

KLS

Celebrating 60 Years of Anthropology in the Northwest

Northwest Anthropology Conference 2007

Washington State University,
Pullman, Washington

Department of Anthropology

March 14–17, 2007

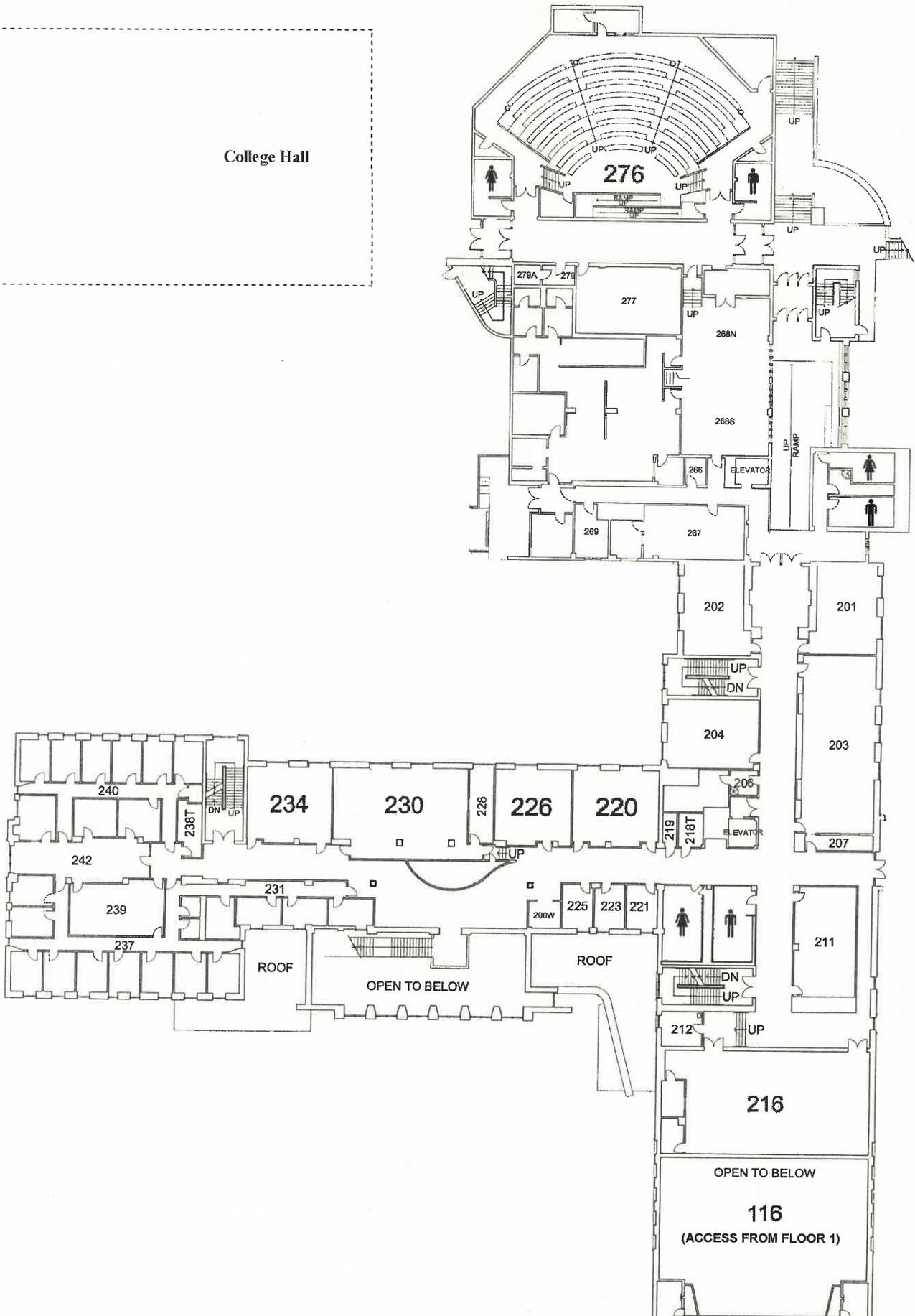
WASHINGTON STATE
UNIVERSITY



World Class. Face to Face.

← Terrell Mall →

College Hall



60th Annual Northwest Anthropological Conference
March 14-17, 2007
Washington State University
Pullman, Washington

Registration: Conference registration is required for attendance at all sessions. The registration table will be in front of Todd Hall 116, open during the following hours.

Thursday, March 15	7 am – 5 pm
Friday, March 16	7 am – 5 pm
Saturday, March 17	7 am – 12 pm

Information/Messages: Conference information will be available at the registration table. A bulletin board for messages will be available near the registration table.

