. I will compare the basic theories of the movement to their materiality inside of a non-materialistic ideology and ask the question: what role did touristic observation play in how I viewed the symbolic materiality of Occupy's original artwork, posters, fliers, and pamphlets through ethnography and participatory action? Was this action merely to find my own identity by moving from the exotic abroad to my own urban cities, or was it a genuine desire for change? I will link this to the meaning of tourism, activism, and the art of conflict as it relates to direct action in urban America and participatory observation in civil engagement. [Session 23]

**Fiegel, Amara (Eastern Washington University)**

***From Bartender to Research Aficionado***

As a returning student, preparing for a new career presents several challenges for reentering the work force. I started out with very little knowledge of how my degree would help me past school. Several of my anthropology professors helped me identify my strengths. Shortly into my first year I became a McNair Scholar. This began my relationship with my mentor who then became my grad school adviser. She was always open to my ideas and offered several of her own of how I could become a better candidate in my career. I took classes and used both my McNair research and later thesis to gain marketable experience. The research skills I've learned as an undergrad have become an important part in my growth as a graduate student and in my professional career. These practical and real life experiences have helped me solidify the direction I want to take professionally. [Session 4]

**Finkelstein, Aviva (Sources Archaeological, & Heritage Research Inc., Simon Fraser University), Morgan Bartlett (Sources Archaeological & Heritage Research Inc.), and Kathryn Bernick (Royal British Columbia Museum)**

***Wet-Site Artifacts from Hopetown Village***

Archaeological excavations in 2010 by the Gwawaenuk Tribe in partnership with Sources Archaeological and Heritage Research Inc. recovered 300 perishable artifacts from Hopetown village (EfSq 2) in the Queen Charlotte Strait region of the British Columbia coast. The majority of the perishable materials are from a deposit with a radiocarbon age of 510-430 cal BP/360-330 cal BP (Beta-297450). Artifacts include cedar-bark basketry, cordage rings, linear cordage, a bent-wood fishhook, other worked wood, and some intriguing "whatsits." The deposit also contained several hundred pieces of bark and wood chips (woodworking debitage), and artifacts of durable materials. From a different part of the site, the team recovered a portion of an historic canoe and paddle. Characteristics of the perishables suggest greatest similarity to wet-site assemblages to the north, particularly the Axeti site in Kwatna Inlet, and general congruence with Kwakwaka'wa material culture. [Session 28]

**Frederickson, Victoria (Central Washington University) and Joseph G. Lorenz (CWU)**

***Species Identification through aDNA Barcode Analysis of Salmon Bones of Central Washington Archaeological Sites***

Salmon bones found at archaeological sites have historically been very difficult to identify, by osteometric identification. While research has been conducted that use DNA comparison to validate osteometric information of salmon species, research on the subject of species identification that uses aDNA as the primary source of identification of salmon bones from archaeological sites has yet to be fully studied. I am using the DNA sequence of the mitochondrial DNA cytochrome B (cytB) locus in an effort to identify the species of salmon bones found at archaeological sites in Washington State. Using PCR to amplify cytB I have been able to identify the species of salmon from modern specimens and I am currently attempting to amplify the cyt locus from ancient salmon remains. This technique when applied to archaeological faunal specimens could be used to determine species identification of specimens that have been historically problematic to identify by other methods. [Session 5]

**French, Jamie (Oregon State University)**

***The Dalles Chinatown Site, a Laboratory Marathon***

Excavations at site 35WS453 began in 2011. Now, three years later, the process of curating the tens of thousands of artifacts recovered from five test units is almost finished. Here is a report of my experiences with this site and its artifacts

from the moment I saw Eric Gleason's 2011 NWAC presentation and naively and enthusiastically asked if I could curate the collection. [Session 25]

**Fuld, Kristen A. (Archaeological Investigations Northwest, Inc.), Terry L. Ozbun, (AINW) and Sarah L. Jenkins (AINW)**  
***A Recent Pleistocene Megafauna Discovery in the Willamette Valley***

Large animal bones were discovered in the floor of a pipeline trench, more than two meters below the ground surface in an agricultural field in Linn County, Oregon. The bones were found within the horizontal boundaries of previously recorded archaeological site 35LIN445, a small lithic scatter where all the artifacts were found on the surface. Archaeological excavation within the pipeline trench recovered fragments of a scapula, innominate, and sacrum representing extinct Pleistocene megafauna, possibly short-faced bear and ground sloth. No artifacts were directly associated with the bones. Two tiny flake fragments (less than 3 mm in maximum dimension) were identified during microarchaeological processing of sediments recovered from deposits surrounding the bones but these were interpreted as intrusive. Multiple lines of evidence suggest the Pleistocene megafauna represent a paleontological locality rather than an archaeological deposit. [Session 38]

**Gamet, Nambi (Eastern Washington University)**  
***The Effects of Intentional Cranial Deformation on Fontanelles***

The relationship between cranial deformation and variant sutural and fontanelle closures has been widely studied. The majority of studies agree on two general conclusions 1) cranial deformation probably does influence the formation of sutural/fontanelle closure in some way, and 2) the probable mechanism is increased pressure on sutures by intentional or incidental stressors, preventing normal closure. There are, however, scholars who conclude that there is minimal effect due to deformation, and variant closures are instead the result of genetic control. This study primarily observes the variable morphology developed at the site of the sphenoid fontanelle at the fronto-temporal/spheno-parietal articulation (pterion). It also considers effects at the bregmatic and lambdoidal fontanelles. The sample for this study is drawn from documented collections accessible through the internet and represents sites from a number of populations using a variety of deformation techniques. [Session 18]

**Gauvreau, Alisha (Simon Fraser University), Dana Lepofsky (SFU) and Michelle Washington (Tla'amin First Nation)**  
***From Cultural Keystone Species to Threatened Species: The Place of Pacific Herring in Northern Coast Salish Social-Ecological Systems***

Pacific herring (*Clupea pallasii*), are a critical part of the social-ecological systems of Canada's Pacific Coast. Like a heartbeat, herring brought a seasonal pulse of life to the Northern Coast Salish and their ecosystems. For millennia, the Northern Coast Salish depended on this forage fish for food, social, and ceremonial purposes. In the last 30 years, the abundance and distribution of herring has dramatically declined. Through our community-based participatory research, we've connected archaeological, oral historical, and ethnographic data with living memory to demonstrate the long-term importance of herring, and the cultural transformations experienced as a result of the now decimated herring stocks. Our research, nested within the coast-wide "Herring School" initiative, highlights the benefits of connecting diverse forms of knowledge and disparate stakeholders to help better understand the changing relationships among people, places, and ecosystems over time. [Session 30]

**Goger, Katie (Brigid Collins Family Support Center)**  
***Nurturing Children Left-Behind: Technology-Mediated Parenting in Migrant Communities***

The Maya of Mesoamerica are involved in transnational migration that separates families. Most commonly men migrate first to the United States, leaving women and children behind. Children of immigrants are affected as the father may be absent for long periods and his ability to parent can be dramatically curtailed. Children experience feelings of abandonment, have poor educational outcomes, and socially depressive symptoms; these stressors are well established. Less studied are the ways migrants are attempting to overcome this situation. In this paper, I will explore the current literature to highlight the ways modern technology allows migrant parents to connect with their children. This paper explores how technology-mediated parenting can support long distance relationships between male migrant parents and their children. Highlighting technology such as video conferencing and social networking, I focus on how male parents depend on communication technologies to provide childrearing and guidance to their children left-behind. [Session 17]

**Gombocz, Katarina (Western Washington University)**

***National Narratives and Cultural Identity: 'Trianon Trauma' and Hungarian Depression***

National narratives play a central role in the shaping of cultural identity. In countries where nationalism has a long and complex history, such as the region of Central-East Europe, the effect that national narratives have on building cultural identity is especially evident. In Hungarian politics, parties make references to events of the past kept in collective memory in order to build these national narratives and which shape Hungarian national identity. One such national narrative is that of "Trianon trauma," or the notion that Hungarians collectively suffer from the partitioning of  $\frac{2}{3}$  of its territory to neighboring countries and the subsequent loss of 3.3 million of its citizens following WWI. Examining this narrative in the context of national identity, I will demonstrate how the appropriation of "Trianon trauma" by political parties builds a particular Hungarian identity of depression. [Session 34]

**Goodwin, Jessica (University of Idaho)**

***The Cyrus Jacobs-Uberuaga House: Reflections of Gender and Class in Early Boise***

In 2012, an abandoned well was discovered beneath the porch at the Cyrus Jacobs-Uberuaga House in Boise, Idaho. The house, now a part of the Basque Museum and Cultural Center, is already a cultural and historical landmark, both for its importance to Boise's early history and its Basque population. The nearly 16,000 artifacts recovered in 2012 shed light on the house's earliest occupation by the Jacobs family, from 1864-1907. The material culture of the Jacobs family reflects how they were positioned socially in early Boise, and how they replicated prevalent middle class values related to class and gender roles. Combined with archival research, this data provides important clues about life in Boise and the West in the late 19th century. [Session 21]

**Griffin, Dennis (Oregon State Historic Preservation Office)**

***Ask and You Shall Find: The Importance of Incorporating Oral History in Archaeological Site Identification and Evaluation***

Ever since Willey and Phillips (1958) focused attention in American archaeology on the relationship between Archaeology and Anthropology, the importance of living cultures in understanding archaeology has grown. Within this larger discussion, the value of oral history data has often focused on if such data can support archaeological evidence, contradict or challenge it in a constructive way that can aid in gaining a better understanding of the past. The overall importance of oral history data has been well documented through many projects over the past fifty years; however, its use in the Pacific Northwest remains rare. This paper summarizes the value of oral history data to archaeology and encourages its incorporation in CRM projects. [Session 26]

**Hall, Kyle (Western Washington University)**

***Infant Microbial Diversity and Immune System Development***

Pediatric birthing and rearing practices that have developed over time serve to reinforce parent-child bonding as well as passing healthy microbiota from parent to offspring. A diverse and complex community of microbes exists in symbioses with the human body, performing chemical reactions that are necessary for the function of the host's immune system. The Immune system has evolved to combat 'opportunistic' pathogenic microorganisms primarily housed in the enteric system of its host. Understanding the relationship and co-evolution between microbiota and their hosts is vital to human immunology, nutrition and health. An infant's microbiome is a key starting place when addressing developmental health issues. Establishing what a healthy gut community looks like will provide vital information on the health of the host's immune system while also discerning the nutritional status and needs for patients of all ages; differences in microbial communities may affect the expression of the host's immune system. [Session 18]

**Haller, Jonathan (Tierra Right of Way)**

***GIS and Mapping Solutions in Rugged Terrain***

Tierra Right of Way explored alternative survey techniques during a 2012 survey in the Monte Cristo, Washington area. The survey included site revisits of historical mining features originally documented in 2006. The techniques proved quite capable of documenting the cultural materials despite the short GPS signal window due to rugged terrain and canopy cover. The success of these techniques has led to the exploration and consideration of additional techniques that might negate the restrictions of these conditions throughout the Pacific Northwest. [Session 20]

**Hambelton, Karla L. (Archaeological Investigations Northwest, Inc.) and Jo Reese (AINW)**

***Soil-fused Stones, Wood-ash Stones, and Clinkers: Pyrometamorphosed Rocks Found at Archaeological Sites***

In 2013, AINW identified a cluster of stones within a concentration of charcoal and burned earth at archaeological site 45CL1012 in Ridgefield, Washington. Upon completion of excavations, laboratory analyses, and additional research we

determined that the stone cluster was created during a natural burn event and was not the result of historic-period use or the remains of a prehistoric hearth or roasting pit. Extreme heat, introduced during a forest fire or a lightning strike, may cause sediments to solidify creating naturally occurring stones within an area of burned earth and charcoal having characteristics similar to cultural features. This paper describes the process by which we came to this explanation for the fused stones at 45CL1012 and will introduce a similar occurrence from Battle Ground, Washington. We hope this information will aid our colleagues in identifying stones created during extreme natural heat that may otherwise be misidentified as cultural features. [Session 13]

**Hannum, Michelle M. (Plateau Archaeological Investigations)**

***Archaeology and History Beneath the Lake: Lake Coeur d'Alene Maritime Heritage***

An article in the Spokesman-Review, entitled "Diving into History," calls attention for the need of a comprehensive inventory of the submerged resources within Lake Coeur d'Alene. The article is a quaint piece geared to the recreational diver and history buff alike, and bestows the attributes of "an underwater museum" on the lake bed. This piece was informative, maybe a bit too informative, as several locations of submerged resources were pinpointed using UTM coordinates and suggested that pieces of vessels make "a nice prize for the finder." By some accounts there are 200 wrecks lying at the bottom of Lake Coeur d'Alene, seventeen of which have known structural remains. Using archives and the local diving community, Plateau is gathering an inventory of submerged resources of Lake Coeur d'Alene, albeit at its fledgling stages. This presentation will highlight a handful of the inventory. [Session 24]

**Hayman, Jeanette (Maritime Archaeology Contractor)**

***Heritage at Risk: An Assessment of Environmental Factors and Archaeological Site Damage in the Pacific Northwest***

This study's purpose is to illuminate the significance of using exploratory models in relation to archaeological sites in the Pacific Northwest. By mapping and analyzing specific geophysical factors occurring in and around the coast and inner waterways of the Pacific Northwest, predictive mapping can help identify archaeological sites that are currently being impacted by natural forces. An analysis of wave energy, sediment accumulation, shoreline erosion, and inundation from sea-level rise could make it possible to determine what geographical areas are being significantly changed and thus, the cultural heritage that stands to become lost. Combining knowledge of the geophysical factors acting on the shorelines with the cultural heritage known to exist in these regions, these datasets could help model environmental phenomena of significance in predicting damage to cultural heritage in the shore zones around the Pacific Northwest. [Session 24]

**Henebry-DeLeon, Lourdes (Central Washington University)**

***Columbia Plateau Cultural Affiliation: Connecting the Data***

Investigating the connections between curators, archaeologists, osteologists, and collectors on the Columbia Plateau has produced a large data set that can be used to determine cultural affiliation required by NAGPRA for repatriation of human remains and funerary objects. All these groups are interconnected to varying degrees and analyzing accession records, field notes, bio-archaeology data and private collector's records provides new data and new questions. [Session 11]

**Henry, Shea (Simon Fraser University)**

***Maima: A Taino-Spanish Contact Settlement on the North Coast of Jamaica***

In the winter of 1503-04, Christopher Columbus was marooned and provisioned by the Taino village of Maima located on the north central coast of Jamaica. With the establishment of the Spanish settlement of Sevilla la Nueva in 1509, the Taino villagers were subjected to enslavement, relocation, disease and government-sanctioned programs of forced labor. As a result the Taino population of Maima was gradually decimated. By the time Sevilla la Nueva was abandoned in 1534, the residents of Maima were completely gone. This process and effect of contact on the village is only minimally known through the archival records and the excavations of the Spanish settlement. This paper will discuss the fieldwork and preliminary results of excavations done on the Maima site midden, shedding light on their lives and the ultimately devastating contact with the Spanish. [Session 22]

**Hill, Cayla L. (Oregon State University)**

***The Impact of Catholicism: Exploring St. Joseph's College, the First Catholic Boarding School for Boys within the Oregon Territory***

The site of St. Joseph's College (35MA67) is located within St. Paul, Oregon, a French-Canadian settlement appropriately positioned on French Prairie, and is also home to the first Roman Catholic mission in the Pacific Northwest, established in 1839 by Father Francois Blanchet of Quebec. On October 17th, 1843 St. Joseph's College was officially dedicated becoming the first boarding school for boys within the Oregon Territory. Fathers Antoine Langlois and Jean-Baptiste-Zacharie Bolduc,

both originally from Quebec, alternated as headmaster until the school's closure in June 1849 due to the mass exodus of settlers tempted by the California Gold Rush. Although St. Joseph's College remains historically significant, the archaeological record is also unique with several unidentified and exclusive ceramics included within its composition. Therefore, both the history and archaeology associated with the site offer an informative, yet distinct, depiction of the growth and impact of Catholicism within the developing Oregon Territory. [Session 21]

**Hill, Genevieve (Madrone Environmental Services Ltd.)**

***Perceptions of Wetland Ecology in Cowichan Traditional Territory, Vancouver Island, B.C.***

Western archaeologists often perceive wetlands as places unsuited to human habitation. Such notions have permeated archaeological education and practice with the result that wetlands are often overlooked as areas of archaeological potential. The avoidance of wetlands is particularly evident in the Cowichan Valley on southeastern Vancouver Island, where approximately 80% of recorded archaeological sites are located on the coast. An ecological approach to archaeological research enables us to locate wetland sites and determine what may be found in them. This approach combines traditional knowledge with scientific method, and highlights the cultural importance of wetlands in the Cowichan Valley. Contrary to common archaeological belief, results show that approximately 80% of known sites are associated with wetland features, while only 10% are located on the coast. [Session 28]

**Hill, Kristina M. (Eastern Washington University)**

***The Search for Women in Archaeological Site Records***

Women are vastly underrepresented in the archaeological records of past cultures worldwide. As a result of variable preservation environments combined with the androcentric orientation of many archaeological analyses are often attributed to male activities by default. This orientation appears in archaeological analyses due to the nearly universal difficulty when discerning the gender association of specific artifacts and activities associated with those materials. This paper will examine the methods used by archaeologists to identify and analyze gender in archaeological site records. The focus of this analysis is North America and recent theoretical developments addressing the archaeology of gender. Through a review of pertinent literature, an assessment is presented of the categories and specific kinds of evidence currently used by researchers to identify women in archaeological contexts. Finally, this paper will review the potentials of new excavation methodological approaches designed to illuminate the presence and roles of women in archaeological site contexts. [Session 36]

**Holter, Russell (Washington Department Archaeology and Historic Preservation)**

***Understanding Washington's Railroad History: A Context Statement Arriving Soon***

Railroads are an often over-looked cultural resource with significant importance in the history of the development of the state of Washington. Railroads and the railroad industry played a major historical role in the broad patterns of human settlement, recreation, resource exploitation, and industrial development. Their role as a cultural resource has been largely marginalized due to a lack of understanding. This paper will present a summary of the Department of Archaeology and Historic Preservation's current efforts at constructing a statement of the contextual role that railroads played in Washington history. This context statement will be available for use by archaeologists and historians. [Session 25]

**Holthoff, Carolyn (Oregon Department of Transportation) and Scott S. Williams (Washington State Department of Transportation)**

***The Year in Perspective: Highlights of ODOT and WSDOT CRM in 2013***

2013 was both a year of "business as usual" for the cultural resources departments at ODOT and WSDOT and one of at least a few surprises. WSDOT staff dealt with the shutdown of the Columbia River Crossing Project (CRC) by the Washington State Legislature and the continuing Alaska Way Viaduct and SR520 mega projects, as well as a court order to start fixing all the fish passage barriers under state highways in the Puget Sound region. ODOT staff dealt with Oregon deciding to pursue CRC without Washington, completed a book on Oregon's historic bridges, made a number of interesting historical archaeology discoveries, and developed new training for their consultants. [Session 14]

**Hopt, Justin (Washington State University)**

***Fish and Complexity: Faunal Analysis at the Shell Midden Component of Site DgRv-006, Galiano Island, B.C.***

Modals for the development of inequality and complexity in the Gulf of Georgia region of the Northwest Coast are often closely linked with subsistence change. The most notable link is seen in the predicted co-development of a salmon-based storage economy and the "Developed Northwest Coast Pattern" of large plankhouses, social stratification, and sedentary villages. This pattern is predicted as occurring within the Marpole Period (2500-1000 BP) with a continuation into the Late-

Period (1000 BP to European contact) but with a diversification of the subsistence pattern. This has only been shown at a handful of sites and recent studies are beginning to question the validity of this connection. Here, faunal material is evaluated from the midden component of site DgRv-006, located on Galiano Island. This midden contains data from both the Marpole as well as the Late-Period which will allow us to evaluate the faunal component of these models through time. [Session 27]

**Howe, Nathaniel (Nautical Archaeologist and Vessel Manager, Northwest Seaport)**

***Navigating the Temple of Doom: Shipboard Hazards for Archaeologists***

Nautical archaeology is a field with numerous inherent dangers. Safety training for professionals focuses heavily on the hazards of diving - nitrogen narcosis, pulmonary gas embolisms, and the bends - but the dangers posed by the ships themselves, sunk or afloat, receive comparatively little attention. To work safely, nautical archaeologists and maritime museum professionals need to be familiar with common hazards found aboard ships and how to mitigate these threats. Fire, sudden flooding, unstable structures, and impaling hazards are ever-present dangers. Now that ships of the 20th century are frequently the foci of archaeological studies, chemical hazards such as asbestos, mercury, and lead require greater awareness and training. Northwest Seaport in Seattle, USA, has been studying these hazards as the organization undertakes archaeological investigations of its vessels in preparation for major restoration work. Collaboration with modern maritime industry safety professionals has been key in developing Northwest Seaport's own safety training and procedures. [Session 24]

**Humphries, Sarah Johnson (Equinox Research and Consulting International Inc.)**

***Does Size Really Matter?***

As part of the Pit Rd Recovery Project, Oak Harbor Washington, we wanted to learn about the relative efficiency and effectiveness of the different techniques for recovering disturbed archaeological sites and burials. To that end, we conducted a two week experiment to compare nested 1/8" and 1/4" screens versus the 1/4" screens. We wanted to see which set up was most effective at recovering disturbed archaeological material and disturbed burials and how much of a difference there was between the two screen sizes in processing time. To accomplish this, we recorded the artifact and skeletal recovery rate and volume screened by the same crew working on the same deposits with 1/8" and 1/4" nested screens one week and 1/4" screen only the next week. Our results suggest under what circumstances, how often, and for how long using nested screens in a disturbed archaeological site may prove useful. [Session 8]

**Hunter, Kyle (The Center for Wooden Boats) and Nathaniel Howe (Northwest Seaport)**

***Digital Photogrammetry and Nautical Archaeology – Measuring and Monitoring Change Over Time***

Digital Photogrammetry as we use it is easiest understood as using digital photographs to build 3D models of an object. The most notable and applicable impact of this technology and research seems to be in the digital conservation and monitoring of the changes of objects such as Boats and Totem Poles. The Center for Wooden Boats received a grant from the Institute of Museum and Library Services in the fall of 2013 to test some different methods of digital photogrammetry and compare them to each other. The goal of the grant is to determine if there are any methods that are a low enough cost that national museums can reasonably use this as a tool to both conserve and monitor the change in large objects over time. In December 2013, both professional conservators from private and public sectors converged to conduct field work and begin testing the software and methods. [Session 24]