Rico's Social: A social gathering sponsored by the *Anthropology Graduate Organization*, *Rainshadow Research*, *Transect Archaeology*, and *Plateau Investigations* will be held at Pullman's landmark Rico's Pub on Thursday evening, 6:00 pm to 9:00 pm. Light refreshments will be provided. In addition, you will find an envelope of "Rico's Bucks" in your conference tote that can be exchanged for the beverage of your choice.

Banquet: The conference banquet will be held in the Gladish View Room at 115 NW State Street just west and uphill of Pullman's downtown area. The banquet will begin at 6:00 pm with a hosted social hour. Jack Nisbet will be the keynote speaker. His talk is entitled "David Thompson on the Columbia Plateau: 1800-1812". Nisbet's books will be available for purchase and signing.

Exhibits: Book displays and other informational tables are located in the 2nd and 3rd floor hallways of College Hall. They are open from 8 am until 5 pm. A list of vendors is provided at the end of the program.

Posters: Posters will be displayed all day Thursday and Friday in the basement hallway and Room 260 of College Hall. Presenters are encouraged to be by their posters between 1:30 and 3:30 on Thursday the 15th.

Northwest Anthropological Conference Business Meeting: The annual conference business meeting is scheduled for Thursday from 4:30 pm until 5:30 pm in College Hall room 125.

Association for Washington Archaeology Meeting: The Annual meeting of the AWA will be Friday from 4:30 pm until 5:30 pm in College Hall Room 125.

Conference Hosted by: The Department of Anthropology at Washington State University.

Conference Planning Committee: Mary Collins (chair), Rhiannon Held, Karen Lupo, John Jones, Melissa Elkins (graduate student), and Ashley Hallock (graduate student).

Keynote Banquet Speaker

Jack Nisbet

David Thompson on the Columbia Plateau: 1800-1812

When Canadian fur agent David Thompson met a band of Kootenai people east of the Rocky Mountains in the fall of 1800, he sent two of his voyagers back across the Divide to examine the commercial prospects of the Columbia Plateau. In 1807, Thompson himself led a party of voyagers and mixed blood families into the Columbia country, and over the next five years he established a network of trade that covered the Inland Northwest. Along the way, Thompson surveyed the entire Columbia River and large section of its major eastern tributaries, made first contact with many Plateau tribes, and described the people and landscape he saw in written descriptions, watercolors, and a series of large accurate maps. This presentation examines the range of written, artistic, and oral memories left behind from those journeys.

Gladish Community and Cultural Center, Pullman, Washington
Friday, March 16, 6:00 PM

Jack Nisbet grew up in North Carolina, graduated from Stanford University before moving to eastern Washington some 30 years ago. Nisbet is a teacher, naturalist, and writer who lives in Spokane with his wife and two children.

In 1994 he published *Sources of the River: Tracking David Thompson Across Western North America*, which received the Murray Morgan Prize. Since then, Nisbet has written *Purple Flat Top* (1997), *Singing Grass, Burning Sage: Discovering Washington's Shrub-Steppe* (1999), *Visible Bones* (2003), and *The Mapmaker's Eye: David Thompson on the Columbia Plateau* (2005), all of which explore human and natural history in the greater Northwest. *Visible Bones* was awarded a Washington State Library Book Award, and the American Library Association named *The Mapmaker's Eye* as one of the year's "Best of the Best" University Press publications.

The Conference at a Glance

Day		Session	Location
Thursday	Morning	1 Water, land, and People: a Focus on Current Research Within Pacific Northwest National Parks	Todd Hall 216
		2 Professional Responsibility and Relevance: Crafting CRM Recommendations that Make a Difference	Todd Hall 230
		3 The Social and Ecological Conditions of Global Scale Capitalism and Indigenous Peoples in Northwest North America	Todd Hall 234
		4A Recent Excavations at Sauvie Island (Sunken Village) Wet Site (35MU4), Portland, Oregon	Todd Hall 276
		5 General Session – Themes in Northwest Archaeology	Todd Hall 220
	Afternoon	4B Recent Excavations at Sauvie Island (Sunken Village) Wet Site (35MU4), Portland, Oregon	Todd Hall 276
		6 Cultural Resources on the Clearwater National Forest	Todd Hall 216
		7 Cultural Heritage and CRM in the Northwest and Beyond	Todd Hall 230
		8 Song to the Creator	Todd Hall 234
		9 General Session – Anthropological Perspectives on Religion	Todd Hall 226
		10 General Session – Historic Archaeology	Todd Hall 220
		11 Poster Session	College Hall 260, Basement
Friday	Morning	12A Evolution and Human Behavior: Contributions from the Northwest	Todd Hall 216
		13 An Inconvenient Truth: Meeting the Challenges of Puget Basin Archaeology	Todd Hall 230
		14 Colville Confederated Tribes: A Diversified Approach to Cultural Resource Management	Todd Hall 276
		15 Rock Art in Jeopardy	Todd Hall 226
		16 General session – Archaeology of the Interior	Todd Hall 220
		17 General session – Cultural Anthropology 1	Todd Hall 234
	Afternoon	12B Evolution and Human Behavior: Contributions from the Northwest	Todd Hall 216
		18 AWA Annual Workshop: Designing and Implementing CRM Archaeology Projects	Todd Hall 276
		19 Current Issues in Curation Workshop	Todd Hall 226
		20 General Session – Exploring Lewis and Clark: Historic Archaeology	Todd Hall 220
		21 General Session – Physical Anthropology	Todd Hall 220
		22 General Session – Northwest Archaeology	Todd Hall 216
		23 General Session – Cultural Anthropology 2	Todd Hall 234
		24 General Session – Recent Studies in Archaeology	Todd Hall 230
Saturday	Morning	25 University of Idaho Student Research in Anthropology	Todd Hall 234
		26 Geophysical Surveys for Archaeology	Todd Hall 230
		27 General Session – CRM and Practical Methods in Archaeology	Todd Hall 220
		28 General Session – Archaeology on the Northwest Coast	Todd Hall 276

**60th Annual Northwest Anthropological Conference
March 14-17, 2007
Washington State University
Pullman, Washington**

CONFERENCE PROGRAM

Thursday, On-going

Todd Hall – Outside 116
Conference Registration and Information, 7 am – 5 pm

College Hall – Second and Third Floor Hallways
Book room, 8 am – 5 pm

College Hall – Museum
People of the Plateau: The Indian Photos of Lee Moorhouse 1989-1915, 8 am – 5 pm

Holland Library, Ground Floor – MASC
Eye of the Beholder: Plateau Lands and Peoples in Historical Maps, 8:30 am - 4:30 pm

College Hall – 260, Basement Hallway
Poster sessions

Thursday Morning

Room: Todd Hall Auditorium, 116

Welcome, opening remarks, and blessing

Mary Collins (Washington State University), Dr. Ron Pond (Palouse/Umatilla)

Room: Todd Hall 216

**Session 1: Water, land, and People: a Focus on Current Research Within Pacific Northwest
National Parks**

Beth Horton (Washington State University) and Heidi Pierson (Fort Vancouver
National Historic Site)

8:30 *Public Archaeology and Reconstruction at the Fort Vancouver Powder Magazine.*
Heidi Pierson (Fort Vancouver National Historic Site)

8:50 *Submerged Cultural Resources and the Community: Working Together Toward
Protection and Preservation.* Jacqueline Marcotte (Portland State University)

9:10 *The Exploding Sutler Store at Vancouver, Washington: Commercial Trade at a
Western Military Fort.* Eric Gleason and Jacqueline Cheung (Fort Vancouver
National Historic Site)

- 9:30 *Restaurant or residence? Faunal Remains From the Earliest Occupation of the Fort Vancouver Sutler Store Privy.* Beth Horton (Washington State University)
- 10:00 **BREAK**
- 10:20 *"Where Ornament and Function are so Agreeably Combined" A New Look at Consumer Choice Studies Using English Ceramic Wares at Hudson's Bay Company Fort Vancouver.* Robert Cromwell (Fort Vancouver National Historic Site)
- 10:40 *Integrating Evidence for a Multitude of Peoples: Using Multiple Lines of Data at the Fort Vancouver Employee Village.* Meris Mullaley (Portland State University)
- 11:00 *The Diverse Roles of Dr. McLoughlin's Garden: An Archaeological Investigation of Nutrition, Health and Social Practice at the Hudson's Bay Company's Fort Vancouver.* Elaine Dorset (Portland State University)
- 11:20 *What the Grind Left Behind: Palynological Investigations at 45-JE-216, A Stratified Rock Shelter in the Olympic Mountains.* Kim Kwarsick (Washington State University/Olympic National Park)

Room: Todd Hall 230**Session 2: Professional Responsibility and Relevance: Crafting CRM Recommendations that Make a Difference**

Mary Rossi (Applied Preservation Technologies)

- 8:30-11:00 Panel Participants: **Mary Rossi** (Applied Preservation Technologies)
Kelly Bush (Equinox Research and Consulting International)
Stephenie Kramer (Washington State Dept of Archaeology and Historic Preservation)
Reuben McKnight (Historic Preservation Officer, City of Tacoma)
Darby Stapp (Pacific Northwest National Laboratory), and
Lyz Ellis (US Army Corps of Engineers)