**Hutchinson, Ian (Simon Fraser University)**

***The Old Shell Game: Late Holocene Variations in the Marine Reservoir Effect in the Northeast Pacific***

Cultural chronologies for the west coast of North America are based on >8000 radiocarbon ages, half of which are derived from marine shell. The latter need to be corrected for the "marine reservoir effect", a measure of the mean residence time of carbon atoms in the ocean. Radiocarbon-depleted waters from the ocean depths are brought to the surface in upwelling zones, which respond to shifts in surface currents and dominant wind directions. Radiocarbon ages on paired samples of shell and wood from archaeological sites from Baja California to Haida Gwaii indicate substantial variation in mean residence time (and therefore upwelling rates) in the late Holocene, with contrasting temporal patterns on the northern coast and central-southern coast. These long-term changes appear to be primarily driven by zonal shifts in the position of the Aleutian Low and concomitant changes in the ocean-atmosphere circulation of the north Pacific. [Session 13]

**Jankowski, Stephen Todd (USDA Forest Service, Malheur National Forest)**

***Form vs. Function: A Classification System for Rock Features***

In current archaeological contexts and field research, identifying and recording rock features can still be a confusing and cumbersome task. This presentation reviews and focuses on existing methodologies and archaeological studies of White (1980), Chartkoff (1983), and Winthrop et al. (1995). Previous studies by these archaeologists demonstrate that rock features are distinct monuments and part of archaeological landscapes that require attention and thorough inspection. The existing and more recent literature concerning rock feature analysis has provided a wider perspective, offering more uniformity for creating a typological classification system for rock features. A broader and comprehensive understanding for identifying and categorizing rock feature morphological attributes, and their typological associations, is presented in order to assist land managers, archaeologists, researchers, ethnographers, and academics alike. [Session 13]

**Kaehler, Gretchen (Washington State Department of Archaeology and Historic Preservation)**

***Behind the Bulkhead: Lessons Learned***

Bulkhead installations, revisions and replacements are among the most common proposed project along the shorelines of Washington. They are also among the most common project to intersect with both recorded and unrecorded archaeological sites. This paper presents some of the lessons we have learned in reviewing bulkhead projects in the form of case studies. Some of these lessons include the differences between timber, rock and concrete bulkheads and the disparity in the extent of ground disturbance for each depending on the landform. The paper also discusses some of the elements of these projects that are considered not ground disturbing by the proponents and attempts to provide an answer for the question of why DAHP often requests archaeological monitoring rather than archaeological survey. [Session 11]

**Kahler, Duane (Western Washington University)**

***Scene Divided or Scene United: Inter/Intra/Cross-cultural Connections through Punk in Los Angeles***

Latin@ punks are an extant and vibrant subculture in the underground punk rock scene in Los Angeles who have made an undeniable impact on the development and maintenance of the punk scene in L.A. Previously punk has been characterized as a youth movement representing rebellion and teen angst situated in Anglo working-class society. As a result, the Latin@ punk movement has been largely characterized as an isolated cultural anomaly. Challenging that idea, this project seeks to explore the lines of communication, cultural exchange, and ideological exchange as a result of punk culture between the predominately Latin@ East L.A. Barrios and others in surrounding communities. I argue that the East Los Angeles punk movement has had a profound impact on punk history as a whole and has become a social movement that permeates the divide between Latin@s and non-Latin@s who interact with shared aspirations of social equity. [Session 17]

**Keller, Sarah (Eastern Washington University)**

***Cilantro, Anise, Cumin: Yum or Yuk?***

Whether a person likes or dislikes a specific food taste is the result of factors that may be biological, social and/or idiosyncratic. The larger study of which this paper is a part, investigates the causes of strong aversion in some individuals to certain foods that are otherwise accepted in American culture. This particular paper focuses on likes and dislikes of various herbs and spices. As the result of a previous pilot study it became apparent that the ability to discern and describe the taste of specific herbs/spices is often more difficult than for other bulkier ingredients. It is proposed, however, that individuals with a genetic-based aversion to a specific herb/spice can still detect and identify it in very low concentrations. Three groups of participants were surveyed: professional chefs/sous chefs and cooks; gourmets/gourmands/ foodies; and a convenience sample of adults who did not identify with either of the other two groups. [Session 18]

**Kelly, Katherine M. (Tierra Right of Way)**

***Wicked Problems – Framing the Discussion***

Wicked problems, such as those commonly encountered by biologists, engineers, agencies, archaeologists, and resource managers working on environmental restoration projects, are rarely “textbook,” instead they are large, messy, complex, and systemic. Wicked problems, even the small ones, seem overwhelming; each part of the problem seems to require an uneven mix of contradictory solutions and untenable choices. The most successful strategies developed to untangle wicked problems tend to rely on inclusive, collaborative, and innovative strategic approaches. As practiced as archaeologists are at crossing interwoven social, ecological, and economic systems, we occupy unique positions on restoration management teams, and are often presented with opportunities to step out of our traditional roles. [Session 35]



**Kelly, Katherine M. (Tierra Right of Way) and Melanie Diedrich (Archaeological Macroflora Identification)**

***Extending our (out)reach – Promoting Stewardship, Public Awareness, and Education***

Washington has a longstanding tradition of public involvement in archaeology – some of it good, some of it bad. There are many excellent reasons to keep folks who aren't directly involved with a specific cultural resource out of the loop, and yet keeping those doors firmly shut also reduces our opportunities to educate, inform, and involve the public in a positive way. And quite frankly, to recruit. The Mission Creek project was a wonderful example of how a successful program of public outreach can orient public toward respectful and enthusiastic interest. Here we present some of the feed-back we observed and received. [Session 9]

**Kelly, Katherine M. (Tierra Right of Way)**

***The Meta of Mining - the Search for Data and Meaning on a Shifting Landscape***

The transient nature of mining operations, the mining cycles of boom and bust, and the propensity for mining companies to shift equipment from one mine workings to another, leave few intact relicts of the past. The imprint of mining on the landscape is further obscured at Monte Cristo by the effects of extreme weather. The remaining physical elements of historic Monte Cristo must be considered a set of blurred images of individual features that collectively provide a clear view of the whole. Although individual properties have collapsed, scavenged, and burned, the activities at these locations have left their imprints on the landscape. A mining district can retain integrity of location, design, setting, feeling, and association because key aspects and their relationships to one another remain identifiable and can convey the type of operations carried out. [Session 20]

**Kessler, Adam (University of Idaho)**

***Those who Speak Tl'ingnan Hol (Klingon)***

The artificially constructed language of the fictional race of aliens, the Klingons, from the Star Trek franchise has a number of fluent, real-life speakers, which some may find puzzling, given that it is no human's native language, it is not the language of a long-standing institution, and works in Klingon are not exclusive to that language. There is nothing about joining a group of Klingon speakers that is socially unique (that is, participants could theoretically get socialization out of another, less linguistically intensive outlet), and the language is designed to be as inaccessible to English speakers as possible. One explanation for this phenomenon is that these Klingon speakers may be looking to adopt an artificial ethnicity, or flirt with drastically different social roles than what is allowed for them in mainstream society. Speaking and being Klingon may give them an outlet for venting frustrations in a bureaucratic and often unfair world, where the most underhanded sometimes come out on top. [Session 6]

**Kiers, Roger (Washington State Department of Transportation) and Erin Littauer (Washington State Department of Transportation)**

***Archaeology and the 2013 Fish Passage Barrier Federal Court Injunction***

A 2013 U.S. District Court injunction requires Washington State to correct hundreds of fish passage barriers in western Washington by 2030. To meet the requirements, the Washington State Department of Transportation (WSDOT) estimates it will need to correct an average of 30-40 culverts each year between 2015 and 2030, roughly three times the recent average. Given their location along streams and shorelines, many culvert replacement projects have a high potential for encountering archaeological resources. A recent survey of a proposed culvert replacement project on Anderson Creek in Kitsap County identified archaeological site 45KP233, providing an example of one resource type that might be affected by such projects. Testing at 45KP233 has identified stratified midden deposits containing evidence of several episodes of hunter-fisher-gatherer occupation beginning around 500 years ago and extending into the contact period. An historic Euroamerican component dating to the late 1800s and early 1900s is also present. [Session 14]

**Kittilstved, Tiffani (Eastern Washington University)**

***Perceptions of Stuttering***

The purpose of this research is to determine how stuttering is viewed and whether education about stuttering will alter listeners' perceptions towards stutterers. A widely used therapy technique associated with stuttering is self-advertising, where stutterers notify their listener that they stutter. Studies have shown that listeners react more positively towards stutterers who self-advertise. My research takes this idea further, investigating how stuttering is perceived in groups who are educated about stuttering and groups who are not. To research this, I interviewed students and constructed a survey that I gave to a control group and an experimental group, which received education about stuttering prior to answering. The findings from these groups were compared to see if there is a significant enough difference to infer that

simple education about stuttering alters perceptions about stutterers. The results of this study help us understand the stigma surrounding stutterers and how education can alter that. [Session 6]

**Kniseley, Marinel (Western Washington University)**

***Connecting Communities of Care***

As the US prepares to face an unprecedented rise in the proportion of elderly citizens to the general population in the next twenty years, eldercare is becoming an increasingly important issue in this country. Though important studies have indicated that the majority of people caring for this largely white aging demographic are immigrant women, the literature regarding these care workers has focused primarily on childcare and housekeeping. This research paper probes the written literature on eldercare in Mexico, particularly the regions experiencing the most emigration of women to the U.S. I explore not only traditional Mexican ideologies surrounding the care of the elderly, such as the notion of familism, but the way these traditions are changing in Mexico. This research seeks to broaden the understanding and emphasize the value of Mexican immigrant caregivers and the cultural and historical context from which they emerge. [Session 17]

**Knobbs, James (Northwest Anthropology LLC), Ashley Morton (Fort Walla Walla Museum) and Darby C. Stapp (Northwest Anthropology LLC)**

***Rethinking Archaeological Survey and Testing Designs, VSP and the Archaeologist***

Estimating time, coverage, expense, and level of effort for surveys and testing can be a time consuming task. This paper discusses a new software program, Visual Simple Plan (VSP) developed by the Pacific Northwest National Laboratory (PNNL) and its application in designing and implementing such tasks. Using VSP to design a survey in Richland, Washington, we illustrate how VSP can be used pre-field, in the field, and in the post-field write up as an efficient method for achieving the above stated goals. [Session 13]

**Knutson, Janie (Eastern Washington University)**

***"tlhIng maH!": Fan Adaption of Invented Languages***

Fictional languages start out as building tools in writer's construction of fictional worlds. Fans of these worlds not only enjoy them but also recraft these fictional languages for their own use. This work explores fannish uses of invented languages through scholarly research and personal experience. Created languages such as Klingon and Sindarin have been widely adapted by fans for role playing, cosplaying, writing, discussion, as well as used in various art forms. This study sheds light on the ways in which people creatively adapt popular cultural materials to express new meanings and identities within and outside the fanbase. [Session 6]

**Koetje, Todd (Western Washington University)**

***Leukoma Seasonality and Maturity at 45-WH-55***

Western Washington University has conducted several years of test excavation at 45WH55, resulting in an extensive collection from several spatially distinct areas of the site. *Leukoma staminea* seasonality and maturity from samples in each area will be used to address questions of site integrity, season of occupation, and placement in the regional context of Locarno beach sites. [Session 27]

**Kraft, Wayne B. (Eastern Washington University)**

***Kalotaszentkirály Revisited***

In "Changing Traditions and Village Development in Kalotaszentkirály" (Oral Tradition 26:2), I noted that small farming appeared to have collapsed in this Transylvanian village as it was said to have, generally, in much of this region. That circumstance did not bode well for the survival of a community based in farming nor, of course, for the continuity of traditional life. By summer 2013, however, grants from the E.U. had revived farming. This village enjoys several advantages that will not be shared by other villages in the region. [Session 12]

**Kramer, Stephenie (Washington State Department of Archaeology & Historic Preservation)**

***Permitting Update from DAHP: Current Permit Compliance and External Audit Results***

The Washington State Department of Archaeology and Historic Preservation (DAHP) is required by law to issue permits for excavation and/or collection of artifacts from archaeological sites on public and private lands. The DAHP has issued over 511 permits to professional archaeologists and project proponents since the program's inception in 1976. At the 2002 NWAC, DAHP reported on low permit compliance rates from 1976 to 2002. A significant increase in current compliance rates and two possible contributing factors are discussed. In addition, the findings and recommendations of a recent external audit by the Washington State Auditor are reviewed. [Session 25]

Lepofsky, Dana (Simon Fraser University), Skye Augustine (Northwest Indian College), Nathan Cardinal (Parks Canada), Amy Groesbeck (SFU), Marco Hatch (NWIC), Julia Jackley (SFU), Eric Mclay (University of Victoria), Misha Puckett (SFU), Kristen Rowell (University of Washington), Anne Salomon (SFU), Nicole Smith (Independent), and Elroy White (Central Coast Archaeology)

***The Clam Garden Network: Documenting Traditional Mariculture Practices on the Northwest Coast***

The "Clam Garden Network" is a collaborative team of First Nations knowledge holders, archaeologists, and ecologists who focus on traditional marine resource management systems throughout the Northwest Coast. In several locations on the Northwest Coast we have 1) documented the location of ancient mariculture features (clam gardens and cleared beaches) and associated terrestrial archaeological sites; 2) conducted ecological surveys and experiments that suggest clam abundance, growth and survival are higher in extant clam gardens beaches than in other beaches; 3) collected zooarchaeological samples to assess ecological changes in ancient clam gardens; 4) recorded local knowledge about the social and ecological aspects of traditional mariculture; and 5) dated the construction of ancient mariculture features. Inter-disciplinary and inter-community efforts are an effective way to document traditional resource management systems, as well as situating them within current socio-political and ecological contexts. [Session 30]

**Lewis, Ian R. (Equinox Research and Consulting International Inc.)**

***Casings with Context: Bullet Casings, Shotgun Shells, and Military Memorabilia from Site 45IS45/300***

Site 45IS45/300 is a heavily disturbed site located on the Oak Harbor waterfront. Based on the historic artifact assemblage, it has become clear that firearm possession was strongly engrained in the local culture throughout history. In addition to military memorabilia, bullet casings and shotgun shells represent a significant portion of this data. The headstamp of a cartridge can provide information sufficient enough to date and classify the artifact. Depending on the product, information can include distinct manufacturer's marks, caliber or gauge designations, and even a stamp of the production year! Additionally, because the 45IS45/300 assemblages were heavily disturbed, headstamp identification, in this case, aided in associating the original locations of disturbed material, and provided a means of further providing context, despite a disturbed site. [Session 8]

***Clasped Tight: An Ethnohistoric Examination of Shell Buttons from Site 45IS45/300***

Site 45IS45/300 is a heavily disturbed site with historic and pre-contact components located on the Oak Harbor waterfront. As a most basic form of analysis, artifacts were classified as historic or pre-contact. Originally documented as pre-contact artifacts, due largely in part to the material type and signs of abrasion, shell buttons were classified as pre-contact artifacts. However, ethnohistoric research has shown that this original classification may have been made in haste; in all likelihood, these artifacts of European origin were likely mass produced, obtained via trade, and may not always have even functioned as traditional, clasping buttons. This specific example shows the usefulness of integrating, or connecting, ethnohistory and the archaeological record. [Session 8]

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

***Results from the Continued Lithic Analysis of the Sunrise Ridge Borrow Pit Site (45PI408)***

Prior research on the 45PI408 assemblage has shown significant intra-site variation in chipped-stone technology and function. These findings were in many ways contrary to the expectations found within theoretical models of prehistoric land use at Mt. Rainier. Unfortunately, much of the previous research was limited by small sample sizes and the inability to determine if subtle differences were meaningful. Recent large scale excavations have increased sample sizes (+2,328 artifacts  $\geq \frac{1}{4}$ "") and the subsequent lithic analysis has continued to expose the previously studied intra-site variation. Using a systematic classification geared towards answering questions about the selective conditions under which lithic technology and/or function becomes fixed in a population, raw material types, heat treatment, and use wear frequency through time are shown to be consistent with previous studies. However, initial observations include an increase in the overall frequency of bifaces and cores with a decrease in the rate of flake/flake fragments. [Session 19]

**Lubinski, Patrick M. (Central Washington University), James Feathers (University of Washington), Karisa Terry (CWU), and Patrick T. McCutcheon (CWU)**

***Update on the Wenas Creek Mammoth Site: Age and Cultural Affiliation***

Central Washington University excavations at the Wenas Creek Mammoth site near Selah, Washington, from 2005-2010 yielded remains of mammoth, bison, and two fragments of possible debitage. Eight bone collagen radiocarbon dates indicate the mammoth and bison died ca. 13,900 RCYBP or ca. 17,000 CALYBP. Comparison of the possible artifacts to the matrix toolstone and to contemporary flintknapped samples show they are much more like cultural debitage than geofacts,

but cannot be unambiguously interpreted as artifacts given their fragmentary nature and small sample size. Ninety-four infrared-stimulated luminescence dates on single sediment grains surrounding one of the two possible artifacts indicate that it was deposited either contemporary with the bone dates (80% of grains) or in the mid-late Holocene ca. 5100 CALYBP (20% of grains). Thus, the site remains in an uncertain position, with solidly-dated pre-Clovis age bones and possible, not obviously associated artifacts of uncertain age. Additional laboratory analyses are underway. [Session 38]

**Luttrell, Charles T. (Washington State Parks & Recreation Commission)**

***I Fought the Law and the Law Won – Making Road Gravel at Fidalgo Rock Quarry***

Beginning and ending in the early twentieth century, Washington State embarked on a short-lived experiment to produce gravel for state roads and other purposes with convict labor. A joint effort by the State Highway Department and State Board of Control, the first of five quarries was developed at Deception Pass as the Fidalgo Rock Quarry. Incarcerated male workers were drawn from the State Penitentiary at Walla Walla and the State Reformatory at Monroe, but only labored at the Deception Pass quarry from 1909-1912. This paper examines events at Fidalgo Rock Quarry and the historical context that generated convict labor for state quarries and roads. [Session 14]

**Mack, Cheryl A. (Olallie Research)**

***More Dog Anyone? Dogs as Food Among the Fur Traders of the Lower Columbia***

A review of fur trade journals and other ethnohistoric sources from the lower Columbia River in the early 1800's reveals ample evidence of the fur traders' use of native dogs as food, particularly while traveling. At the same time, there is little indication that dogs were used as a regular source of food by either the Chinookan or Sahaptin-speaking residents of the area. This paper considers the question of why there were so many apparently surplus dogs among the Indians of the lower Columbia River at this time period, and possible explanations as to why these dogs weren't being used by the native population as a dependable food source. [Session 27]

**MacNaughton, James (University of Idaho)**

***Chinese Benevolent Societies in the Old West: "Joss Houses," the Tongs, and their Effect on Chinese Immigrants 1860-1920***

A trope of historical Western fiction is the Yellow Peril stereotypes, centered about the smoky Tong lair or "Joss House". In reality, one was a benevolent society hall and the other a Chinese temple. The societies were a focal point for the Chinese immigrant community. The aim of this research was to examine organized criminality in Chinese communities in the American West of the nineteenth century and to establish if that crime influenced policy and attitudes towards Chinese immigrants or if prejudice magnified the crimes in the eyes of the white population. The evidence indicated that "secret societies" within the benevolent societies were the vectors of organized crime within Chinese society throughout America. In examining the vocabulary in newspapers reporting crime involving the Chinese community, it was found that the terminology often fostered a sense of otherness. This prejudice was utilized by the secret societies throughout the country to further the ghettoization of the Chinese, in order to consolidate their own power. [Session 22]

**Major, Maurice L. (Washington State Department of Natural Resources)**

***The Unrealized Potential for Archaeology and Anthropology in Environmental Restoration***

Over several decades, environmental restoration has grown from groovy volunteer projects to a multi-million dollar industry. In the process, it has come to emphasize engineering and grading covered with a blanket of fish-friendly gravel or native plants. Archaeologists are increasingly involved, but mostly as damage control, with an unrealized potential to foster more authentic and successful restorations through improved data on geomorphology, past land use, and former environments. Archaeological and anthropological orientations help introduce less static conceptions of time as well as the benefits of traditional ecological knowledge and the continued actions of humans on the landscape. On the flip side, restoration projects present opportunities for data collection by archaeologists, and for both the practice and understanding of traditional cultural practices. [Session 35]

**Major, Maurice (Cultural Landscapes)**

***Seven Saturdays, Were They Worth It?***

"Salvage" has earned a dubious reputation in cultural resource management. Besides recovering a bunch of artifacts, did the Mission Spit salvage work result in anything useful? Preceding papers have focused on particular answers provided by sorting artifacts from a truckload of sediment, and here the archaeological gaze is turned on the landscape and historical context before raising further questions: Were hundreds of hours of screening worthwhile? Did we learn anything we could

not have guessed? Are there lessons for future environmental restorations? Did the cultural resource management system as practiced in Washington serve the resource well? Would we do it again? [Session 9]

***Within Spitting Distance: An Introduction to the Mission Spit Salvage Project***

Last year, archaeological inventory at Priest Point Park, in Olympia, Washington, resulted in discovery of a buried sand spit containing Native and Euro-American artifacts, recorded as Site 45-TN-450. While the Section 106 process concluded that the site was not significant, the project's stubborn archaeologist felt there was information worth gleaning, and arranged a volunteer project to screen a truckload of sediment. With the cooperation of the local Catholic Parish, local Tribes, and volunteers coming from nearby and as far as Bellingham and Portland, hundreds of artifacts were collected, and analysis has unearthed a tale of contact between Tribes, Americans, and Europeans on a dynamic landscape. [Session 9]

**Malone, Molly Sue (University of British Columbia)**

***Oral History and the Skagit Waterscape***

This paper explores how the oral histories of the Upper Skagit Indian Tribe connect to places throughout the Skagit waterscape, and how contemporary Upper Skagit people understand these connections. [Session 31]

**Manion, Mollie (Oregon State University)**

***On the Home Front: Exploring the Domestic Life of Women and Children in Early Oregon***

Excavations at the Newell homestead site (1832-1861), within Champoeg State Heritage Area in Oregon has yielded over 40,000 artifacts over the last ten years. This unusually intact domestic cabin site is painting a picture of what life was like in early Oregon. Not the traditional history of men, wars and politics, but the lives of the women and children who kept the home fires burning and the farmstead running, while the men were out and about. This site sheds light on what life was like for the Native American women and their métis children during this transitory period of history. [Session 22]

**Mann, Sarah E. (Western Washington University)**

***Outsourcing America's Pregnancy: An Epigenetic and Sociocultural Evaluation of Commercial Surrogacy in India***

With the growing field of epigenetics and the realization that prenatal environment plays a key role in gene expression one area of research has been largely overlooked- gestational surrogacy. A number of developmental issues have been linked to imprinting and epigenetic events during fetal development. As women suffering with infertility and decreased fecundity show a tendency to turn to surrogacy to obtain a child, surrogacy is increasing in prevalence. However, the expensive nature of surrogacy, and varying legality, in the United States has caused people to find cheaper and legally supported options abroad- most notably in India. India's political history and socioeconomic environment are examined to illuminate the arguments of 'exploitation' of the participants, which is often raised in conjunction to commercial surrogacy. This paper attempts to highlight the need for more research in surrogacy epigenetics and outcomes. [Session 18]

**Marcotte, Jacqueline (Environmental Science Associates)**

***Recording Submerged Sites: Conventional and Unconventional Technologies***

There are several technologies available to aid archaeologists in locating and recording submerged sites. This paper presentation explores the various conventional or high-tech methodologies available, including side-scan, multi-beam, and sub-bottom profilers, as well as less conventional, low-tech options. The discussion will also focus on the limitations of these technologies for certain site types within the Pacific Northwest region, as well as availability and cost. [Session 26]

**Marken, Mitch (Environmental Science Associates)**

***Underwater Archaeology, Methods and Use of Contexts***

This paper discusses the importance of developing and using contexts when conducting submerged cultural resource investigations for transportation projects. The paper will highlight some of the recent guidance from the Oregon SHPO and discuss how that guidance can be applied to testing and evaluation of both submerged historic and prehistoric remains. Using limited case studies, parallels will be drawn between work that occurs on adjacent land sites, and recent approaches used to determine significance of submerged areas of potential effects. Other topics will include incorporating remote sensing data and using coastal and riverine geomorphology to enhance methodological approaches. [Session 14]

**Marks, Jeffrey (University College London)**

***Defining a Unique Model of Public Engagement at the Fort Vancouver Public Archaeology Field School***

The NPS Public Archaeology Field School at the Fort Vancouver National Historic Site has a unique approach to public engagement. In addition to teaching traditional excavation methodology, the students are instructed to provide interpretation to the public as the entire excavation is accessible to visitors of the fort. This paper first defines the theories and methods taught by the field school leadership and then seeks to evaluate the students' perception of how well they implemented this public engagement model in the field. The analysis of survey responses, compared with the defined model for public engagement termed the "Fort Vancouver Model", yielded interesting results. The students followed the spirit of the taught methodology but their approaches were individually and intuitively developed and expanded upon as the field school progressed. Suggestions are then made about the potential adaptability of this method of public engagement in other settings. [Session 10]

**McClure, Rick (U.S. Forest Service, Gifford Pinchot National Forest)**

***Archival Records and Research Design for Cultural Resource Surveys on National Forest System Lands in the Pacific Northwest***

Society has moved rapidly into a brave new world where vast libraries of data and information of every kind are available in electronic form, accessible by a simple Internet search. When designing a cultural resource survey, however, it remains ever important, to consider primary archival sources and traditional documents research methods. While a SHPO database search serves as a good starting point, additional background research is essential. Records of the U.S. Forest Service, including many retained at administrative facilities around the region and not yet available in digital form, provide a case example. Agency direction requires the review and compilation of existing local environmental, archaeological, and historical information during planning for field surveys on National Forest System lands. This information comes from a wide variety of primary documentary source material, including maps, large-format atlases, photographs, and official subject-based files, agency reports, and correspondence. Diaries, memoirs, and oral histories with agency personnel are another primary source. All of these sources have proven important to the identification, documentation, and evaluation of cultural resources within specific project areas, and emphasize the importance of adequate background research in survey design. [Session 26]

**McCroskey, Lauren (USACE Technical Center of Expertise for the Preservation of Historic Structures and Buildings)**

***Saving Fish, Losing History (or, Not Just another Ratty Ass Barn)***

Data from archaeological resources can be preserved through data recovery and their protection may be further buttressed by tribal advocates. Historic buildings and structures have fewer champions, and are often passionately scorned by those who view them as unwelcome reminders of the human intrusion into once pristine habitat. With this "take no prisoners" approach more is lost than just old building material. The continuum of human use of the land is strongly evoked by historic buildings, the archaeologist loses, too when these resources are not given due process. Anticipatory demolition not only removes sections of this continuum, but may damage in situ archaeological deposits. The most critical loss is the chance to tell a bigger story from all perspectives. By valuing the historic built environment, the archaeologist and biologist widen the net of constituents who will visit these sites, parks, and landscapes and support their causes in the future. [Session 35]

**McDonald, Kendal (Applied Archaeological Research)**

***I'm Not Touching You! A Comparison of Three Remote Sensing Techniques***

As remote sensing or archaeogeophysical techniques become a more common tool for archaeological field work, there is a greater need to understand which methods are appropriate for each survey location. This paper compares the abilities and limitations of ground-penetrating RADAR (GPR), magnetometry, and metal detectors to help archaeologists determine the best method to use, the optimal conditions for their use, and the order in which they should be used. Examples of how these non-destructive techniques have been used in the Pacific Northwest to locate and map artifacts and features and their varying degrees of success will be presented. [Session 26]

**McDougall, Allan K (University of Western Ontario)**

***Connections in Context: Property in Early Oregon***

In an era of hegemonic transformation, the social context of claimants—and even the calculus of their political positioning as the flood of new immigrants descended—defined the context through which one could claim the right to property. This paper will document the importance of context in the connection of settlers to their land despite the legitimacy of occupation through earlier title. [Session 7]

**McGraw, Juliet (Washington State University), Colin Grier (WSU), Jade D'Alpoim Guedes (WSU)**

***Plants and Potlatching: A Paleobotanical Analysis of a Feasting Feature from Galiano Island, Southwestern British Columbia***

One dimension of an archaeology of the individual involves the study of discrete events in the archaeological record. Here, we provide an analysis of a feasting feature in a Late period plankhouse at the DgRv-6 site at Dionisio Point on Galiano Island, southwest British Columbia. This rock-lined feature includes the remains of at least 44,000 sea urchin that appear to have been processed as part of a single consumption event, likely near the end of the plankhouse occupation (circa 600 cal BP). We focus on the paleobotanical remains from the feature, providing an analysis of the fuel woods used for heat processing of urchin and the function of dense patches of fibrous "matting" that were recovered during its excavation. These materials provide insights into the activities that formed part of this significant event, the individuals involved, and the role of the feast in the production and reproduction of the household and its external relations. [Session 27]

**McLaren, Duncan (Cordillera Archaeology) and Kathleen Hawes (Pacific Northwest Archaeological Services)**

***Early and Mid-Holocene Waterlogged Materials from the Triquet Island Site on the Central Coast of British Columbia***

Small-scale testing of archaeological deposits at EkTb 9 on Triquet Island has uncovered a wet-site component with preserved plant material dating between 7700 and 5600 calendar years before present. Wooden artifacts found include a yew (*Taxus brevifolia*) mat needle (or atlatl board), composite fishhook parts, partially burnt sticks, and wood chips. Lithic artifacts, fire cracked rock, and faunal remains were found in association with this component and with earlier and later period strata lacking wood preservation. Preliminary testing at other sites on the B.C. central Coast has uncovered other early to mid-Holocene water-saturated components dating as old as 10,500 cal BP. These findings have potential to broaden our understanding of the early to mid-Holocene cultures of the B.C. central Coast. [Session 28]

**McLaren, Duncan (University of Victoria, Hakai Beach Institute), Kathryn Bernick (Royal British Columbia Museum), and Brendan Gray (Cordillera Archaeology)**

***A Late Holocene Cradle Basket from the Stave River Delta, Southwestern British Columbia***

In the fall of 2013 an emergency project at DhRo1, on the west bank of the lower Stave River near its confluence with the Fraser River, recovered a complete, coiled cradle-basket. The base of the basket is formed by slats joined by a plaited weave, the sides of the basket have been constructed by spiral coiling with split stitches and a flat-bundle foundation. Radiocarbon dating of the basket reveals an age of 790-690 cal BP. Stylistically, the basket is most similar to those constructed by the Stl'atl'imx (Lillooet) who often traveled to the upper reaches of the Stave watershed to conduct trade with Hunkimintum speakers of the lower Fraser River. [Session 28]

**Mentzer, Kari M. (Eastern Washington University)**

***Where Should Baby Sleep? An Examination of Discourse Regarding Bedsharing in the United States***

Throughout recorded history, mothers and their babies have slept next to each other as a function of breastfeeding and ease of caring for an infant. While this practice is still the norm in many cultures, in the U.S. the normative pattern is solitary sleep for infants. Other sleeping patterns are judged inferior and even dangerous. Nonetheless, parents continue to share their bed with their children. This paper explores how our cultural norms came to pass and how infant sleep is experienced by modern American parents. It examines the discourse available to parents regarding infant sleep, including both popular and official sources. Finally, this paper analyzes how parents use these sources in online discussions about infant sleep and how parents internalize and challenge official accounts of the reasons to practice or avoid bed sharing. [Session 12]

**Menzies, Charles (Gitxaala Environmental Monitoring, University of British Columbia)**

***Archaeology in Laxyuup Gitxaala: Connecting with Community through Teaching***

Since 2009 Gitxaala Nation and UBC have been involved in a collaborative archaeology and traditional knowledge research project. This project builds upon a long standing socio-cultural research collaboration. As part of the project, which involves documenting Gitxaala village sites not previously recorded or describe in the archaeological literature, project team members have engaged community youth through hands on applications of research techniques. This presentation documents the nature of the engaging, highlights some of our research results, and explores the importance of making connections with youth and community members as a driving force in new archaeological investigations. [Session 30]

**Mierendorf, Robert R. (TA. QT Studies) and Kevin E. Baldwin (TA. QT Studies)**

***Toolstone Geography in the Upper Skagit River Valley and Adjacent Areas***

The Upper Skagit Valley cuts through the core of the northern portion of the Cascade Range, an area uniquely defined as the headwaters of the Fraser, Skagit, and Columbia Rivers. The valley also cuts into chert bedrock, where it was traditionally quarried. Data from Salish ethnohistoric records, archaeological surveys, excavations, and museum artifact collections define the Hozomeen chert toolstone quarry complex based on physical, petrographic, geographic, and technological criteria. Artifact-to-source correlations show that most toolstone use was within 20 km of bedrock quarries but that it circulated to distal outlier sites located up to 150 km from quarries, an expanse covering portions of the Northwest Coast and Plateau. Radiocarbon dates and time-sensitive artifacts indicate use for 10,000 years or more. Flaking technologies reflect raw material abundance, quality, access, and proximity to lowland settlements. Routes of toolstone dispersal from the quarry complex followed river corridors and topped divides, including the Cascade crest, and circulated to distant lowland villages. [Session 31]

**Miller, Bruce G. (University of British Columbia)**

***Ethnohistory of the Upper Skagit***

The first detailed examination of the late 19th and 20th century history of the Upper Skagit tribe reveals an almost astonishing capacity of tribal leaders to reframe the political system to create cohesion in an extraordinarily difficult period of dislocation. Leaders dealt simultaneously with exclusion from fishing, the possibility of a nuclear power plant on their territory and waters, decline of male occupations and the out-migration of some members. By the end of the period, membership was rapidly increasing, the community had created significance features of self-governance, and engaged in reorienting the community to current economic, political, and legal successes. I examine this in light of concepts of corporate families, and Coast Salish practices of aggregation and disaggregation. [Session 31]

**Miller, Fennelle (FDMC) and Jennifer Hackett (Manastash Mapping)**

***Identifying the Seattle to Walla Walla Wagon Road***

Using archival resources, GIS mapping and analysis, and some fieldwork, the team of FDMC, Manastash Mapping, and ESA-Paragon was able to identify the route of the Seattle to Walla Walla Wagon Road. Our task was to identify the wagon road and early state highways that paralleled it, from Snoqualmie Pass eastward. As with all roads constructed before planning, the wagon road location seems to have varied slightly over time, but undoubtedly followed a single general route. Our team performed archival research, looking for references in text to the roads and points along them; we acquired and reviewed every historic map we could find; we digitized all of the relevant maps; and we ground-truthed the roads. Finally, we produced a series of GIS maps showing the road locations, a suggested driving route for those interested in exploring the area, and a few points of historical significance along the way. [Session 14]

**Millsap, Courtney (Eastern Oregon University) and Mary Kolb (EOU)**

***Hershey's, Big Hunk, and Jujubes: An Analysis of Candy Wrappers from the Historic Rivoli Theater***

A wide variety of candy wrappers were discovered during debris clean-up beneath the seating area of the historic Rivoli Theater, in Pendleton, Oregon. These candy wrappers provide a glimpse into daily life, especially related to entertainment and leisure activities for people in northeast Oregon. Specifically, the data provided from the analysis of these old candy wrappers informs our understanding about the time frame of theater operation and the consumption choices of the theater patrons. [Session 25]

**Minichillo, Tom (King County Department of Transportation, Road Services Division)**

***Sites Under Roads: Three Examples of Intact Archaeological Deposits, King County WA.***

Archaeology associated with roads and bridges is commonly about sites that are destroyed during construction. I will be presenting three examples of intact prehistoric archaeological deposits located beneath existing roads in King County, WA. In each case the nature of the site and its discovery is described. The sites are in urban and rural settings, on marine shorelines and in riparian areas, and are both shallow and relatively deep. In all cases the constructed roadway appears to have a preservation effect on the remaining archaeological materials, with at least one example of markedly better preservation being attributable to the presence of the road. The implications for archaeological research designs and for the long-term preservation of sites are discussed. [Session 14]



**Moret-Ferguson, Celia (Cardno Entrix)**

***Using Ethnographic Context and Spatial Distribution Analysis to Understand the Significance of Ambiguous Stacked Rock Features: A Case Study from Northeast California***

Across the landscape, Native American stacked rock features are often overlooked. In many cases, their origin, function, or time period cannot be assigned; or they are misinterpreted as either historic-period or modern. A stacked rock feature complex in Northeast California is used as a case study to show that spatial distribution analysis can be cross-referenced with information gleaned from ethnographic research to provide contextual information on these stacked rock feature complexes and their association to the landscape. This study can be used as a template for understanding the significance of stacked rock feature complexes, verifying tribal collective memory, or locating traditional cultural properties across particular physiographic and ethnographic settings. When the meaning or significance of precontact features are not apparent, are ambiguous, or need to be verified for management purposes, the methods from this study can be used as a framework for further analysis. [Session 19]

**Moss, Madonna L. (University of Oregon), Camilla F. Speller (University of York), Antonia Rodrigues (Simon Fraser University), and Dongya Yang (SFU)**

***Connecting Zooarchaeology to Community Interests: The Archaeology of Pacific Herring in Alaska***

We aim to develop a more complete understanding of the ancient Alaska Native use of Pacific herring (*Clupea pallasii*) to better assess the historical abundance, biogeography and genetic diversity of herring in the past. The ultimate goal is to improve herring fisheries management to benefit a wide range of stakeholders in the Arctic, Subarctic and beyond. Herring bone samples from 17 archaeological sites in Alaska spanning 9000 radiocarbon years have been tested. Ancient DNA recovery has been high, but technical challenges limit what we can say about genetic population structure at this time. Preliminary evaluation as to how the Alaska samples relate to others in British Columbia, Washington State, and the northwestern Pacific will be presented. The results should have implications for fisheries policy and practices, Alaska Native subsistence rights, and herring conservation. [Session 30]

**Nakonechny, Lyle (Washington State University)**

***Late Holocene Trade and Exchange in the Willapa River Valley: Archaeology and “Just-so Stories” of Enclaves, Wealth, and Dance on the Southern Washington Coast***

Late Holocene cultures of the Willapa River Valley of southwest Washington utilized a diversity of non-local materials acquired through multiple channels of long-distance trade. Exotic obsidian, nephrite, and schist artifacts are represented in surface and tide-zone collections from throughout the Willapa watershed. Recent XRF provenience studies of obsidian artifacts from multiple Willapa family surface collections have identified central Oregon sources, as well as unexpected sources in southern Oregon, northern California, central California, and Idaho. The anomalous diversity of sources inspired multiple hypotheses extending beyond modern collection contamination. This paper explores a hypothesized Pacific Athabaskan coastal trade network that may have existed between the Kwalhioqua-Tlatskanie enclaves of the Willapa River Valley, and the Tolowa, Hupa, and Upper Umpqua cultures of southwest Oregon and northern California. The Willapa River Valley is viewed as part of a network of Pacific coast estuary-oriented cultures engaged in relationships of exchange, wealth, status, and world-regenerative dance. [Session 36]

**Neterer, Alison (Beeswax Wreck Crew)**

***Exploring the Beeswax Wreck***

The Beeswax Wreck is a longstanding shipwreck mystery and maritime archaeology intrigue off the Oregon coast. The research team has determined the wreck is a Spanish Galleon ship from artifacts washed ashore, but has yet to identify the wreck location. Thus, the next installment of the Galleon adventure is to head out to, and under, the sea. This brings with it a slew of new considerations. In this presentation I will examine the issues specific to conducting archaeological dive operations with volunteers. The Beeswax project has always been a volunteer effort with a heavy focus on community involvement. Combine this effort with a need for specialized skills – boat operation, survey knowledge, dive experience in rough conditions – and the task becomes even more challenging. This paper is an examination of the Beeswax project’s experience of those challenges and how they can be alleviated in the future. [Session 24]

**Newsom, Matt (Washington State University)**

***Conflict Versus Drama: The Role of ‘Misplaced Fierceness’ in the Struggle for the Future of Women’s Flat Track Roller Derby***

After 13 years of consistent growth, two approaches dominate the current wave of women’s flat track roller derby. One embraces unregulated self-expression, fun, and community; the other seeks to develop derby strictly as a legitimate sport. As derby grows, differing opinions divide leagues over the direction of derby’s future. So, how does this conflict fit within a

theoretical discussion of the sport and its players? Using ethnographic fieldwork from two different leagues, I argue this conflict represents a struggle over identity politics. Through such things as league management strategies and material culture, skaters engage with the playful components of derby and compete to shape their leagues according to personal objectives. Finally, I demonstrate that key to this engagement is the process of mimicry, and show that this process ultimately ushers the sport into new competitive arenas as well as a wider variety of recreational forms. [Session 12]

**Nims, Reno (Portland State University)**

***Introduction to Sablefish Life History: Preliminary Results from Tse-whit-zen Village Site Faunal Analysis.***

Preliminary data from analysis of Tse-whit-zen – a village site on the southern shoreline of the Strait of Juan de Fuca occupied for the past 2,000 years – fish remains shows sablefish (*Anoplopoma fimbria*) may have played an important role in subsistence strategies of the village residents, but little is known about the interactions between ancient sablefish populations and foragers. Consulting ecological literature for information on modern sablefish life histories can reveal potential intersections between human populations and this deep sea species, the juveniles of which are known to inhabit near-shore habitats. The general age category at which sablefish are acquired thus has implications for the interpretation of procurement strategies employed by human foragers. Ages may be attributed to sablefish remains using a body-size regression formula based on the vertebra diameter, but it is also important to develop diagnostic criteria for sablefish identification because of skeletal similarities to salmon (*Oncorhynchus* sp.). [Session 27]

**Noll, Christopher D. (Versar Inc.)**

***A Baseline Context for the Interpretation and Evaluation of Historic Mining Properties Using the 1872 Mining Law***

The identification and investigation of historic age bedrock mining features is a relatively common occurrence in cultural resource management settings in the American West. These features can be problematic for archaeologists who must evaluate their significance based on data sets constrained by arbitrary project boundaries, and limited or incomplete historic records. Attempts by archaeologists to interpret historic mine sites are further complicated by the dominant research themes in historic mining archaeology related to very specific social and economic contexts that may not be well developed for the area in which an archaeologist is working. All historic mining since 1872 occurred within an overarching legal context that can serve as an effective baseline for evaluating the level of development and financial investment at a historic mining property, which will permit reasonable inferences about the significance of a site. The baseline presented identifies developmental stages and material signatures of historic mine properties. [Session 25]

**North, Michelle (Equinox Research and Consulting International Inc.)**

***Have You Been Dumped? Using Artifact Analysis to Reconstruct Deposition in a Disturbed Context***

When faced with a large volume of disturbed cultural material it is common to assume it has a limited data potential. A timeline of the disturbance and resulting re-deposition can aid in forming a better understanding of a collection and recover some of the data potential; however an accurate chronology is often unavailable. Working backwards by analyzing a collection from a disturbed context is one method in which to recreate this timeline. Here we discuss how the analysis of a collection's artifact type density from a disturbed site on Whidbey Island, Washington gave clues to the events in which that disturbance and re-deposition of material occurred and the implications of that reconstruction. [Session 8]

**Odwak, Hartley (Sources Archaeological, Heritage Research Inc.)**

***The Hopetown Archaeological Project – Wet Site Challenges and Outcomes***

Sources Archaeological and Heritage Research Inc. and the Gwawaenuk Tribe's 2010 Hopetown Project (Heghums, EfSq-2) was a large-scale excavation which examined 2,150 cubic meters of shell midden containing a wealth of artifacts and features. The most unanticipated findings were two wet-sites, the first of their kind in the Broughton Archipelago archaeological record. The recovered perishables include an array of basketry, cordage, and worked wood, as well as a canoe and paddle which required immediate, on-site development and implementation of methods to excavate, store, pack, and transport the waterlogged material to Sources' laboratory (Vancouver, B.C.). The establishment of optimal environmental stability for the perishables in the laboratory, as well as during storage and transport, was met through extensive consultation with Northwest Coast wet-site experts. [Session 28]

**Oliver, Kali D.V. (University of Idaho)**

***At the Intersection of Orphaned Collections and Civic Engagement***

At times, orphaned archaeological collections may seem like a messy, overwhelming task for professionals to attempt to address, especially with their already overburdened schedules. However, in recent years orphaned artifacts have become a source of civic engagement within certain communities, meriting them additional attention. This paper will focus on two

major examples of how orphan collections are being used in a federal capacity, through the Veterans Curation Program (VCP), and within an academic setting, via the Market Street China Town Project (MSCAT), to further social action. Additionally, my time spent re-housing and sampling materials from the orphaned Hussey Collection, in collaboration with the Fort Walla Walla Museum, for my thesis, will also be examined. This will briefly illustrate how partnering with non-profit associations, such as local museums, to re-examine orphaned archaeological materials can provide ample public outreach opportunities. [Session 10]

**Ortega, Rebecca (Western Washington University)**

***Spirited Away: Coevolution of Hepatitis B and C with East Asian Alcohol Phenotype***

Individuals who carry one or more mutant genes involved in alcohol metabolism (*ADH1B\*2/ALDH2\*2*) experience what is known as the 'alcohol flush response'. The mutant enzymes (*fast ADH/inactive ALDH2*) elicit negative physiological responses via rapid acetaldehyde influx, promoting a reduction of alcohol consumption and subsequent protection against alcoholism and death, especially in hepatitis B and C endemic regions. Paradoxically, some alcoholics in China and Japan carry one or both protective genes (*ADH1B\*2/ALDH2\*2*). They also exhibit reduced flush responses compared to non-alcoholic controls with corresponding mutant alleles. This study develops a multifactorial coevolution model between hepatitis B/C and the *ADH1B\*2/ALDH2\*2* allele type to examine virus-host relationships as possible selection pressures on the enzymes of alcohol metabolism. Changes in cultural climates and phenotypic plasticity will also be implicated to explain why alcoholics with mutant alleles elicit a different physiologic response than non-drinkers with identical allele types. [Session 37]

**Packwood, Robert K. (University of Montana)**

***Social Control in US Biomedicine: Theory and Examples from Primary and Urgent Care***

United States biomedicine serves multiple functions. Besides its well understood healing role, biomedical doctors, nurses, and medical personnel serve social control functions. Often these social control functions are applied informally, or at a level slightly below full conscious perception. An analysis of patient/medical personnel interactions at the primary and urgent care levels conducted in Seattle offers considerable specific evidence supporting the notion that US biomedicine is about much more than just healing. [Session 34]

**Parker-McGlynn, Kyle (University of Idaho)**

***Digital Museums Used to Create Accessibility and Educational Outreach***

The main goal of this presentation is to demonstrate ways archeology can create accessibility and educational outreach to the public via the internet. Several different web interactive programs such as CyArk, 123D catch, and even YouTube, will be demonstrated on how they can be used by archeologist to create accessibility and outreach. The second part of the presentation will be on how you can integrate several different internet services together to create a viable digital museum. A properly done digital museum can make it so artifacts are available to view and interact with by anyone with the internet. A sample digital museum displaying artifacts from the Asian American Comparative Collection (AACC) will be used as an example for this demonstration. [Session 10]

***Pre-Missoula Flood Site Suitability Model***

The concept of this presentation is to examine possible pre Missoula Flood site locations in the Columbia Plateau Region. This task will be accomplished by examining paleo climate data, and faunal remains to determine if people could have lived in the region before the Missoula Floods occurred. After examining paleo climate data previously discovered sites are used to determine if patterns of suitability exists, suitability pattern variables include but are not limited to distance to fresh water, percent of slope, elevation, and aspect of hillsides. All of these variables will be used to create a site suitability model that then will be combined with a digital elevation model (DEM), of the Missoula Floods. The Missoula Floods DEM will be used to remove possible sites that were affected by the flood to determine if any possible site locations are left to be found today. [Session 38]

**Pederson, Mark (Western Washington University)**

***Italian Piazze as Models for Sustainable Public Outdoor Space***

One of the potential functions of any culture is the purposeful shaping of its built-environment to provide appropriate settings for successfully negotiating a sustainable relationship with the broader natural environment. An urban culture's operative spatial units are neighborhoods and thoughtfully designed public outdoor space, at that scale, can act as a venue for the production of the social capital essential for resilient and sustainable communities. In this research, a systematically selected sample of Italian piazze is considered as prototypical of those morphological characteristics fundamental to

effective design of public outdoor space which maximizes its social utility. The approach draws on archaeological methods and the documentation of features, in this case piazze, as though they were prehistoric in origin with no available narrative to shape an understanding of their existence. Analysis is limited to the material characteristics of the piazze without regard to their specific cultural production, use, or meanings. [Session 36]

**Pederson, Nora (University of Alberta)**

***Wapato Harvests on the Lower Columbia: Incipient Agriculture? Industrial Agriculture?***

Recent work on wapato cultivation in the Lower Columbia region focuses on management and intensification strategies that come close to full-fledged agriculture. These analyses are based on models of subsistence that, when used as comparative tools, provide important insight into the development of agriculture on a global scale. However, as comparative tools, these models are ineffective without sufficient understanding of specific practices in local historical, and cultural, context. This paper draws connections between 20<sup>th</sup> century participation in Oregon's agriculture industry and the 19<sup>th</sup> century cultivation, harvest, and trade of wapato in the Willamette Valley and Lower Columbia region. It compares these two indigenous activities in regional, historical, and theoretical contexts and invites anthropologists to reconsider indigenous agriculture in the Northwest. [Session 7]

**Petrich-Guy, Mary (University of Idaho)**

***Lessons Learned: Developing an Archaeological Teaching Kit for Idaho Elementary School Classrooms***

Though preservation and cultural resource management laws were written with the public in mind, effectively engaging the public is a constant challenge. In the face of demands for measurable results in education programs and the classroom, both archaeologists and educators are turning focus towards assessment. Archaeology teaching kits for elementary classrooms can be useful tools, facilitating an integration of archaeological material into schools; yet how do these kits impact attitudes towards archaeology, history, and cultural preservation? How likely are educators to use the kits in the classroom? What actions should archaeologists take prior to and during the development of such materials? This paper will discuss the results from collaborative development, testing, and assessment of the Sandpoint, Idaho, Archaeology Project hands-on teaching kits. [Session 10]

**Philips, Lisa (University of Alberta)**

***Locating Blended Communities in Early 19th Century Hawaii***

Daniel Boxberger has been a collaborator with Allan McDougall and me on three consecutive SSHRC grants exploring hegemonic changes that occurred when the British, and later Canadian, and USA states were imposed on long-standing blended communities in the Old Northwest and the Pacific Northwest. In keeping with this panel, the extensive personal, familial and entrepreneurial connections that linked these two areas was extended across the Pacific to, especially, Hawaii and Russia. In 2009, while conducting research in Hawaii, I asked a local archivist where I might find blended families from the early 19th Century. Much to my astonishment, I was informed that there was almost no intermarriage at that time. With another five years researching descendants of the early traders in the Pacific Northwest, I was able to locate many of those missing families. This paper presents some parallels between blended families in the Sandwich Islands and the Old Northwest. [Session 7]

**Phillips, Taylor (Eastern Washington University)**

***The Chicana/o Struggle***

The purpose of this paper and research is to examine and critique the current United States education system and discuss the negative effects it has on Chicana/o students. By identifying the faults and misconceptions of English-only programs and how they are limiting Chicana/o students' academic potential, communities, parents and educators are better able to recognize how to right the injustice and bring an equal education to these students. I will discuss the pros and cons of English as a Second Language programs, Bilingual education programs and Immersion programs and how Chicana/o students will best benefit by schools who utilize them. By better understanding these program options, communities, parents and educators will be able to put forth an education reform which will better help the students of the Chicana/o community succeed and flourish while reaching their full academic potential without harming the education of non-Chicana/o students. [Session 6]

**Polmueller, Casey (Eastern Washington University)**

***Efficacy of Marine Protein in the Self Management of Joint Disorders***

This project is a pilot study for a larger project, the purpose being to ascertain whether consuming marine protein is more or less effective than or equivalent to fish oil supplements in the self management of joint disorders, including arthropathies

and Sjogren's disorder. The population is made up of volunteers who have a joint disorder. The subjects will be told to take a daily fish oil supplement or eat fish three times weekly. The participants will be also asked to keep a structured journal of their experiences during the study and will be contacted biweekly by the researcher to discuss their experiences. [Session 18]

**Price, Erika J. (Central Washington University)**

***Vocalizations of Tibetan Macaques (*Macaca thibetana*) at Mt. Huangshan, China***

Little information exists on the types of vocalizations produced by Tibetan macaques (*Macaca thibetana*). Data were collected on the vocalizations of a group of 41 managed Tibetan macaques of both sexes and all ages at a tourist site at Mt. Huangshan, China over two months in 2013. This allowed for the first construction of a vocal repertoire ethogram for the species, including descriptions of all observed vocalizations, the contexts in which they occur, their production by members of each age/sex class, and their apparent intended recipients. Most vocalizations are produced by the individuals of multiple age/sex classes and occur in multiple contexts. Video recordings were made of most vocalizations, which will allow for future reference and analysis. [Session 37]

**Riley, William J. (Eastern Oregon University)**

***Electrical Resistance Tomography as a way to Map Sediment Depth in Limestone Caves in Croatia***

This study examines the use of remote sensing in archaeology generally and more specifically using Electrical Resistance Tomography (ERT) in measuring sediment depth in cave sites. Remote sensing is utilized by today's archaeologists to help guide at archaeological sites and as a primary data set to help with site interpretation. Geophysical techniques such as magnetic survey, GPR, conductivity and electrical resistance all gather data on subsurface anomalies. More specifically, ERT, can be used for depth sounding in a way similar to collecting GPR time slices. This technique is proving to be useful in mapping depth of cave sediments and helping to guide archaeological investigations in caves. [Session 13]

**Robison-Mathes, Anna (Equinox Research and Consulting International Inc.)**

***No Context, No Problem: Connecting 45IS45/300 with Historic Pioneer Way***

Sites disturbed by human activity have a prominent place in the field of archaeology. Finding context in these sites can be challenging, especially in heavily disturbed settings. The disturbed site of 45IS45/300 offers an example of this search for contextual information. This study looks at finding context in the site's historic artifact assemblage by examining the dislocated material of 45IS300/45. Removed from Pioneer Way in Oak Harbor, WA, this material was deposited by truckloads at a second location in piles that contain discrete amounts of information. In addition to analyzing a sample of these piles, this study also uses archival research of the area to reconnect the artifact assemblage to the historic area of Oak Harbor, WA. By examining the components of a disturbed site, site 45IS45/300 provides an insight into the efficacy of retrieving contextual information in heavy disturbance. [Session 8]

**Rogers, Ann Bennett (USDA Natural Resources Conservation Service)**

***Is the Map Wrong, or were the Mappers Wrong?***

Changing technologies and the proliferation of compliance archaeology, especially in the last 40 years has resulted in an overwhelming dataset. The characteristics of this dataset, which has been brought over from hand drawn maps by amateurs trying to preserve information for a disappearing resource to high technology. As archaeologists adapt new methodologies, they still need to understand the earlier goals and purposes of earlier recording. Understanding those methodologies is the beginning. This paper will address these changing information types, the assumptions that recorders made and how these maps potentially influence management decisions today. [Session 26]

**Rollins, Alyson (Equinox Research and Consulting International Inc.)**

***What Information Can Fauna from a Re-deposited Site Tell Us? Analysis of the 45IS45/300 Faunal Assemblage***

During road construction activities in downtown Oak Harbor, Washington in 2011, culture rich shell midden from 45IS45 and historic deposits were inadvertently removed and transported to five locations in central Whidbey Island. These five locations comprise re-deposited site 45IS300, which was screened over a 13 month period to recover artifacts, fauna and human remains. One of our primary research questions during this investigation was "What information can be learned from a disturbed context?" With this in mind we set out to analyze the faunal assemblage from the 45IS45/300 Recovery Project, consisting of 11,576 mammal, bird and fish bones and bone fragments. These findings are based on raw counts of bird and fish bones and more in-depth investigation of mammal bone, including representation by bone/animal size class, taxonomic representation and abundance, element representation, age, distribution, and modifications in cataloged mammal specimens. Two clear trends were identified through this analysis. First, most of the assemblage consisted of

historic food animals that were likely processed locally. Correlations can be made between the re-deposited piles at the Pit Road location and (what is believed to be) the original excavation location in the vicinity of known Butcher Shops along Pioneer Way. Second, the abundance and distribution of bird and fish bones, as well as the non-domesticated terrestrial mammal element distribution is greatest in the re-deposited piles identified as containing “dense precontact” materials. [Session 8]

**Rorabaugh, Adam N. (Washington State University)**

***Critically Evaluating the Applicability of Dart-Arrow Indices in the Salish Sea***

A substantial amount of recent literature has re-examined the applicability of dart-arrow indices in chipped stone tools from archaeological assemblages ranging from the Columbia Plateau to Californian Coast. As yet, these approaches have not been employed to examine variation in Coast Salish lithic traditions. I critically apply several recent dart-arrow indices from the literature, and also employ a discriminant function analysis (DFA) to a data set of chipped and ground stone points from 49 archaeological sites spanning the past 5,000 years in the Salish Sea. Each index yields different timing for the introduction of arrow technologies in the region, ranging from 3500-2000 cal BP. However, all suggest that darts and arrows were complementary technologies. Following Erlandson (2014), I suggest that the application of these metric indices for functional interpretations overlooks the complexities of coastal lithic assemblages and the wide range of potential functions for hafted chipped and ground stone technologies. [Session 19]

**Rose, Chelsea (Southern Oregon University's Laboratory of Anthropology)**

***Going Public: Public Archaeology and Heritage Tourism at the Jacksonville Chinese Quarter Site in Southern Oregon.***

The Southern Oregon University Laboratory of Anthropology (SOULA) conducted data recovery excavations at the Jacksonville Chinese Quarter site in the fall of 2013. SOU students and community volunteers were incorporated into the investigation, and an ‘Open Site’ Public Day brought hundreds out during the dig. When excavations unexpectedly uncovered the intact remains of a building burned in the fall of 1888, the entire community was able to share in the excitement of the discovery. Working closely with the Oregon Department of Transportation, the City of Jacksonville, and the Jacksonville Fire Department, SOULA’s excavations in the Chinese Quarter Site fostered a new awareness and appreciation on behalf of the local community and public for the town’s buried history. This project demonstrates how holistic, public approaches to cultural resource management can have positive impacts on the larger project, and highlight the intrinsic value of our shared cultural heritage. [Session 14]

**Rose, Chelsea (Southern Oregon University's Laboratory of Anthropology) and Mark Tveskov (Southern Oregon University's Laboratory of Anthropology)**

***After They Drove Old Dixie Down: Identity and Isolation in a Southwestern Oregon Mountain Refuge***

In the spring of 1872 the Carolina Company wagon train left the war-torn Appalachian Mountains and headed to Oregon. Pulling up generations worth of roots in a region particularly devastated by the infamous Stoneman's Raid of 1865, the group eventually found refuge on a remote mountain on the Southwest Oregon Coast, where they were given three years to starve out by neighboring communities. Described as the bone and sinew of the south, the Carolina Company soon established a mill, school, and small ranching settlement that endures to this day. While perceived as backwards by their urban neighbors, the community came to rely on their isolation for survival and sense of identity. At one time promoting itself as a utopian community, the largely self-sustaining colony created a successful, even if modest, existence. Recent investigations have provided new information about this poorly understood historical community and its modern legacy. [Session 22]

**Rosenberg, J. Shoshana (Portland State University) and Virginia L. Butler (Portland State University)**

***A Study of Social Rank and Resource Control Using Ichthyofaunal Remains from the Cathlapotle Plankhouse Village Site***

Social inequality and inherited rank are a trademark of the social organization of Northwest Coast Native Peoples, and faunal remains are one path for examining this. My thesis work tests the relationship between prestige differentials and subsistence patterns using fish remains from the Cathlapotle plankhouse village site on the Lower Columbia River. Using models from optimal foraging theory to develop a ranking system for fish taxa based primarily on size, I examine the degree to which social rank designations of houses are reflected in the spatial distribution of ichthyofaunal remains relative to their taxonomic rankings. Analyses show a higher proportion of salmon compared to lower-ranked minnows/suckers and more of the large chinook species relative to smaller non-chinook salmon where elite village members likely lived. This research informs on the nature of resource control in the region as well as the efficacy of drawing conclusions about social rank through faunal remains. [Session 27]

**Rowland, Julia (Western Washington University)**

***Connecting with Communities: Putting Community Archaeology into Practice in Skagit County, Washington***

From 1897 to 1907 the Equality Colony, a socialist utopia, attempted to unite socialists from across the nation and to convert the U.S. by providing a practical demonstration of prosperity under socialism. The Colony played a fascinating part in the formation of Washington State and has great potential to contribute to the archaeological record. The land that hosted the Equality Colony is privately owned by 35 different parties creating a challenging context for archaeological survey. My goals in this project were to share my knowledge about Equality with the local community, to learn what interest in and information about the Colony they had, and to address people's concerns about archaeology. I attended local history events, gave talks, held meetings, and sent out numerous rounds of postcards. In this paper I will examine the methods used; both triumphs and setbacks will be discussed. This project has inspired and contributed to conversations about heritage, archaeology, history and conservation in this community. [Session 10]

**Sappington, Robert Lee (University of Idaho) and Laura Longstaff (University of Idaho)**

***The Kelly Forks Work Center Site: A 12,000-Year Record of Human Occupation at the Interface between the Columbia Plateau and the Northwestern Plains***

The multi-component Kelly Forks Work Center site (10CW34) is located at the confluence of Kelly Creek and the North Fork of the Clearwater River on the Clearwater National Forest. A series of 26 radiocarbon dates document recurring occupations here from the early Holocene into the historic period. Concentrations of Windust phase and Cascade phase flaked lithic tools, plus anvils, net weights, and shaft abraders provide evidence of tool manufacture and modification, as well as fishing, hunting, and animal processing. While most cultural materials are comparable to those from the southern Columbia Plateau, several lithic tools are similar to styles from the northwestern Plains. Protein residue analysis identified bison, sheep, rabbit, human, rodent, and other antisera. X-ray fluorescence identified obsidian and vitrophyre items from sources in Idaho, and Oregon, and Montana. Kelly Forks represents a significant setting in the northern Rockies that was used intermittently for more than 12,000 years. [Session 5]

**Sanchez, Gabriel M. (University of Oregon), Jon Erlandson (UO), and Eirik Thorsgard (The Confederated Tribes of Grand Ronde)**

***Cetacean Hunting at the Par-tee Site (35CLT20): Ethnographic, Artifact, and Blood Residue Analysis Investigation***

Anthropologists have long believed that Native Americans on the Northern Oregon Coast did not actively hunt cetaceans; however, archaeological evidence suggests otherwise. My project utilizes ethnographic data, comparative artifact analysis, radiocarbon dating, and blood residue analysis to investigate whether whales may have been hunted during prehistoric times along the Northern Oregon Coast. An artifact from the Par-Tee site (35CLT20), a humpback whale (*Megaptera novaeangliae*) phalange with an embedded bone harpoon point, provides evidence of whale hunting. The dimensions of the embedded harpoon point were determined using computed tomography (CT) scanning in order to complete comparative analysis. Based on comparative analysis three harpoon typologies were selected for blood residue analysis. Blood residue analysis confirmed the use of the leister harpoon for trout, salmon, and steelhead fishing. In addition, future C14 dating will provide a time marker for active or opportunistic whale hunting within Oregon. [Session 27]

**Schwartz, Tracy (University of Oregon)**

***Preparing for the Public: The Dos and Don'ts of Public Archaeology as Learned through Trial and Error***

Archaeology is often viewed as the study of the material culture of dead. Considering how the living population may interact with the site or learn from it is usually an afterthought or never a real concern. However, especially considering the value of the archaeological record to speak for marginalized communities whose voices have been silenced in the written record, the public should have the opportunity to engage with archaeologists and their methodologies, not in an Archaeology 101 classroom, but instead at the excavation site. Borrowing from the lessons learned from conducting public archaeology at the Cyrus Jacobs-Uberuaga Boarding House in Boise, Idaho, this talk will review some of the dos, don'ts, and didn't think of that's to help future excavations connect the public to the past. [Session 10]

**Shantry, Kate (SWCA Environmental Consultants, Inc.)**

***Historic Hot Rocks? Fire Modified Rock Characteristics at Mission Spit***

Fire modified rock (FMR) is a ubiquitous and understudied artifact type. Analyses of FMR for cultural resource management projects are usually limited to field documentation and/or partial collection of feature FMR. Random sampling of FMR may have utility for comparisons to other assemblages. Collection of FMR at Mission Spit, a contact-era site in southern Puget Sound, offered an opportunity to attempt to explain this technology that persisted throughout the archaeological record in the Northwest. [Session 9]

**Sharley, Ann (SWCA Environmental Consultants, Inc.)**

***Mid-20th Century Pan-Abode Log Cabins***

Pan-Abode log cabins are a distinctive and easily recognizable type of mid-twentieth century architecture. They are also surprisingly common. This paper presents a brief history of the Seattle-based manufacturer and identifies characteristics of this architectural type. [Session 25]

**Shaw, Lawrence M. (University of Idaho)**

***How to Communicate Your Research in 2014: Adapting Advertising and Marketing Techniques for Anthropological Communication***

Communication problems have plagued most academic researchers during some point in their careers. This paper will look at the techniques and strategies utilized by media professionals to help eliminate poor communication. Everyday advertising agencies are creating advertisements that stand out amongst the cluttered media environment. Competition to sell products has lead advertisers to create advertising messages that permeate popular culture. The application of these techniques will help today's researchers accurately and effectively communicate their research across many platforms and demographics. Effective communication is the difference between ignorance and clarification in situations of writing grant proposals to engaging the public. [Session 6]

**Shong, Michael (SWCA Environmental Consultants, Inc.)**

***Finding Balance between Environmental Restoration and Protecting Historic Properties***

In 2013, the Washington State Department of Ecology completed environmental remediation and restoration at the former Irondale Iron and Steel Plant site (45JE358), an historic property listed on the NRHP. The plant left waste material on site, contaminating localized areas. The goal of the cleanup was to reduce risks to human health and the environment posed by petroleum hydrocarbons and metals in the soil. SWCA Environmental Consultants, Inc. was contracted to develop a monitoring and discovery plan and to monitor cleanup actions with the goal of preserving and protecting cultural resources within the confines of protecting public and environmental health and safety. The cleanup actions resulted in documentation of historic features, although some were damaged, or destroyed in the process. This presentation discusses the results of monitoring and the interplay between county, state and federal agencies with respect to protecting cultural resources and the need for environmental remediation and restoration. [Session 35]

**Silverman, Shari Maria (Apres Rain Arroyo)**

***Relationship between Culture, Geology and Transportation Viewed Through Roadcut Hazards***

A dynamic relationship between culture, geology, and transportation was revealed by a roadcut hazard engineering study in the northern Rocky Mountains and Great Basin. The survey involved analyses of 883 road cuts throughout the state of Idaho. It examined rock and soil characteristics, weather, road features, road use intensity, and other factors. The study also uncovered changing routes through time, sometimes through hazardous areas. The ethnohistoric record suggests that environmental factors determined travel routes and modes within the region during late prehistoric and protohistoric periods. From historic times into the modern era, however; industrial advancements and needs, politics, new residents, and changing values reduced geography's control over travel routes. The more hazardous roadcuts often stood upon historic- or modern-period pathways, or alternate routes to older ones. Geology still shapes hazards and maintenance. However, economics and politics now determine travelways. [Session 35]

**Smart, Tamela S. (Equinox Research and Consulting International Inc.)**

***What can Lithic Artifacts from a Re-deposited Site Tell Us? A cursory Examination of the Lithic Assemblage from 45IS45/300, Whidbey Island, Washington***

During road construction activities in 2011 in downtown Oak Harbor, Washington, culture rich shell midden from 45IS45 and historic deposits were inadvertently removed and transported to five locations in central Whidbey Island. These five locations comprise re-deposited site 45IS300, which was screened over a 13 month period to recover artifacts, fauna and human remains. Lithic artifacts were the most common precontact artifact type recovered during the 45IS45/300 Recovery Project (n=118, 56.5%) and provide valuable insight into the past activities that were carried out at this location.

Specifically, the site was likely occupied during the Marpole Phase, the inhabitants were using lithic materials that were available locally, they may have been curating lithics from the past, and that many of the bifaces were dual purposed.

[Session 8]



**Smith, Julia (Eastern Washington University)**

***Undergraduate Research in Anthropology: A Recipe for Student Success***

Eastern Washington University has built a successful system for supporting undergraduate research, building from our core major classes to a university research symposium to regional and national professional conferences. This paper explores the ways in which this has helped students both as developing professionals and in building supportive relationships within the department. [Session 4]

**Smits, Nicholas (Archaeological Investigations Northwest, Inc.) and Ron Adams (AINW)**

***From Wide-Open Town to Chinatown: Investigations at Site 35WS453 in The Dalles, Oregon (Part II)***

In 2013, AINW. conducted archaeological testing at site 35WS453 for the proposed Granada Block Redevelopment project in downtown The Dalles. The City of The Dalles, in partnership with private developers, plans to build a hotel on city property within site 35WS453, which encompasses half of a city block. Historically, the businesses that occupied the block between the 1850s and 1870s were part of the city's earliest commercial district. Between the 1880s and 1930s, the northern half of the block was the center of The Dalles' Overseas Chinese community, anchored by stores, boardinghouses, and laundries. The stratified archaeological deposits at site 35WS453 are associated with commercial and residential occupation between the 1850s and 1950s, and the site's complex depositional history can be traced through multiple floods, fires, and episodes of building construction and demolition. This presentation focuses on the historical associations of the archaeological deposits and recovered artifacts. [Session 21]

**Solimano, Paul S. (Willamette Cultural Resources Associates, Ltd.) and Daniel M. Gilmour (Willamette CRA)**

***Precontact Land-use in the John Day Reservoir***

Dozens of precontact archaeological sites were excavated prior to being inundated by the John Day Dam, but only a fraction of this material has been analyzed and reported. In this paper, I make use of an available data point: the size, shape and general age of house features. This house data allows formulation of a preliminary model of changing hunter-gatherer land-use patterns in the area through the Holocene. Early and Middle Holocene materials are sparse and poorly understood, but appear the residue of residually mobile foragers. Pithouses appear around 3,000 years ago and are likely related to logistically organized foragers. Pithouses and mat lodges seem to peak between about 2,500 and 1,000 years ago and may decline afterwards. These patterns are compared to the The Dalles area as well as the Deschutes and John Day River drainages. [Session 19]

**Stallard, Lindsey (Oregon State University) and Kevin Bruce (Siuslaw National Forest)**

***Old Records and New Tools: Using Historic Land Records to Structure Archaeological Survey and Historic Site Management on the Siuslaw National Forest***

Over 3,900 land records are housed at the Siuslaw National Forest (SNF) headquarters offering valuable information on early 20th Century homesteading in Oregon's Coast Range. Current SNF program direction aims to summarize this information to support archaeological site identification and the development of a historic context that will lead to a more effective management strategy for homestead sites. Initial work to meet this goal is underway through Stallard's thesis research, which will focus on historic land records and associated sites in the Indian Creek watershed in Lane County, Oregon. New methods involving integration of land record information into a database and GIS will be used to formulate expectations concerning site size, layout, and complexity that will be tested through archaeological fieldwork on a sample of homestead sites in the watershed. The study should provide new insights concerning homestead sites on the SNF and serve as a model for future work. [Session 11]

**Steinkraus, Sarah M.H. (Central Washington Anthropological Survey, Central Washington University)**

***Excavation at 45KT248, the McDonald Springs Site***

In the spring of 2013, Central Washington Anthropological Survey conducted a Phase III archaeological excavation at the McDonald Springs Site (45KT00248) in Kittitas County, Washington. CWAS was contracted to execute deep excavations at McDonald Springs in order to identify eligibility of the site for the National Register of Historic Places. During this project three one by one meter units situated within a one meter deep trench were excavated. Two of these were excavated to a depth of approximately two meters below datum and the third was excavated to a depth of 3.8 meters below datum. A total of 3,793 flaked lithic artifacts and 453 faunal bone fragments were documented. Only three of the lithic artifacts were diagnostic tools. This presentation will discuss the excavation at this site and the ongoing research associated with the project. [Session 5]

**Stokeld, Rachel (University of Idaho) and Mary Petrich-Guy (University of Idaho)**

***Documenting Chinese Railroad Laborer Camps in Northern Idaho: A Professional/Amateur Collaboration***

This paper will discuss a site inventory project conducted by University of Idaho graduate students in Bonner County, Idaho. The project aimed to record the location of campsites occupied by Chinese laborers constructing the Northern Pacific Railroad through Northern Idaho, beginning in 1882, and identify candidates for excavation. Inventoried sites were located through collaboration with an artifact-collector-turned-researcher of the immigrant Chinese in the American West. The Chinese laborer was vital to the building of the trans-continental railroads; linking the east and the west, and transforming the economy and population of the United States. While archaeological study of Overseas Chinese settlements in urban and mining settings has yielded data on lifeways in these contexts, little is known about the lives of the men involved in railroad building. This project is a first step in addressing this data gap. Within the theme of this conference, this collaborative project is an example of anthropologists connecting with the amateur archaeologist community. [Session 10]

**Storey, Danielle (U.S. Army Corps of Engineers)**

***Preserving Mining Landscapes: What to Do When Your Archaeological Site is a Big Hole in the Ground?***

Mining landscapes have been described as many things: harsh, austere, stark, but never pretty. At the heart of environmental restoration is the idea that we should be putting the landscape back to its natural state. And while biologists will tell you that it is for fish and wildlife habitat, we know that for the public, the idea of aesthetically pleasing landscapes is a large part of the equation. This makes working with mining landscapes an especially wicked problem because most of us have been conditioned against preserving places that are unattractive, unpleasant or controversial. This paper provides two case studies set in northeastern Nevada where the needs of human health and safety, wildlife, and the mining landscape found common ground. [Session 35]

**Sullivan, Michael (Artifacts Consulting, Inc.)**

***Washington State Roads: Integrity and Context GIS Analysis***

Development of a geographic information system (GIS) screening tool to proactively identify historic significance levels and interpretive potential of state roads. A five county area serves as the initial project with potential for statewide expansion and inclusion of county roads. Central to this process is development of a methodology to understand alignment and setting changes over time, identify and locate character-defining features of the roads and their corridors, points of interest and associated built environment features, and assess visual and scenic qualities. The intent is to facilitate Section 106 and Section 4(f) project planning and to direct preservation efforts to those roads and corridors having the highest integrity. The interpretive element seeks to raise greater public awareness and appreciation for the role roads play in community and regional development patterns. Data will be shared through DOT and the Regional Transportation Planning Organizations for use by their clients in advanced project planning. [Session 14]

**Tasa, Guy L. (Washington State Department of Archaeology and Historic Preservation) and Liam Q. Tasa, (South Puget Sound Community College)**

***Toward An Archaeological Guide to Coffin Plates and Their Use in the United States and Canada (ca. 1800 to 1930)***

Frustration encountered during the identification and dating of a coffin plate associated with the skeletal remains of two individuals found in Renton, Washington in 2008 led to an effort at establishing a guide to coffin plates and their use in the United States and Canada. Utilizing photographs and other data collected from historic period coffin plates available on genealogical and online auction sites over the past four years has resulted in a collection of just under 1500 coffin plates dating from ca. AD 1800 to 1930. Utilizing these photos along with historic references (trade catalogs and patents) has allowed for the beginning of the creation of a stylistic guide to coffin plates and their periods of use. A summary of some preliminary observations on coffin plate trends, a description of a couple of the coffin plate styles identified, and a review of the undated coffin plate from Renton are discussed. [Session 25]

**Tasa, Guy L. (Washington Department of Archaeology and Historic Preservation)**

***2013 Biennial Report to the Legislature Concerning Activities Performed Under Washington's Non-Forensic Human Skeletal Remains Legislation***

The Washington State Department of Archaeology and Historic Preservation is required to report to the state legislature biennially its activities performed under the 2008 human remains legislation that was enacted into law. A summary of this report is presented. It describes the activities of the State Physical Anthropologist's work with non-forensic human skeletal remains cases since the law was enacted nearly six years ago and the agencies efforts at mapping cemeteries and burial locations across the state. Difficulties encountered in these endeavors are outlined and discussed. [Session 25]

**Taub, Alex A.G. (Wenatchee Valley College)**

***I Can Dig This: Applying Archaeology Field Research Methods to Teaching Introductory Classes***

This paper will look at how projects and mock excavations can give new students a realist experience in the logic of archaeology without the risk to actual sites and artifacts. These projects include two activities on artifact interpretation. One on a mock controlled excavation and one which brings these three earlier projects together by trying to interpret stories of culture change as told through artifacts. Attention will be given to the legal and ethical challenges of these types of projects. [Session 4]

***A Time for Sharing of Classroom Techniques and Methods***

An open floor discussion to share projects, approaches, methods and tools. Please come prepared to share specific resources that you think can help others. [Session 4]

**Taylor, Laura (Western Washington University)**

***The Sound, Ships, and Salmon: An Investigation of Historic Walking Tours in Whatcom County, Washington***

The history of Whatcom County, Washington is a history of water. Access to Bellingham Bay was integral to the development of Whatcom County in the late 19<sup>th</sup> and early 20<sup>th</sup> centuries; the salmon, timber, and mining industries that created the capital necessary for early development all relied on shipping to and from Bellingham Bay ports. History of this early time is portrayed most often in historic walking tours in Whatcom County. Tourism is a billion dollar industry in the United States, and over 50% of tourists in the United States report visiting a historic or heritage site while traveling. This paper examines how historic walking tours in Whatcom County, Washington incorporate elements of multi-vocality and authenticity, and how these presentations contribute to the place identity of the region. In doing so, I hope to isolate elements that could be improved in order to draw a larger audience to these tours. [Session 23]

**Temple, Carolyn (Bureau of Land Management, Burns, OR)**

***Dry Bone Complex: A Preliminary Study of Hunting Behavior in Southeast Harney County, Oregon.***

Following the 2012 Holloway wildfire in southeastern Harney County Oregon, an archaeological survey was conducted to locate, record, and protect cultural resources during rehabilitation projects. During this survey, more than twenty areas, approximately 2 meters in diameter, were found containing concentrations of various types and sizes of animal bones. Flaked stone tools, lithic debitage, and groundstone were also found. Faunal life represented within the concentrations includes antelope, amphibian, jack and cottontail rabbits, bird, waterfowl, mountain sheep, and bovine (possibly bison). A conservative estimate of the collected bone is more than 10,000 bones. This location, located along an ephemeral drainage, contains evidence of a food processing area, dating possibly to as early as 1700 or as late as 1870 AD. [Session 27]

**Thomas, Scott (Bureau of Land Management, Burns, Oregon)**

***Late Prehistoric Bison Hunters in Southeastern Oregon***

In 1980 a ceramic bearing, late prehistoric site (Lost Dune Site) was discovered in southeastern Oregon south of Burns, Oregon. The site was intensively studied by the author and Bill Lyons, Ph.D. between 1980 and 2001. Lost Dune Site (35HA792) displays a unique set of assemblage attributes in addition to the Shoshone Ware pottery. It includes: Desert Series arrow points, blade cores and blades, bifacial thinning blade-like flakes, well-made scrapers, knives, drills and graters (commonly made of CCS in the midst of an obsidian dominated landscape), abrading stones, numerous utilized blades and flakes and bone and tooth enamel fragments of Bison. Since 1980 a number of other sites, sharing the same assemblage attributes, have been found. Not all contain ceramics but they all share most or all of the assemblage attributes seen at Lost Dune site. This assemblage complex is rarely seen in southeastern Oregon and the objective of this paper is to describe and illustrate the complex, present current thinking about its cultural/geographic origins and the paleo-climatic regime associated with it. [Session 19]

**Tushingham, Shannon (Washington State University) and Mary Collins (WSU)**

***Exploring the Future of Archaeology on the Plateau: The 2014 Washington State University Museum of Anthropology Plateau Conference***

What is the future of archaeological research on the Plateau? What challenges do we face, what directions should we be going, and how do we incorporate different voices and exciting new techniques in our discipline? These were among the questions addressed at the Washington State University Museum of Anthropology Plateau Conference, a special day-long seminar held at Washington State University on March 14, 2014. The conference included presentations by a panel of senior scholars and tribal representatives who were asked to present their views on what questions might be addressed by future archaeological studies on the Plateau, followed by lively discussions by participants with a wide range of

perspectives. Here we report on the major themes discussed by panelists and participants in this one time “brainstorming event,” the intent of which was to inspire a new generation of scholars and to help secure the future of archaeological research on the Plateau. [Session 5]

**Utter, Natasha (Western Washington University)**

***Looking from the Inside Out: Connecting Prisoner Treatment to Rates of Violence in the Community at Large***

This paper addresses the link between the treatment of offenders within the correctional system and the rate of violence in the outside community. Several factors of inmate treatment are compared across several correctional systems. The results are then compared to the rate of violence within the jurisdiction of each correctional system reviewed. Initial research shows that areas with a high level of prisoner safety and access to rehabilitative programs inside the correctional system result in a lower level of violence in the outside community and lower rates of recidivism. An examination from the inside of the correctional system shows a clear link between humane treatment of prisoners and lower levels of violence in society. [Session 12]

**Vallance, Neil (University of Victoria)**

***Shared Territory: Coast Salish Understandings of the Land Surrender and Land Use Provisions in the Douglas Treaties (1850-54) and the Stevens Treaties (1854-55)***

Traditionally, comparisons of land cession agreements by Indigenous peoples in favour of the British Crown or the United States government have focused on the written texts found in treaty templates and accompanying correspondence. Recently these official treaty narratives have been challenged by the long-neglected eye-witness accounts of Indigenous participants. My dissertation compares two sets of these unofficial versions with respect to jurisdiction over land and its resources. Specifically I look at mid-nineteenth century agreements entered into by the Coast Salish on Puget Sound and southern Vancouver Island. The Salish brought to both sets of negotiations proposals to share their land with settlers. My presentation will describe these schemata as disclosed in the eye-witness accounts, and the colonial/settler response to these proposals. [Session 12]

**Van Galder, Sarah (Statistical Research, Inc., Edgar K. Huber Statistical Research, Inc.)**

***Archaeological Sensitivity Model for Filucy Bay, Key Peninsula, Washington***

Statistical Research, Inc. developed a preliminary sensitivity model for Filucy Bay, in the southern Key Peninsula of Puget Sound on behalf of the Pierce County Department of Planning and Land Services. The model was developed using the results of extensive archival research and a cultural resources survey. The location of identified and previously known prehistoric and ethnographic sites, ethnographic accounts, the location of fresh water sources, landform types and resource procurement areas along the bay also factored into the development of the model. The sensitivity model yields valuable information to Pierce County and the Key Peninsula community to help protect, conserve and enhance the cultural heritage of Pierce County and the Key Peninsula and incorporate this information in site design and subdivision plan reviews. With further development the model has the potential to provide useful planning information to the Key Peninsula community, other coastal communities and Pierce County. [Session 11]

**Von Wandruszka, Ray (University of Idaho) and Tara Summer (University of Idaho)**

***Chemical Analysis of Historic Artifacts Recovered from the Site of a 19th Century San Jose Chinatown***

A prosperous Chinatown in the center of San Jose, CA, was destroyed by arson fire in 1887. Numerous artifacts were recovered in an excavation carried out in 1985 and placed in storage. Recently, archaeologists at Stanford University have worked on this collection, and a number of artifacts were sent to the University of Idaho Chemistry Department for chemical analysis. Among the materials analyzed were Chinese ‘stone drugs,’ folk medicines derived from natural minerals since ancient times. Other items included treated wood fragments from the remnants of a dwelling, and everyday objects that originated in Anglo-Saxon America. Due to the sudden nature of the destruction of this Chinatown, many bottles and containers that were recovered still had their original contents. [Session 25]

**Wagner, Dick (The Center for Wooden Boats)**

***Lake Union: The Inside Story, The Lake Union Underwater Archaeology Project***

The purpose of studying the cultural history, archaeology, biology, and geology of Seattle’s Lake Union is to give it an identity, and discover its inside story. Our community would benefit from a lake that could become a civic commons and living museum, giving our citizens pride of place and an educational resource for generations to come. The Lake Union Underwater Archaeology Project seeks to uncover secrets that will become the foundation for interpretation, events, and

working exhibits that can add new dimensions to the community. Since its inception five years ago, more than 40 skilled volunteers, governmental agencies, organizations, institutes and corporations have participated in this project. [Session 24]

**Walker, Cam (Archaeological Investigations Northwest, Inc.)**

***A Brief History of Hillside Farm: Multnomah County's First Poor Farm***

In August, 2013, an inadvertent discovery during construction at the Oregon Zoo provided an opportunity to explore a little-known part of Oregon's historic past. A portion of the graveyard associated with Hillside Farm (1868-1911) was found, on land now part of the Oregon Zoo. During construction for the project, a total of 10 individuals were identified, eight of whom were archaeologically recovered. Although preservation was generally poor, a few artifacts and limited osteological analysis was possible. These data provide an incomplete, but intriguing description of life at the poor farm prior to its relocation in December, 1911. An overview of findings and a brief description of Oregon's historic-period poor farms are presented here. [Session 22]

**Williams, Emily (Western Michigan University)**

***Risky Business: The Anthropology of Sex as Work***

Participant observation, fieldwork and ethnography have long been the cornerstones of anthropological research. Using such qualitative methodologies is contingent upon building relationships and endeavoring to bring subaltern voices to the fore. In this paper, I argue that anthropological research methods can inform existing public health strategies that target risk within the sex industry. Much of the public health literature surrounding sex work as a vulnerable population uses a top down approach to assess whether or not sex workers adopt tactics that minimize exposure to disease. Drawing on multiple interviews with local sex workers and anti-trafficking advocates, I juxtapose what sex workers consider to be "occupational hazards" against "risky behavior" as constructed by public health officials and anti-trafficking advocates. These differences are not only critical to explore, but illuminate the ways in which anthropologists can connect to local communities and other disciplines. [Session 12]

**Williams, Mark R. (University of New Mexico) and Dale Croes (Pacific Northwest Archaeological Services)**

***Faunal Analysis from Labouchere Bay Rockshelter Middens***

Excavations conducted at Labouchere Bay on Prince of Wales Island, Alaska during the summer of 2013 (NSF OPP 1108367) provide new evidence of ancient people's use of ecologically-rich paleoshorelines. Preliminary analysis of faunal remains from several mid-Holocene rockshelters and associated shell middens illustrates the importance of near-shore rocky coast food resources. Ongoing research will explore this data within the context of the adjacent early Holocene waterlogged clam bed and raised beach deposit with chipped stone flakes and cores. [Session 27]

**Williams, Scott S. (Washington State Department of Transportation) *The Lithic Technology of the Mission Creek Site***

Analysis of stone tools and debitage recovered from the Mission Creek site on the eastern shore of Budd Inlet in south Puget Sound, Thurston County, reveals the site was utilized during the late pre-contact through early contact period. The site contains a variety of small projectile points and debitage indicating bipolar reduction of water worn pebbles and cobbles, typical of late pre-contact assemblages in south Puget Sound. It also contains historical glass artifacts that have been knapped and used as tools. The presence of knapped glass tools suggests continuity from pre-contact through the contact period and use of the site before metal tools became commonly available in the region. [Session 9]

**Wilson, Doug (Portland State University, National Park Service)**

***Use of Tablet Computers in Excavation of the Fort Vancouver Village***

The use of information and communications technology (ICT) has revolutionized archaeological mapping, image recording, and analysis through tools such as GPS, GIS, and digital cameras. In spite of this, archaeologists have been slow to adopt integrated digital recording techniques, relying to an inordinate degree on paper-based recording systems to collect data on archaeological phenomena. Where archaeologists have utilized digital data, the resultant databases often can answer only very specific research questions. This paper reports on how tablet computers are being used in the joint Portland State University/Washington State University Vancouver Public Archaeology Field School to adapt existing archaeological paper forms used in excavation, gravestone recording, and laboratory processing of artifacts to digital ICT forms. The use of ICT in digital recording provides data to help further develop, troubleshoot, train, and implement digital recording on multifaceted archaeology projects. [Session 13]

**Withee, Katee R. (University of Nevada, Reno)**

***The Materiality of Family Identity: Archaeological Investigations of 19th Century Jewish Merchant Households in Aurora, Nevada***

Exploring the materiality of the construction of a “family identity” in a 19th century mining boomtown is the intended purpose of this presentation. Two household sites are used in this study; the home of the Levy family and the Kaufman family. Both were prominent civic members and Jewish merchants who resided in an ethnically heterogeneous middle class neighborhood. Artifact assemblages from two archaeological field seasons and relevant documentary resources are consulted in investigations of “family identity” at the two households. Ideologies and societal expectations of the Victorian era, as well as expectations of class status, ethnicity, and religious practice influenced ideas of “the family”. These ideals are expressed and interpreted in the archaeological remains at the site. Understanding the complexities, performances, and constructions of a “family identity” helps inform other aspects of research on frontier communities and the individuals and families who lived there. [Session 22]

**Woodward, Robin (Simon Fraser University)**

***The First Abbey in the New World: An Expression of Power and Ideology***

Every empire needs an ideology, and the Spanish Crown and the Catholic Church found their sense of justifying mission in the obligations to uphold and extend their faith and by extension a civilized way of life. Lacking lucrative mineral resources, Jamaica was destined to become the first primarily agricultural colony established by the Spanish during the contact period. Founded in 1509 as the capital of the island, Sevilla la Nueva prospered briefly as a supply base for other Spanish colonizing ventures in the region. Over the past 40 years archaeologists have discovered the remains of a fort, sugar mill, numerous workshops and an abbey. This paper will present the results of the excavation and preliminary analysis of the remains of the first Catholic abbey in the New World, the construction of which commenced in 1524. [Session 22]

**Young, Kathleen Žuanić (Western Washington University)**

***Fish Wars in Whatcom County 1912 and 1916***

This paper examines two interrelated incidents involving illegal fishing in Lummi Nation waters. In April 1912, Scandinavian and Croatian fishers sought spring herring stocks in Lummi territory; Whatcom County Superior Court issued arrest warrants against the Croatians charging them with conspiring to obstruct the Scandinavian crew from fishing, albeit illegally. None of the charges addressed the illegal incursion into Lummi waters. In April 1916, the Croatians came back; Lummi men with guns took their gear and held the Croatians captive. What happened during this time is an example in conflict resolution with the Lummi and Croatian fishers recognizing they had more in common with each other than with the State Fish Commissioner or corporate interests. April 1912 set the foundation for Lummi and Croatian fishers cooperating in 1916 and it changed the direction of the history of the fishery in Whatcom County. [Session 7]

## Posters

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**Adler, Amanda D. (University of Idaho)**

***The Effects of Homelessness on the Mother-Child Relationship***

In the year 2002 I had my first experience with homelessness. This was the year that I became a homeless child. A year of living in a homeless shelter in Charlotte, North Carolina lead me to my future research as a scholar. I posed the question, "what effect does homelessness have on family dynamics, more specifically, does homelessness have an effect on the bond between mother and child?" This research question lead to the creation of this poster which is based off of a literature review. It will inevitably flow into a thesis topic in the near future. As a result of my research I have concluded that the tragic even of becoming homeless does in fact impact the relationship between mother and child. I was saddened, but not surprised to discover that there are negative impacts of living in a homeless shelter. However, I was also greatly satisfied to bring to light the many positive impacts homelessness also had on family life. [Poster Group C]

**Ancheta, Melonie**

***Pigments and Paint Technology of NW Coast Peoples***

There is a 3000+ year gap in the historical record of NW Coast painted objects as well as incorrect identification of the materials used. Employing a multidisciplinary approach which combines spectroscopic technology, natural sciences, art, history and cultural practices and beliefs, this first study of the pigments and paint technology of NW Coast peoples has significant implications for Native peoples, anthropologists, archeologists, museums and private collections. My research has correctly identified the minerals traditionally used by NW Coast artists into modern times. Identification and understanding of the behavior of the pigments and binders is essential to cultural issues, identifying and matching artifacts to specific regions, dating, storage, and conservation and preservation of Native artifacts. Two pigments, vivianite and celadonite, will be introduced and discussed regarding the long history of use, alteration of color and states, the relevance of these two particular pigments to the cultures employing them and the necessity of understanding the place of these two mineral pigments in the larger context of cultural and art history. [Poster Group A]

**Andrews, Shannon (Western Washington University)**

***Building Local History: Involving Community in the Inventory Process for a Living History Museum***

Using our history to bring communities together, whether it be global, national, or local, is what anthropology is all about. My work at Hovander Park in Ferndale, Washington with the Hovander Collection Inventory Project, along with volunteers, is setting the foundation for future educational opportunities at the local level. The house is on the National Register of Historic Places and includes several thousand items, most of which are from the Hovander family who completed the two story house in 1903. Many items traveled with the family when they emigrated from Sweden to several locations before settling in Ferndale. The house holds historical materials that not only paint a picture of life at the turn of the century but also educate about architecture and farming techniques. Over the last three years I have learned hands-on, each step of the inventory process and begun to learn what makes a good living-history museum. [Poster Group D]

**Armstrong, Chelsey Geralda D. (Simon Fraser University)**

***Hazelnut (*Corylus cornuta*) on the Northwest Coast: An Ethnobiological Profile***

Traditionally, wild and managed plants were central to Pacific Northwest Coast peoples diet, technology and worldviews. However, shifting lifeways imposed by colonialism has changed the way plants are perceived and remembered. By focusing on *Corylus cornuta* this research will integrate various ethnobiological sub-disciplines to better understand the cultural and ecological significance of hazelnut on the Northern Northwest Coast. Today, hazelnut are common in British Columbia, but have not had a lot of cultural importance in the recent past. Linguistic evidence supports the hypothesis that a disjunct population of hazelnut in the Gitksan and Nisga'a region of British Columbia was brought from the Salish region and potentially managed for food and fuel by Northern peoples. Combining this evidence with ethnographic information, modern and ancient genetics, archaeological surveys, and ethnoecological studies, we will gain insights into the multi-dimensional ways in which peoples interacted with and related to their natural world. [Poster Group A]

**Barrick, Wilbur C. (Warm Springs Geo Visions Cultural Resources Department)**

***A Systematic Approach to Historic Railroad Documentation and National Register Recommendation, Jefferson Co., Oregon***

Landscape-scale linear features occur in a variety of archaeological contexts throughout the region; they can be challenging to document and manage in meaningful and effective ways because they often possess variable levels of integrity and

extend beyond study area boundaries. The Warm Springs Geo Visions Cultural Resources Department documented and made National Register recommendations for a 2.3-mile section of the 222-mile historic Oregon Trunk Railroad. Background information pertaining to railway engineering system features, regional settlement patterns, and transportation history were utilized as a historic context in National Register recommendations. Analytical units were explicitly defined as railway engineering system features that retain similar levels of integrity. The presentation showcases useful methods for researching and managing historic rail lines and resonates with ongoing discussions about management approaches for linear resources. [Poster Group D]

**Baumgart, Erin (Central Washington University), Tiffany Cummings (CWU)**

***Geoarchaeology of House Features, Redbird Beach, Hells Canyon, Idaho***

The Redbird Beach Site contains extensive vertical exposures of archaeological materials inter-bedded with Snake River flood sediments. Stratigraphic analyses reveals 30 or more flood events (1000-2500 B.P.). Previous studies by students from Washington State University and Central Washington University have documented several hearths, ovens and possible house floors (200-2000 B.P.) exposed in upper portions of bank profiles. Suites of subsurface surveys by the University of Arkansas suggest intact features remain buried in the upper terrace. This undergraduate research project reexamines stratigraphic evidence for possible house floors. We outline criteria and results for distinguishing house floors from flood channels or stream troughs. [Poster Session I]

**Bennett, Elizabeth (University of Nevada, Reno)**

***Anthropology Museums in a Postmodern World: Future Directions and Challenges***

Museums can be considered in numerous ways: as mausoleums of culture, houses of immortality, public institutions of research and education, and so on. Considering specifically the role of museums in the public sphere, museums historically have not always served publics other than society's privileged few. In the postmodern era, anthropology museums have the potential to become powerful instruments of public engagement and community revitalization, but also must confront many new and interesting challenges: How do museums define or shape community? How can museums offer spaces for public discourse without alienating certain societal groups? How should museums educate the public, if at all? How should multiple perspectives be integrated and expressed in museum displays? This poster presentation will examine all of these questions, in search ultimately for future museological directions in an increasingly postmodern context. [Poster Group B]

**Brown, James (Central Washington University), Steven Hackenberger (CWU) and Patrick McCutcheon (CWU)**

***Resources Intensification, Sedentism, Storage, and Ranking: A Visual Synopsis of Pacific Northwest History and Theory***

Resource intensification is a concept used in explanations of sedentism, storage, ranking and hierarchy among early horticulturalists and complex hunter-gatherers. Within the Pacific Northwest treatments of these concepts have developed through three orientations: evolutionary-ecology, political economy, and social agency. This poster charts the intellectual history of Northwest Coast and Columbia Plateau theory and traces relationships between synthetic works and archaeological studies. We compare the performance criteria (dynamic and empirical sufficiency, and tolerance limits) for both synthetic works and archaeological studies. Given that almost all treatments of resource intensification and sedentism focus on the development of households (plank houses and house pits) and larger house settlements, our review shares a critical synopsis of major approaches in the anthropological archaeology of the Pacific Northwest. [Poster Session I]

**Campbell, Renae (Willamette Cultural Resources Associates, Ltd.), Kanani Paraso (Willamette CRA), and Michael Daniels (Willamette CRA)**

***Ceramic Vessel Quantification: An Experimental Analysis of Methodologies***

Minimum number of vessel (MNV) calculation is generally accepted as the preferred quantification for ceramic assemblages because it is thought to provide a more accurate representation of objects before they entered the archaeological record. MNV counts are also better suited for comparisons between assemblages that may have experienced different breakage rates. However, methods used to calculate MNV values vary between analysts and remain somewhat subjective. Additionally, past studies of the effectiveness of MNV calculation often rely on archaeological assemblages that represent a sample of an unknown population. This experiment compares MNV counts derived from several of the more frequently used calculation methods in order to assess their comparability. By recording data from a set of whole vessels, breaking them, and then recording various samples of the resulting assemblage it is also possible to assess which calculation methods result in the most accurate estimate of the total population for each sample size. [Poster Group D]



**Campbell, Sarah K. (Western Washington University), Will Damitio, (WWU), and Katie Wiggins**

***Western Washington University's Clovis Point?***

For years it has been believed that Western Washington University has a Clovis point, of uncertain provenance, in its collection. Collections research has finally succeeded in determining the path by which the point came into our collection. While we may wish it were not so, our fluted point must be taken off of the already very slim list of examples of Clovis technology from western Washington State. [Poster Group G]

**Carner, Amanda (Central Washington University), Ricardo A. Fernandes, (CWU), Savannah Schulze (CWU), Mary Lee Jensvold (CWU), and Joseph G. Lorenz (CWU)**

***Characterization of the Mitochondrial Ancestry in 20 Captive Chimpanzees (Pan troglodytes)***

For over 30 years Central Washington University was home to five unique chimpanzees. Washoe, Dar, Moja, Tatu and Loulis were part of a project to investigate if a non-human animal could acquire human culture, including the use of sign language. Researchers collected thousands of hours of behavioral data, however little was known about the chimpanzees genetic origins. Although Washoe and Moja died before samples were collected for genetic analysis, DNA was extracted from feces collected from Dar, Tatu and Loulis. Primers used to amplify the D-loop region of human mtDNA were used on the corresponding region in the chimpanzee mtDNA. Over 600 chimpanzee D-loop sequences were obtained from GenBank and used as a comparative database. In addition, we sequenced the D-loop region of 19 additional chimpanzees. We have been able to assign subspecific affiliation to Dar as Pan troglodytes troglodytes. Furthermore, we found representatives in all four subspecies of chimpanzees. [Poster Group H]

**Chalmer, Nyra (Simon Fraser University) and Chris Picard (Gitga'at First Nation)**

***Gitga'at-Simon Fraser University (SFU) Archaeology and Heritage Pilot Project: Connecting to the Past to Protect the Future***

The Gitga'at First Nation on the North Coast of British Columbia is facing major marine developments in their ancestral lands, most notably tanker traffic related to several crude oil and liquefied natural gas export projects. While the Gitga'at community has extensive oral knowledge about their history and past landscape use, their territory is largely unknown archaeologically. 2013 marked the pilot season of the GSFU Archaeology and Heritage Project which focused on the identification of coastal sites, including intertidal features, settlement areas and culturally-modified trees. Many of these culturally significant places are also ecologically important, representing an unbroken connection between Gitga'at people and their ancestors. Such places are touchstones of Gitga'at identity, illustrating the inextricable link between community well-being and their eco-cultural landscape. Through connecting community knowledge, oral history and archaeological evidence, the Gitga'at Nation can develop holistic, long-term heritage management strategies in the face of major developments in their community. [Poster Group A]

**Chenvert, ErinMarie (Central Washington University) and Dr. Patrick McCutcheon (CWU)**

***Paradigmatic Lithic Analysis of an Upper Kittitas County Spring Site, Washington***

The Upper Kittitas County Spring Site collection comes from the northwestern area of Kittitas County. The collection was picked up from the surface of a plowed field near a spring. This site has a unique set of artifact types. My research focuses on comparing the artifact types and frequencies to a number of other sites in the Yakima and Columbia River Valleys. The Upper Kittitas County Spring Site collection contains 758 lithic artifacts made up of ground and chipped stone artifacts. There are 520 pieces of debitage, 67 ground stone tools, 56 projectile points, and 115 broken biface/miscellaneous artifacts. Ground stone, projectile points, and broken biface artifacts represent all stages of manufacture and were analyzed using a lithic paradigmatic classification. In some cases the Upper Kittitas County Spring Site collection is very similar to other sites in the region and in other cases it is quite distinct. [Poster Group F]

**Cheung, Yu Ling (Hong Kong Archaeology Consultant Ltd.)**

***Ancient Chinese Jade Sawing Techniques***

The East Asian have more than 10,000 years of history in jade carving. Chinese archaeological fieldwork has unearthed numerous large scale jade and precious hard stone artifacts, such as *Zhang* (a kind of ritual item) found in *Sanxingdui* site could be long as 100cm in length with less than 1cm in thickness. The finished artifacts, semi-finished items and associated debitage display evidence of different sawing techniques including string sawing, blade swing, and rotary cutting techniques. However, how large scale blade sawing technique was performed is still uncertain and researcher have suggested different methods. This presentation compares and contrasts the different jade sawing techniques and presents the result of experimental blade sawing on a serpentine block (30cm x 20cm x 10cm) by a serpentine slate saw in order to

make a serpentine slate that is a core for carving *Zhang* and other ritual jade items in similar shape. How water and abrasive agent affect the effectiveness of blade sawing are also discussed. [Poster Group F]

**Dampf, Steve (Historical Research Associates, Inc.) and Gabe Frazier (HRA)**

***A Systematic Approach to a Tablet-based Data Form Management Process for Archaeological Site Updates, Testing and Monitoring***

Following the requirements of FERC's Programmatic Agreement for relicensing, Historical Research Associates, Inc., assisted Avista Corporation in developing Historic Properties Management Plans for the Spokane River Project in eastern Washington and northern Idaho. Implementation procedures include archaeological site revisits and monitoring, for which HRA developed a monitoring program for previously recorded sites to assess the kinds, severity, and pace of impacts, as well as to document the kinds of cultural materials that may be exposed. For the 2014 drawdown, HRA implemented a tablet-based form database manager for fieldwork. A database for each site with the corresponding form index was stored on the field tablet in order to facilitate an accessible and secure site recording interface, while simultaneously capturing as much digital data as possible for current conditions. The ability to capture sketch maps, photography, voice dictation or voice notes with tablet platform, will expedite the field to office transition. [Poster Group F]

**Davis, David R. (Central Washington University)**

***Evidence for the Presence of an Archaic Ritual Mortuary Complex in Vermillion County Indiana***

In 1975, in Vermillion County, Indiana, the author discovered 20 stone artifacts ranging from scrapers to projectile points protruding from a weathered circular mound. Subsequent investigations since 2011 using Google Earth technology have also revealed the probable presence of multiple mounds, two of which appear to be serpent effigy mounds. The site is presently undisturbed. The artifacts, which have been identified by type and assigned date ranges based on comparative analysis, evidence a date range which covers the greater part of the Archaic Period, and the entire Woodland Period. Preliminary research shows evidence of some artifactual similarity to the Terminal Archaic (1500-700 BC) Riverton culture of the Lower Wabash Valley (Winters 1967). This cultural manifestation is primarily represented in southwestern Indiana and is defined by a micro-tool industry observed at shell midden sites in the Wabash Valley of Illinois in the early 1960s (HRA Gray & Pape, LLC 2002). [Poster Group F]

**Day, Lianne A. (Central Washington University) and Patrick M. Lubinski (CWU)**

***A Faunal Sample from Pre-Mazama Levels of the Bernard Creek Rockshelter, Hells Canyon, Idaho***

The Bernard Creek Rockshelter (10IH483) is located in Hell's Canyon, Idaho, and lies just above the Snake River. It was excavated in 1976 by the University of Idaho and 4 m of cultural deposits spanning over 7,000 years were discovered. A preliminary analysis was performed on the faunal remains in 1976, but no in-depth taphonomic information was originally recorded. My analysis examined 573 mammal and bird specimens underlying Mazama tephra from 310-370 cm below surface. Preservation was excellent, with 99% of specimens exhibiting Stage 0-1 bone weathering. Remains were dominated by large mammals (>70% deer size or larger) and included bighorn sheep and deer. Other identified taxa included woodrat, ground squirrel, marmot, canid, porcupine, bear, and rattlesnake. A significant number exhibited modification by humans (including cutmarks, impact damage, and use-wear) with few signs of non-human modification (like gnawing or digestion) which indicates the assemblage is almost entirely accumulated by people. [Poster Group G]

**Fitz-Gerald, Kyla (University of Idaho)**

***'Goo and Gunk' Cosmetics and Masculinity***

This poster looks at the idea of masculinity in America during WWII from the perspective of cosmetic use. Three cold cream jars were recovered at Kooskia Japanese Internment Camp in Lowell, Idaho, and the jars are the focus of the analysis considered in the poster. [Poster Group D]

**Fulkerson, Tiffany J. (Washington State University), Elizabeth Truman (WSU), John Dorwin (Eastern Washington University), Kevin Lyons (Kalispel Tribe of Indians), Richard Conrey (Hooper Geoanalytical Laboratory, School of the Environment), and Melissa Goodman (WSU)**

***Geoarchaeological Investigations of a Late Holocene Site (45PO426) on the Kalispel Reservation, Pend Oreille County, WA***

This study presents the results of geoarchaeological investigations conducted at site 45PO426 by multiple parties at the request of the Kalispel Tribe of Indians. Phase I inventory conducted in the summer and fall of 2013 identified the presence of cultural resources at 45PO426 which is hypothesized to be a Late Holocene bone degreasing site. We aimed to determine whether geoarchaeological signatures of cultural activities exist in artifact-bearing soils and to test the hypothesis that archaeological features represent bone degreasing. Analyses included pH, electrical conductivity, organic carbon, inorganic

carbon, particle size analysis, and X-ray fluorescence. The geoarchaeological signatures detected in cultural deposits display significant differences from non-artifact bearing components in some analyses. Sediment properties also substantiated presumed taphonomic properties. For instance, the sediments are strongly acidic, which negatively impacts bone preservation. This study is also a component of a larger study aimed at developing quantitative geochemical methods for anthropogenic sediments. **[Poster Session I]**

**Gamble, Erin (Edmonds Community College)**

***Tree People: A Survey of Culturally Modified Trees on Hope Island***

A part of Deception Pass State Park in Washington State, Hope Island is a popular kayaking and boating destination that offers primitive campsites and hiking trails. However, beyond its current day recreational use Hope Island has a long and rich history of human use. The island is a known Native American archaeological and paleontological site with multiple archaeological surveys on record. Most recently, the Learn and Serve Environmental Anthropology Field (LEAF) School conducted an archaeological survey on the island that focused on documenting culturally modified trees (CMTs). Current research on the island is focused on completing a comprehensive analysis of the historical and prehistorical uses of the island as documented through its culturally modified trees. **[Poster Group A]**

**Gilmour, Daniel M. (Willamette Cultural Resources Associates) and Martin E. Adams (Paleoinsect Research)**

***Proxies of Younger Dryas Climate Change in Western Oregon***

Paleoindian groups occupied North America throughout the Younger Dryas (YD) Chronozone but researchers often assume that cooling temperatures associated with the YD affected human populations and possibly led to adaptive changes in human behavior. Meltzer and Holiday (2010) observed that assessments of the nature, severity and abruptness of the YD are largely based on records of temperature variations from ice core data in central Greenland where cooling was most pronounced. They maintained that expression of the YD would have been highly variable and experienced differently on a local or regional level. In this poster, we explore proxy evidence for paleoenvironmental change in western Oregon during the YD. We examine evidence from disparate sources (geochemical, paleoentomological, paleontological, palynological, and surficial geology) to determine if records detect climate upheaval. **[Poster Group G]**

**Goodwin, Matt (Willamette Cultural Resources Associates, Ltd.), Michael A. Daniels (Willamette CRA), and Josh Moss (Willamette CRA)**

***The Spread of Invasive Plant Species and Their Effect on Cultural Resources along the Middle Columbia River***

Over the last decade, cultural resources professionals have documented a rapid increase in the spread of invasive plant species at archaeological sites along the middle part of the Columbia River. Compliance-based archaeological work in this area has provided a large amount of anecdotal documentation of the increasing effect the rapid spread of species such as *Amorpha fruticosa* (False Indigo), *Ailanthus altissima* (Tree-of-Heaven) and *Elaeagnus angustifolia* (Russian Olive) has had on a wide array of archaeological resources in this region. This poster displays some baseline information on a few of the more pervasive species and their spread in the middle Columbia River area and incorporates information from site record forms and compliance reports to illustrate their effect on archaeological resources. The discussion focuses on providing a basic overview of the problem and introduces some intriguing questions as to the future of managing and protecting the effected resources. **[Poster Group B]**

**Hammond, Joyce (Western Washington University), Heather Christensen (WWU), Ashley Duncan (WWU) Naomi Karasawa (WWU) Cecilia Martin (WWU) Meredith McKay (WWU) Destiny Petroske (WWU) and Kristopher Rolstad (WWU)**

***Connecting Through Participatory Action Research***

This poster presents several 2014 Participatory Action Research (PAR) projects undertaken by anthropology students, community organizations, and community members to work toward identified goals of: 1) meeting challenges of youth homelessness 2) creating greater involvement in organizations and 3) building more effective communication, all of which were facilitated through connections made between Western Washington University anthropology students, Western Washington University campus groups and the broader communities of Whatcom and Skagit Counties. Information on the projects, which centered on specified research and action goals of Northwest Youth Services, the Bellingham Senior Activity Center, the Bellingham YWCA, and the Western Washington University International Students Association Organization, will be presented. The poster will address the goals, methods of research and action, and outcomes of each project. We hope that the information will inspire others to explore the uses of PAR and to draw upon PAR as a bridging mechanism that can close gaps, strengthen ties, and forge new links. **[Poster Group C]**

**Hanson, Sydney (Central Washington University), Eric Wakeland (CWU), Thomas Hale (CWU) and Patrick Lubinski (CWU)**  
***Investigating the Anatomy of the Hyoid Bone of Hoofed Mammals for Archaeological Interpretation***

Hyoid bones are part of a complex of small bones in the throat region of mammals, including hoofed mammals (artiodactyls). Many archaeological sites with faunal remains lack hyoid bones; however, hyoid bones do occur in sites with large numbers of artiodactyl remains. Hyoid bones have been recovered with butchery marks and used as ornaments in archaeological sites across the Plains and Eastern United States. Hyoid bones are poorly known to many zooarchaeologists, and simple questions, such as how to side these bones, have not been well resolved. This project involved extracting hyoid bones in place from multiple artiodactyls to ensure an adequate sample for determining side, as well as adding to a sample for identifying hyoid species. This poster will provide examples of the use of hyoid bones in archaeological sites, as well as information for determining side, which is important for the interpretation of cut marks on these bones. [Poster Group F]

**Harris, Kiah (Central Washington University)**

***Analysis of Slang Translation***

Perfect equivalency between languages is more of a questionable phenomenon than something of tangible existence. Slang is notoriously known for being nearly impossible to translate; an issue that is brought on mostly due to cultural and societal separation but also due to the constraint between free and direct translation, as one method seems to always betray the other. This project is an attempt to analyze, define, and translate one hundred and five American English slang terms and expressions into the Spanish language using the both literal and free translation methods. To enact this research, various slang dictionaries, machine translation tools, and my own personal knowledge will be used. The process will consist of three translations of the same list of terms. The project will focus deeply in the differences between literal and stylistic translation to better understand the difficulties and strangeness of slang translation. [Poster Group E]

**Hendrix, Jillian (Central Washington University), Sarah Steinkraus (CWU), and Steven Hackenberger (CWU)**

***Revitalizing Collections for Environmental Archaeology: The 1962/63 House Features (45KT12 and 45KT13) Excavated by Robert Kidd***

French Rapids (45KT12) and Hole-In-the-Wall (45KT13) sites were excavated in the 1960s by Robert Kidd. At least two periods of occupation have been identified at each site: upper house occupations (ca. 700 BP) and lower house occupations (ca. 1700-1900 BP). The collections are jointly controlled by the Washington State Parks and the Wanapum Heritage Repository. The rich assemblages (collections of fauna and lithic materials) are well organized and have been re-inventoried along with field notes, site maps, detailed stratigraphic profiles, and photographic materials. Most of these items are now also digitized. Sediment samples and related notes include those of Roald Fryxell, who was then serving as the Curator of the Ginkgo Petrified Forest. The collection is ideally suited for a number of types of environmental archaeological studies. [Poster Session I]

**Jackley, Julia (Simon Fraser University), Dana Lepofsky (SFU), Jennifer Carpenter (Heiltsuk Integrated Resource Management Department), Nancy Turner (UVic)**  
***Mountain Top to Ocean Floor: The Eco-cultural History of Hauyat***

The Mountain Top to Ocean Floor Project is a collaborative undertaking by the Heiltsuk First Nation, Simon Fraser University, and University of Victoria, that seeks to document and explore the unique cultural and ecological history of Hauyat, a landscape in Heiltsuk traditional territory on the Central Coast of British Columbia. Over the millennia Hauyat has been transformed by a complex web of relationships between people, plants, animals and ecosystems. The rich and deep history of this place is known through Heiltsuk oral history and is also reflected in the number and diversity of archaeological sites and eco-cultural features. Ranging from the lower intertidal to the subalpine, the landscape has been modified to include clam gardens, fish traps, root gardens, berry patches, orchards, settlements, rock art, and defensive sites. These features are suggestive of long-term resource management systems that likely worked together to provide food, materials, and medicines for past communities. [Poster Group A]

**Jansson, Anna (Burns Paiute Tribe)**

***Making Connections with Isolates; Historic Isolated Finds from the Jonesboro Plowing Project in Malheur County, Oregon***

What stories can ten isolated finds tell us? The Burns Paiute Tribe executed a cultural resource monitoring project in November 2013 on the agricultural plowing that occurred on their Jonesboro Ranch Property in Malheur County, Oregon. The monitoring resulted in the discovery of a handful of artifacts scattered across an alfalfa field. Though these finds are not eligible for the National Register of Historic Places, how can they add to the archaeological record of the area? The goal of this poster is to showcase the historic research that was done for this project, which results in explaining the Euroamerican history of the Jonesboro Ranch Property. [Poster Group D]

**Johnson, Jeffrey (Eastern Washington University) and Adam Calkins (EWU)**

***Paleo-Indian Thermal Feature Identification***

While the Paleoindian archaeological record in North America includes a number of perplexing information gaps, perhaps none is greater than the nearly universal absence of definitive evidence for hearths and associated hearth activities. This paper will not only give an analysis of hearths, but provide techniques to better identify these features within a Paleoindian site. The site sample employed in this comparative analysis ranges from early to Late-Paleoindian manifestations and includes both specialized and non-specialized site records. The existence of hearths on sites within the Paleoindian period (c. 15,000-10,000 years ago) is presumed on the basis of survival requirements in the diverse, temperate environments of North America present during this timeframe. By using a comparative analysis of the techniques used on multiple Paleo-Indian sites within North America, data can be compiled to demonstrate the need for archaeologists to adjust their analysis of Paleo-Indian hearths/fire features. [Poster Group G]

**Johnson, Katie (Southern Oregon University Laboratory of Anthropology)**

***Profiles of the Past: A Glimpse of a Chinese Home in Jacksonville, Oregon.***

Southern Oregon University Laboratory of Anthropology conducted data recovery excavations in the Chinese Quarter site of Jacksonville, Oregon in the fall of 2013. During the project, excavators came down upon an intact section of a building burned in the fall of 1888. Preliminary findings from the rich feature, paired with a fruitful collaboration with the Jacksonville Fire Chief, may help to reorient the cultural material in time and space as the structure collapsed and was consumed by fire. [Poster Group D]

**Johnson, Sarah (Equinox Research and Consulting International Inc.)**

***Bone and Antler Tool Assemblage from the Recovery of the 45IS45/300 Site in Oak Harbor, WA***

The precontact bone and antler tool assemblage from the Pit Road Recovery Project has helped characterize the disturbed precontact site, 45IS30/45. Bone and antler artifacts were widely dispersed throughout the different parts of the Pit Road Recovery Project and made up about 30 % of the precontact assemblage. Mammal bone artifacts represent a wide array of functional and morphological categories. The largest category is "modified bone fragments," manufactured through grinding, that appear to have been used to process other materials, possibly plant fibers. These are expedient and opportunistic tools that would have required relatively little time to produce. More complex tool that require more time to manufacture, such as harpoon points, sewing tools, and wedges were also present but in smaller numbers. [Poster Group F]

**Kannegaard, Rachael N. (Western Washington University)**

***What is that Spot?: Residue Analysis of Quartz Crystal Microblades***

The function of quartz crystal microblades in the Salish Sea Region during the Locarno Beach Phase (3500-2400BP) is not well established. My poster contributes to this discussion with the results of residue analyses using cross-over immune-electrophoresis (CIEP) and a scanning electron microscope equipped with an energy dispersive x-ray spectrometer (SEM-EDS). These findings include the identification of at least two types of organic and three inorganic substances on these prehistoric tools. [Poster Group F]

**Kassa, Sonja (Central Washington University)**

***The Archaeology of Obsidian Occurrence in Stone Tool Manufacture and Use along the Mid-Columbia River, Washington***

Evolutionary archaeological theory has aided in generating explanations of difference and change in the temporal-spatial relationship of artifacts in precontact socio-economic systems. The selective context in which obsidian is acquired and consumed into stone tool manufacture and use can be understood through a model of stone tool cost and performance. This model documents artifact physical properties, technological and functional variation, and historical context to test hypotheses of obsidian source occurrence and treatment in precontact socio-economic systems over time. This approach was applied to 658 local and nonlocal obsidian artifacts from 18 archaeological sites along the mid-Columbia river in Washington to understand the quantity and degree to which sources were employed in stone tool manufacture and use. Preliminary results indicate local, generally lower-quality sources comprise 93% of the collection, occurring as largely unused bifaces, cores, and flakes. Nonlocal, higher-quality sources represent 7% of the artifacts as two bifaces and small flakes. [Poster Group F]

**Kennedy, Dustin (The Confederated Tribes of Grand Ronde)**

***Impacts of Projected Sea Level Rise on the Northern Oregon Coast and Columbia River.***

Natural processes including inundation, erosion, and deposition are actively compromising the integrity of culturally significant areas along Oregon's north coast and the lower Columbia River. Recent scientific climate data suggests that sea level rise will increase the negative impacts to these areas. Additionally, tidal influence within the Columbia River associated with sea level rise will affect cultural resources as far east as the Portland Basin. This poster presents the preliminary results of a GIS-based predictive model illustrating the effects of sea level rise along the northern Oregon coast and lower Columbia River. The Confederated Tribes of the Grand Ronde Community is conducting this study to identify areas of potential impact to optimize the protection of these locations. [Poster Group B]

**Kolb, Mary (Eastern Oregon University) and Tiffany Wiley (EOU)**

***The Rivoli Theater Past, Present and Future***

We will give an overview of the history of the Historic Rivoli Theater in Pendleton, Oregon. The poster will analyze historic maps and photographs from the life of the Rivoli Theater and information regarding its pivotal times of transformation over the years. In addition, information will be provided detailing the current renovation. We will end by illustrating how the undergraduate archaeological research done at the site will aid in the accurate retelling of not only the history of the theater, but will inform our understanding of the lives of the people who frequented the theater. We will then lay out future research plans for the theater based on our findings. [Poster Group D]

**Kopperl, Robert (SWCA Environmental Consultants), Christian Miss (SWCA), Kenneth M. Ames (Portland State University), Charles Hodges (Pacific Geoarchaeological Services) and Amanda Taylor (Pacific Lutheran University)**

***Preliminary Findings from Data Recovery Excavation at the Bear Creek Site (45K1839), a Paleoindian Occupation in the Puget Sound Lowlands***

The Bear Creek site remains the only archaeologically excavated, stratified site in the Western Washington lowlands yielding Paleoindian artifacts. Intensive excavations in 2013 as partial mitigation for a salmon habitat restoration project in the city of Redmond, east of Seattle, produced abundant data on lithic technology and local and regional site formation processes at the Late Pleistocene-Holocene transition. Diagnostic lithic artifacts share affinities with several Western North American Paleoindian traditions. Horizontally discrete concentrations of debitage and other lithic artifacts suggest repeated use of this place by small groups of people using a variety of lithic raw materials. Excavation coverage across a wide area also highlights the complexity of post-depositional processes following this early occupation. [Poster Group G]

**Larsen, Susan (Western Washington University) and Erin Benson (WWU)**

***Conditions of Recrystallization of Biogenic Aragonite by Experimental Heat Treatment of Clinocardium Shells***

When aragonite mollusk shells undergo heating, they have the potential to recrystallize into calcite, which may compromise the integrity of isotope analysis. This is of concern to archaeologists because cultural taphonomic processes may include burning. Isotope testing of midden shells is integral in reconstructing paleo-environmental conditions and season of harvest. Temperatures reported in the literature at which biogenic aragonite recrystallizes into calcite are inconsistent. In an effort to better understand the transformation conditions, we heated aragonite *Clinocardium* at various temperatures, over a range of time spans. Our results conflict with the time it takes for euhedral geologic aragonite to recrystallize, at a set temperature. Understanding how midden shells are affected by heating will allow us to better explore the conditions that render isotope analyses useless. [Poster Group F]

**LeTourneau, Philippe D. (Burke Museum and King County Historic Preservation Program)**

***Recent Paleoindian Point Finds in Western Washington***

Unlike inland portions of the Pacific Northwest (eastern Washington, Idaho, eastern Oregon), the archaeological record of late Pleistocene-earliest Holocene human occupation west of Washington's Cascade Mountains is exceedingly meager. Only one intact, buried Paleoindian site with lithic artifacts is known; the remainder of the record consists primarily of isolated Paleoindian projectile points from surface or disturbed contexts. A few studies over the past 15 years have focused on fluted points from western Washington. In this poster, I present detailed information on recent finds of Western Stemmed, Clovis, and other Paleoindian points from the region that I have had the opportunity to study. I also examine the distributions of the various point types and discuss possible strategies for locating additional Paleoindian sites in western Washington. [Poster Group G]

**Lewis, Ian (Equinox Research and Consulting International Inc.)**

***Casings with Context: Bullet Casings, Shotgun Shells, and Military Memorabilia from Site 45IS45/300***

Site 45IS45/300 is a heavily disturbed site located on the Oak Harbor waterfront. Based on the historic artifact assemblage, it has become clear that firearm possession was strongly engrained in the local culture throughout history. In addition to military memorabilia, bullet casings and shotgun shells represent a significant portion of this data. The headstamp of a cartridge can provide information sufficient enough to date and classify the artifact. Depending on the product, information can include distinct manufacturer's marks, caliber or gauge designations, and even a stamp of the production year! Additionally, because the 45IS45/300 assemblages were heavily disturbed, headstamp identification, in this case, aided in associating the original locations of disturbed material, and provided a means of further providing context, despite a disturbed site. **[Poster Group D]**

**Litzkow, Jamie M. (Bureau of Land Management)**

***Taking it Down to Build it Up: Resolving Adverse Effects to Historic Barns through Reclamation***

A primary goal of cultural resource management is to balance the protection of historic properties with the enhancement of these properties for the public benefit. When an undertaking is determined to have an adverse effect on an historic property, it is the responsibility of the lead agency and consulting parties to develop a plan to mitigate (resolve) those adverse effects. Where historic buildings are impacted, Historic American Buildings Survey (HABS) documentation has been the standard mitigation approach. While HABS is valuable, simply recording a building does little to benefit the local community. The Advisory Council on Historic Preservation (ACHP) encourages creative approaches when mitigating adverse effects to historic properties geared towards emphasizing the public benefit. An example of such an approach is the Bureau of Land Management's (BLM) partnership with the Washington Trust for Historic Preservation's (WTHP) Barn Recycling Program to address the recent decommissioning of two historic barns. The program salvages building materials from deconstructed structures and redistributes them to local Heritage Barn owners for their own restoration efforts. This presentation will discuss the benefits of the program and outline potential issues for the lead agency to consider in the reclamation process. **[Poster Group D]**

**Maddoux, Maryanne (Oregon State University) and Emily Modelski (OSU)**

***"Coast to Coast": A Chronology of Towle's Log Cabin Syrup***

This typology of Towle's Log Cabin Syrup will provide a useful tool for the dating of syrup tins, as well as, a history of the product itself. Towle's Log Cabin Syrup was founded in 1887 and has been a staple item in American kitchens and businesses ever since its inception. Within the Pacific Northwest it was especially popular within early logging and mining camps. Towle's created decorative syrup tins in the shape of a log cabin utilizing a series of distinctive designs. Not only has this clever marketing inspired collectors, but the frequent variation in tin style and decoration has made these tins invaluable tools for site dating. The syrup was quickly consumed and readily available which makes the tins an excellent horizon marker in excavations. Through the use of tin design and logo imaging it is possible to ascertain accurate product dating. **[Poster Group D]**

**Major, Maurice (Washington State Department of Natural Resources)**

***DNR Office Hours***

There will be no fascinating graphics, but a real live DNR archaeologist will be present to field questions, listen, and talk about cultural resources on 5,000,000 acres of state land. No appointment necessary. **[Poster Group B]**

**McWilliams, Tyler (AMEC)**

***Weighted Artifact Density: Mapping the Hot Spots of an Archaeological Site***

The goal of this study was to create an objective method of summarizing the results of an archaeological survey. In some cases sketching a polygon around a site may not sufficiently describe it, as many sites have concentrations of artifacts and gaps with few or no artifacts. AMEC used two different methods to calculate the artifact density of subsurface tests on an archaeological site, and then used GIS to interpolate and display the values of those artifact density statistics between subsurface tests. The resulting maps quickly show a reader the likely locations of the most data-rich portions of an archaeological site using data from a recent United States Army Corps of Engineers project near Libby, Montana. Recommendations for survey methodology which would improve the analysis are made, and limitations of the analysis are presented. **[Poster Group F]**

**Morton , Ashley M. (Fort Walla Walla Museum)**

***Towards a Historical Archaeology of Health and Illness***

Historical archaeologists are well positioned to contribute to a greater understanding of the ways in which people dealt with their illness in the past, given access to health and hygiene artifacts. Yet the archaeology of health or indeed, an archaeology of medicine remains underutilized from the wider discipline. The lived experience of being sick and strategies of wellness are ever present in archaeological assemblages from toothbrushes and patent medicines, to hypodermic needles. Exploring contemporary and medical anthropological concepts, this poster introduces a health framework to historical archaeological approaches to the past. [Poster Group D]

**Murphy, Andrew (Grant County PUD) and Brett Lenz (Columbia Geotechnical Associates)**

***Geoarchaeology for a Crescent Find on the Babcock Bench, Grant County, Washington***

A Terminal Pleistocene-Early Holocene chipped stone crescent artifact was surface collected from the Babcock Bench in central Washington State. Laboratory and field analyses of three test units are implemented in a synthesized geomorphic-stratigraphic framework to provide context for this find. Conditions are similar to those of crescent finds elsewhere throughout the west and Paleoindian sites on the Plateau. Geomorphic and pedogenic features identified during this study that correlate to Paleoindian sites on the Columbia Plateau are: (1) flood scoured or denuded bedrock adjacent to fluvial landforms; (2) extinct or recharged wetland environments; (3) redoximorphic soil features of Latest Pleistocene age that terminate in Early Holocene loess. Two geosols and one paleosol ubiquitous to the Columbia Plateau are further identified. These soil units are distinguished as the Bishop geosol a Terminal Pleistocene soil, the Badger Mountain geosol a Latest Pleistocene through Early Holocene soil, and the Willow Lake paleosol a post-Altithermal soil. [Poster Group G]

**O'Grady, Patrick (University of Oregon Museum of Natural and Cultural History) and Scott P. Thomas (Bureau of Land Management, Burns District, Oregon)**

***Medicine Wheels in Oregon? Archaeological Evaluation and Inquiry Into Two Large Stone Circles and Related Features in the Northern Great Basin of Southeastern Oregon.***

The discovery of two stone circles 20-plus meters in diameter in the northern Great Basin uplands invites comparisons with similar features on the northern Plains. The largest has four "spokes" that radiate from the center, the smaller is situated in a natural amphitheatre, suggesting a setting as significant as the feature itself. Stone circles of such dimensions are exceedingly uncommon in Oregon and heretofore unknown in the northern Great Basin. Balloon mapping results are accompanied by data from excavation of a nearby occupation surface, including AMS dating, obsidian sourcing/hydration, and paleoethnobotany. We seek input from other researchers regarding these unique features.

***The Dietz Site: Revisiting the Geochemical Sourcing and Hydration Measurement Properties for Fluted and Stemmed Artifacts from 35LK1529, Lake County, Oregon***

Recent investigations of obsidian utilization at sites containing fluted and stemmed points in southeastern Oregon reveal that the majority of geochemical sources are derived from nearby quarries, with infrequent use of more distant sources. This is counter to previous findings at the Dietz site, where a majority of fluted points were once believed to originate from the Buck Mountain source in California. Twenty-five years of intensive explorations at Oregon obsidian localities to determine source boundaries, coupled with modifications to the inventory of analyzed trace elements has occurred since the previous analysis. Re-analysis of Dietz artifacts using this increased degree of resolution indicates the obsidian is largely derived from local sources, in keeping with other sites containing fluted and stemmed points in the region. This paper was originally presented at the 2012 Great Basin Anthropological Conference and offered in an updated form for the Northwest Conference.

**Oosahwee-Voss, Eric (Confederated Tribes of the Colville Reservation)**

***Sinixt Traditional Cultural Properties and Practices***

The Sinixt, also known as the Arrow Lakes or Lakes Tribe, were declared extinct by the Canadian government but remain a constituent member of the Confederated Tribes of the Colville Reservation. The Sinixt traditional territory extends from near Revelstoke, British Columbia, Canada, down through Kettle Falls, Washington. Many Sinixt continue to use areas throughout their traditional territory. This poster documents some of the past and present traditional cultural properties and practices of the Sinixt. [Poster Group A]



**Osiensky, Whitney S. (Western Washington University)**

***Daciteopia?: What We Can Learn From a Holistic Approach to Sourcing Fine-Grained Volcanic Artifacts (FGVs)***

Several research projects have demonstrated Watts Point dacite was used extensively by native people in the Salish Sea. This research also points to the fact that other FGV sources exist, but little has been done to identify their location. Artifacts from nine sites in western Washington and geologic samples from eight locations within the North Cascades and Salish Sea are compared using whole-rock major elemental analysis, trace elemental analysis and mineralogical analysis. Of the artifacts, 72% were dacite while the remaining 28% were other various types of FGVs. Of the dacite artifacts only about half come from Watts Point, showing that native people were not dependent on Watts Point and had access to many other FGV sources. [Poster Group F]

**Parfitt, Anne B. (Central Washington University) and Dr. Patrick T. McCutcheon (CWU)**

***Chemical Sourcing of Obsidian Lithic Fragments from the Grissom Site (45KT301) to Study Intra-site and Inter-site Source Variability***

The Grissom (45KT301) site, located in northeast Kittitas County, Washington, dates from 2500 B.P to the Historic period. While much of the assemblage remains unanalyzed, recent preliminary analysis revealed a high frequency of obsidian chipped stone artifacts. A technological, functional and material analysis of 165 obsidian artifacts in addition to XRF analysis of 49 artifacts was undertaken to provide information on the number of obsidian sources represented, source frequencies through time, and the distribution of source frequency across space. Nine unique sources were identified in the XRF analysis, one of which was a local tachylite source. While questions about source frequencies through time could not be definitively answered, source variation across space is higher in the southern part of the site than the northern part. Source variation across technological classes met expectations, but an intersite comparison did not show an expected pattern between distance from source and source abundance. [Poster Group F]

**Pefferman, Audrey (Western Washington University), Luke Jones (WWU), and Julia Rowland (WWU)**

***Odorono Days and Mentholatum Memories***

Looking at the collection of historic artifacts gathered during the 1975 excavation of 45-WH-09, Birch Bay, Washington (Gaston and Grabert), the research team analyzed each artifact in the hopes of determining whether or not the assemblage reflected recreation use of the bay. Individual analysis of each historic artifact from this accession and historical research on the area of focus gave us our primary information. Typologies based on material and function were compared to previously established models for site use. The results were not definitive as to the primary use of the site but much of the collection was dated to an occupation period of roughly twenty years, between 1930-1950. Further research into the historic land use records in the area is needed to determine a more accurate portrayal of the site use. [Poster Group D]

**Phaneuf, Christen (Eastern Washington University)**

***Comparative Analysis of Paleo-Indian Osseous Rods***

Osseous rods, made of both bone and ivory, occur in Paleoindian sites across North America. A sample of these rods share similar traits and has led some researchers to posit possible functional correspondences. This paper will examine a bone rod found at the Sentinel Gap site (45KT1362), a c. 10,000-year-old late Paleoindian site located in central Washington. Morphometric data are provided and compared to information published on other early-dating osseous rods. Potential functions of this rod will be reviewed along with the possible uses of osseous rods recovered from other Paleo/late Paleoindian sites. [Poster Group G]

**Ramey, James (Willamette Cultural Resources Associates, Ltd.)**

***Mammalian Butchery at the Briar Site (35CO35)***

The Briar site (35CO35), occupied approximately AD 1420-1600, was the focus of a joint field school between Portland State University and Portland Community College in 1986. In the winter of 2011, Portland State University and Willamette Cultural Resources Associates launched a joint effort to complete the analysis of this neglected site. In the fall of 2013, preliminary analysis of the mammalian faunal remains was undertaken in conjunction with this effort. This poster presents those findings. Goals included an examination of butchery, as well as taxonomic identifications and a comparison to the nearby, and contemporaneously occupied, Cathlapotle (45CL1) and Meier sites (35CO5). [Poster Session I]

**Reid, Kenneth C. (Idaho State Historical Society)**

***Thermal Aquifers and Winter Villages in Idaho***

Idaho elevations average nearly a mile above sea level, dropping from east to west. Sites of prehistoric winter villages cluster below 2,000 ft in the lower canyons of the Snake, Salmon, and Clearwater rivers at the western edge of this

elevation wedge. A sequence of early, lower (<1000 ft) to later, higher (~4000 ft) winter settlements can be recognized in these three basins. However, exceptions occur within shallow thermal aquifers on the Middle Snake, and on the northern rim of the Bonneville Basin along Bear River. A composite band of several hundred Shoshones wintered within a thermal aquifer at Bia Ogoi near Bear River for several months in the winter of 1862-63. Historic records suggest that subsistence here depended more on charity from nearby Mormon settlements than traditional foraging practices. However, Shoshone oral traditions assert centuries of winter sedentism at Bia Ogoi. Fieldwork soon underway will address these questions. [Poster Session I]

**Risdon, Edrie (Grant County Public Utility District), Sarah Steinkraus (GC PUD) and Steven Hackenberger (Central Washington University)**

***Middle and Upper Columbia House Settlements: Population Dynamics, Collector Strategies, and Sampling Bias***

This study revisits explanations for development of semi-sedentary and sedentary collector strategies and compiles an updated radiocarbon database for house features from three areas of the Middle and Upper Columbia River (including Canada). The low number of radiocarbon dated houses known for the interval between 3500 to 4000 years ago may present a hiatus in forager house settlement. This interval is followed by the development of collector house settlement. The low number of house dates between 2000 and 2500 years ago may represent another hiatus in collector settlement. This interval is followed by a period of population growth and greater aggregation of collector households. House forms change, and settlements become more dispersed after 500 years ago. Relatively small sample sizes make it is highly likely that sampling bias and/or erosion and burial of river terraces also account for gaps in the radiocarbon record. [Poster Session I]

**Rodrigues, Antonia (Ancient DNA Laboratory, Department of Archaeology, Simon Fraser University), Iain McKechnie (University of Oregon, Hakai Network for Coastal People, Ecosystems and Management, SFU), Kasia Zimmerman (Ancient DNA Laboratory, SFU), and Dongya Yang (Ancient DNA Laboratory, SFU)**

***Species Identification of Archaeological Rockfish (*Sebastes* spp.) in the NE Pacific: New Insights from Ancient DNA***

Rockfish (*Sebastes* spp.) are a diverse genus of marine fishes that have a significant economic, social, cultural and ecological role in the Northeast Pacific Ocean today as in the past. Commercial and recreational fishing have resulted in dramatic declines in rockfish populations, spurring several recent management efforts through marine reserves and closures. The archaeological occurrence of rockfish is widespread and can aid fisheries conservation in extending ecological baselines, but rockfish species identification is not possible using osteological characteristics alone. This study uses ancient DNA to identify rockfish species from five sites (ca. 2500-250 BP) in a modern marine protected area. Species identification of archaeological rockfish remains offers new insights into the deep history of rockfish exploitation in the Northeast Pacific Ocean. This can contribute to our understanding of traditional fishing practices, the potential impact of human fishing activities, as well as the accurate characterization of preindustrial genetic and species diversity. [Poster Group F]

**Rorabaugh, Adam N. (Washington State University)**

***Re-examining 45WH1 Cherry Point and 45WH17 Semiahmoo Spit***

The development of large plank houses in the Salish Sea during the Marpole period (2400-1000 BP) has been central to theorizing issues of social inequality and resource use among complex foraging societies. In Northwest Washington two substantial shell midden sites, 45WH1 Cherry Point and 45WH17 Semiahmoo Spit have provided considerable insights into changes in subsistence and social organization in the region. As part of a larger dissertation, seven new radiocarbon dates were acquired for these sites. The dates for 45WH17 confirm the extent of the Locarno Beach (3200-2400) deposits, while the dates from 45WH1 are associated with hearth features that Garland Grabert interpreted as part of a house floor feature with associated post holes. Dates ranging from 2600-1100 cal BP suggest that this probable structure dates to Marpole. Along with other sites in Washington such as Tualdad Altu and Biederbost, Cherry Point suggests that large houses and their associated social transformations are present outside of the Fraser Delta and Gulf Islands during Marpole. [Poster Group F]

**Ross, Laurie (Edmonds Community College) and Lia Andrews (ECC)**

***Wildlife monitoring at Two Sisters Return: animal survival in a semi-rural environment***

At the Two Sisters Return conservation easement, students from Edmonds and Everett Community Colleges are monitoring game trails to assist the Snoqualmie Tribe in minimizing the environmental impact of a proposed tribal cultural center. Wildlife assessment on land managed by the Tribe is an integral part of the revival of the Snoqualmie people. This poster presents a comprehensive analysis of data collected over two years by the Learn and Serve Environmental Anthropology Field (LEAF) School. Combining traditional ecological teachings with remote cameras, GIS mapping, and tracking skills,

student research provides evidence that the Two Sisters Return site supports migration and breeding of elk, deer, bears, and coyotes where growing suburbs meet the forested foothills of the West Cascades. [Poster Group A]

**Rowland, Julia (Western Washington University)**

***Community Matters: An Archaeological Investigation of the 1897 to 1907 Equality Colony, Skagit County, Washington***

In 1897 dreamers, idealists, and the politically motivated converged on Washington Territory. The Brotherhood of the Cooperative Commonwealth, a Maine based socialist political group, had put out a call to its over 2,000 members across the nation. Their long term goal was to win the heart of the soon-to-be state for American socialism. The short term goal was to establish a colony to demonstrate the joys of socialist living to the country. The long term goal was never realized; the short term resulted in the formation of the Equality Colony. At its peak the Colony spanned over 600 acres and was home to around 300 people. This poster presents data from the first archaeological survey of the former Equality Colony. Analysis of historic records and archaeological survey are combined to give new perspective on this fascinating piece of early Washington state history. [Poster Group D]

**Saban, Chantel V. (Oregon State Anthropology), Martin E. Adams (Paleoinsect Research), and Katelyn N. McDonough (University of Oregon Anthropology, University of Oregon Museum of Cultural & Natural History)**

***Paleoecological Research from Paisley Cave 2 (35LK3400)***

Continuing entomological, palynological and general artifact research at Paisley Caves (35LK3400) have yielded high resolution insights into the paleoenvironment of the Chewaucan Basin during the terminal Pleistocene through the early Holocene. Insect, pollen and artifact distributions have been seen to correlate chronologically, most significantly within Younger Dryas deposits ca. 12,800-11,500. This report ties together three independent studies focused on materials recovered from Paisley Cave 2 towards the purpose of highlighting the unique environmental conditions humans experienced while in the area of the Caves during the terminal Pleistocene through the early Holocene. [Poster Group G]

**Sappington, Robert Lee (University of Idaho)**

***An Overview of Prehistoric House Structures in the Clearwater River Region, North Central Idaho***

The examination of house pits has long been a focus for archaeologists in the southern Columbia Plateau. House pits, mat lodges, and other residential structures were first reported in the Clearwater River Region by Lewis and Clark in 1805. The first house pits were excavated in this region in the early 1970s and a number have been examined since that time. The oldest house pits date ca. 5000 BP and evidence of sedentism increases throughout the late prehistoric period with the most recent house pit dated ca. 700 BP. The largest known house is a probable mat lodge located at Ahsahka that was radiocarbon dated ca. 1200 BP. Extensive data recovery excavations and the spatial analyses of features and material culture within this structure provided insights into numerous activities including lithic tool use and manufacture, mammal processing, fishing, and storage as well as indications of the presence of children. [Poster Session I]

**Schulze, Savannah M. (Central Washington University)**

***The Introduction of Artificial Habitat Structures in Two Troops of Lemur Species (*Eulemur sanfordi*) in Semi-Free Ranging Enclosures***

This study investigated the introduction of artificial habitat structures to a strata level that did not contain many structural supports. This structure was predicted to increase the use of that strata level in two troops of semi-free-ranging Malagasy lemurs- *Eulemur sanfordi* (Sanford's brown lemur) – at the Lemur Conservation Foundation, south central Florida. Habitat structures can limit species ability to ambulate and studies on positional behavior in captive primates vary when compared to their wild counterparts. This project took place in two different phases: before introduction of artificial habitat structures and after artificial habitat introduction. The artificial habitat structures were in the form of artificial vines made to replicate natural vines and approved for primate use by Disney and the LCF's Scientific Advisory Counsel. The PI used group scan sampling to record the troops' behaviors, location and direction of travel. *Eulemur sanfordi* increased its use of horizontal and vertical structures and began to take advantage of the horizontal spaces provided by the artificial vines. This study on the introduction of artificial habitat structures provides documentation of successful ways to supplement these forests and aid in wild lemur conservation. [Poster Group H]

**Sechrist, Laura (University of Nevada, Reno)**

***Land Use at a 19th Century Stagecoach Station***

The site of Granite Creek, a 19th-century emigrant camp and stagecoach station in the Black Rock Desert near Gerlach, Nevada, illustrates the continuity of land use through time. One of the few green spaces within the Black Rock, Granite Creek attracted emigrants traveling the Oregon-California Trail as a resting and watering area, both for themselves and

their pack animals. Recognizing the value of this place, local settlers established a trading post and stagecoach station at Granite Creek, modifying the landscape in order to enhance the unique conditions of its natural environment. After it was abandoned, settlers and ranchers continued to use the station's landscape for some of the same purposes. This poster will explore the connections between Granite Creek's historical purpose and current use based on archaeological survey and excavation the University of Nevada-Reno conducted in 2013. [Poster Group D]

**Sheldon, David J. (Central Washington University), Patrick T. McCutcheon, (CWU), Caitlin Limberg (CWU), Sonja Kassa (CWU), David Davis (CWU), Anne Parfitt (CWU), and Patrick Lewis (CWU)**

***Archaeological Investigations of the Sunrise Ridge Borrow Pit Site (45PI408) at Mount Rainier National Park***

Archaeological investigations at the Sunrise Ridge Borrow Pit site (45PI408) in Mount Rainier National Park continue to yield information about prehistoric land use in the upland environments of the Cascade Range. Initial testing at the site was conducted between 1997 and 2001 to establish site boundaries. Excavations were conducted by Central Washington University (CWU) Archaeological Field School between 2011 and 2013 in an effort to characterize the site. A total of 19 1x1 meter units were excavated yielding thousands of artifacts and identifying several intact features. Analyses of the recovered materials are currently underway at CWU. These analyses include thermoluminescence dating of fire modified rock, radiocarbon dating of faunal material and charcoal, macrobotanical analysis, lithic analysis of the chipped stone assemblage, and obsidian sourcing. These analyses will refine the temporal placement of the site and allow inferences about past lithic technologies, trade networks, and subsistence patterns. [Poster Group F]

**Shellenberger, Jon (Yakama Nation), Shane Scott (Yakama Nation), and Steven Hackenberger (Central Washington University)**

***Documenting and Protecting House Settlement within the Yakama Nation Lands.***

A cooperative project was developed between the Yakama Nation and the Central Washington University CRM Summer Field School. Three sites with large house features were field mapped and relevant information on features, artifacts and impacts were compiled in a GIS database. These sites have the largest concentration of houses and the largest house sizes on the Lower Yakima River. Site maps were built with base station GPS and enhanced with high resolution LiDAR. Information for one site (~17 houses) includes data for disturbance from ORV traffic and looting. Data for a second site (~10 houses) has been integrated into project design for fisheries habitat restoration. The map for a third site (~20 houses) documented damage from a firebreak and the database provides a baseline for future protection from highway construction and fire restoration work. [Poster Session I]

**Sparks, Shane (ICF International)**

***Preliminary Results of SEM Geochemical Analysis of Weathered Artifacts from Two Sites in Western Washington (45SN14 and 45WH34): What is in a Rind?***

This preliminary analysis was conducted to identify the geochemical composition of the rinds of weathered artifacts from two sites in the western Washington, 45SN14 and 45WH34. The analysis was conducted using a Scanning Electron Microscope (SEM) with Energy Dispersive X-ray analysis (EDX) and retractable backscatter detector (BSE) to identify the geochemical elemental data from both the sub-rind and weathering rind portions of each artifact. The elemental data collected from each sample were then compared to generate a weathering rind elemental profile for each artifact. The preliminary results produced positive data concerning the identification of the elemental composition of the rinds. Next steps include the investigation of rind formation processes and potential for rind data to yield information concerning site formation processes. [Poster Group F]

**Taylor, Allie (Central Washington University) and Patrick Lubinski (CWU)**

***Pig Feet and More: Analysis of a Historic Faunal Sample from Ellensburg City Block 24***

City Block 24 in Ellensburg, Washington, was occupied by Euroamericans and Overseas Chinese starting in the late 1800s. A 1989 community archaeology project excavated a portion of downtown and recovered cultural materials mostly from the late 1800s and early 1900s. The excavated fauna was not analyzed or reported at the time. My project involved examining all of the fauna recovered from half (18) of the 5 x 5 foot excavation units, a sample of 434 specimens. Identified taxa are dominated by domesticated species, including pig, cattle, chicken, dog, and cat, but there is also one wild species, pheasant. Most of the modified bones were saw-cut, except for the chicken, dog, and cat elements. Pig bones were primarily lower limb, foot elements (pigs feet?) and vertebral remnants of pork chops. Unlike other sites from the 19th century West Coast, most of the identifiable bones were pig and chicken instead of cattle. [Poster Group D]

**Tiede, Kristen (University of Idaho)**

***Amethyst Glass as a Dating Tool***

Kooskia Internment Camp in rural North Central Idaho held Japanese internees during World War II. The camp was open from 1943 to 1945[1], holding 256 male internees. The first archaeological field season was in 2010, followed by a second field season of excavation in 2013. While the artifacts from 2010 are still being catalogued, there are very few amethyst glass artifacts. The rarity of both true amethyst glass and sun purpled glass can be very helpful in dating the site. Also, potential identification of the amethyst glass artifacts could aid in the dating of the site. [Poster Group D]

**Trosko, Tess (Western Washington University), Isabella Reis-Newsom, (WWU), Amanda Rodriguez (WWU), Rhea Roskam (WWU)**

***Migration through a Child's Eyes***

As a group we've collaborated to provide a thorough understanding of youth migration. This poster examines four key aspects of migration through a child's eyes. It begins with The Forgotten Ones which examines the experiences of youth whose parents migrate and leave them behind. Next A Complex Crossing looks at the experiences of children who tackle the border both alone and with companions. It is followed by No Migrant Left Behind; an analysis of migrant educational programs within the school systems in the United States. Finally it concludes with Grappling with The System by looking at the unfortunate circumstances by which parents are deported and their migrant children end up in the foster care system as wards of the state. Our recommendation is that migration policies be reexamined through a child's eyes. [Poster Group C]

**Truman, Elizabeth (Washington State University), Dr. John Dorwin (Kalispel Tribe of Indians) Stan Gough (Eastern Washington University Archaeological and Historical Service) and Dr. Melissa Goodman-Elgar (WSU)**

***Delineating Space Using Geoarchaeological Methods for Occupation Sites in the Pacific Northwest***

45PO429 is an ethnographically known occupation site of the Kalispel Tribe of Indians along the Pend Oreille River, WA. We present the results of geoarchaeological field and lab assessments used to aid in analysis of selected occupation areas and features. Features were identified using the ethnographic record. Knowledge regarding duration of occupation and primary or secondary use of features was explored using a simple suite of methods (PSA, EC, pH, LOI). By using natural controls to form baseline signatures, the human impact to the landscape can be more easily deduced. Delineation of interior and exterior space for a single depression is explored. Particle size analysis aided identification of deliberate action related to creation and conservation of the depression by past people. The relative ease of geoarchaeological analysis is meant to aid CRM interests by allowing more informed decisions regarding human land use with relatively little impact to the archaeological record. [Poster Session I]

**Williams, Alexandra (Archaeological Investigations Northwest, Inc.) and Molly Eimers (University of Montana)**

***Trade and Traditional Prey Use: Examining Housepit 54's Faunal Strategies during the Fur Trade Era***

Inhabitants of Housepit 54 at the Bridge River village in south-central British Columbia participated in a seasonally structured subsistence strategy requiring great knowledge of the regional ecology. Household members employed careful planning to coordinate hunting and gathering activities with processing and storage to ensure enough provisions were amassed for the winter village occupation when resources were scarce. This system became more complex during the Fur Trade period. The fur trade offered households new opportunities to create alliances and extend power through reworking existing subsistence practices. Few studies have centered on household adaptations during the Fur Trade era within the Mid-Fraser Canyon. This faunal analysis documents Housepit 54 Fur Trade era subsistence and supports interpretations of more complex social changes in the lives of householders. [Poster Session I]

**Wollwage, Lance K (Washington State Department of Archaeology and Historic Preservation), Guy L. Tasa (WA DAHP), and Stephenie Kramer (WA DAHP)**

***Partial Stratigraphy of the Snakelum Point Site, 45-IS-13, Island County, Washington, and Comment on the Use of Small Test Units***

This poster presents a stratigraphic section that shows how prehistoric and recent disturbance in coastal shell midden sites of the Puget Sound region can produce a complex depositional mosaic over very short distances. At the Snakelum Point site, the excavation of two closely spaced (~1 m) expedient test units exposed re-deposited shell midden above human skeletal remains. Placement of a 1x2 m excavation unit spanning the smaller test units revealed stratified natural and cultural deposits, an intact interment, pit and fill, and midden sediments and human skeletal material re-deposited during cut-and-fill events in early historic and modern times. We close with a brief consideration of the ramifications of such

arrangements when using small test units and the interpretation of archaeological work at Snakelum Point and similar sites in the region. [Poster Group F]

**Zimmerman, Kasia (Simon Fraser University), Dana Lepofsky (SFU), Siemthlut Michelle Washington (Tla'amin First Nation), Antonia Rodrigues (SFU), Megan Caldwell (University of Alberta), Nyra Chalmer (SFU) Chris Springer (SFU), and Dongya Yang (SFU)**

***Changing Ways, Constant Companions: The Ancient DNA, Ethnohistory, and Archaeology of Tla'amin Dogs***

Early explorers, naturalists, and ethnographers visiting western Canada remarked on the ubiquity, variety, and distinctiveness of native North American dogs, noting that dogs were used for a multitude of purposes. Since the arrival of European goods, lifeways, and dog breeds the use and prevalence of native North American dog breeds has reduced dramatically. This study combines an ancient DNA analysis of archaeological dog remains from Tla'amin territory, with an ethnohistoric investigation of Tla'amin dogs to determine the origins and fate of the native dog lineages from this area, and to document the place of dogs in Tla'amin culture. Our results reveal persistence in terms of both the maternal lineage of dogs from this area, and the memory of these dogs in the community. [Poster Group A]