Room: Todd Hall 234**Session 3: The Social and Ecological Conditions of Global Scale Capitalism and Indigenous Peoples in Northwest North America**

Benedict J. Colombi (Idaho State University)

- 8:30 *Perspectives on Progress: What the History of Anthropological Theory Can Offer.* Haley Paul (Washington State University, Department of Anthropology)
- 8:50 *Early Relations on the Northwest Coast: A History of the Fur Trade to A.D. 1850.* Julie Kramer (Idaho State University)
- 9:10 *Subsistence in the Modern Political Climate: Native Fishing Rights and Alaskan Legal Structures.* Crystal Callahan (Idaho State University)

- 9:30 *The Impact of Energy Development on Indigenous Self-Governance.* William Willard (Washington State University)
- 10:00 **BREAK**
- 10:20 *Local Producers, Global Consumers: Salmon and the Organization of High Latitude Communities.* Benedict J. Colombi, Katherine Reedy-Maschner, and Herbert D. G. Maschner (Idaho State University)
- 10:40 *Discussant* – John H. Bodley (Washington State University)

Room: Todd Hall 276

Session 4A: Recent Excavations at Sauvie Island (Sunken Village) Wet Site (35MU4), Portland, Oregon

Dale Croes (South Puget Sound Community College) and Michele L. Punke (Archaeological Investigations Northwest, Inc.)

- 8:30 *Sauvie Island National Historic Landmark Wet Site (35MU4), Portland, Oregon—First Limited Archaeological Investigation and RipRap Repair, September 2006.* Dale Croes, (SPSCC) John Fagan and Maureen Zehendner (Archaeological Investigations Northwest, Inc.)
- 8:50 *Setting the Stage—The Environment at Sauvie Island.* Melanie Diedrich (Evergreen State College)
- 9:10 *Mapping the Sauvie Site and Numerous in situ Acorn Leaching Pits and Wooden Stakes.* Philip Pedack, Michael Martin (SPSCC) and David W. Cox (Archaeological Investigations Northwest, Inc.)
- 9:30 *Geoarchaeological Field Investigations at 35MU4, Sunken Village, Sauvie Island, Oregon.* Michele L. Punke (Archaeological Investigations Northwest, Inc.)
- 10:00 **BREAK**
- 10:20 *The Acorn-Leaching Pits of Sauvie Island: Macroflora analysis, comparison of regional acorn use, and population size estimate.* Bethany Mathews (SPSCC)
- 10:40 *100% Sample Micro-Analysis—The Method and Preliminary Results.* Melanie Diedrich (Evergreen State College) James W. Goebel Jr. and Tressa Pagel (SPSCC)
- 11:00 *Analyzing the Sauvie Basketry, Basketry Waste Materials and Experimental Archaeology.* Olivia Ness and Dale Croes (SPSCC), Robert Kentta and Bud Lane, (Confederated Tribes of Siletz Indians), Patricia Courtney Gold, (Wasco, Confederated Tribes of Warm Springs)
- 11:20 *Woodworking—Woodchips, Adzes and Experimental Archaeology.* Kathleen Hawes and Tyler Graham (SPSCC)

- 11:40 *Woodworking—Split wood, Wooden and Antler Wedges and Experimental Archaeology.* Jason Channel and Dale Croes (SPSCC)

Room: Todd Hall 220

Session 5: General Session – Themes in Northwest Archaeology
Melissa Goodman-Elgar (Washington State University)

- 8:30 *The Turchin-Korotayev model for Population Dynamics and Internal Warfare in the north Northwest Coast: a Tlingit Case.* German Loffler (Washington State University)
- 8:50 *A Quiet Voice: The Search for Women's Presence at The Stemilt Creek Site, 45CH302.* Dana Komen (Eastern Washington University)
- 9:10 *Variability of the Archaeological Record With Respect to Resource Zones in the Saddle Mountains, Grant County, Washington.* Amy Senn and Patrick McCutcheon (Central Washington University)
- 9:30 *Temporal Change in Columbia Plateau Textiles.* Rhiannon Held (Washington State University)
- 10:00 **BREAK**
- 10:20 *Culture Contact and Culture Change on Northwest Coast: The Gingolx Cemetery.* Richard Garvin (University of British Columbia)
- 10:40 *The Resonance of Material Culture: Carving and Weaving the Past.* Mark Ebert (University of Victoria)
- 11:00 *Error and Acceptance in Raw Material Source Assignments.* William Lyons (Washington State University)

Thursday Afternoon

Room: Todd Hall 276

Session 4B: Recent Excavations at Sauvie Island (Sunken Village) Wet Site (35MU4), Portland, Oregon

- Dale Croes (South Puget Sound Community College) and Michele L. Punke (Archaeological Investigations Northwest, Inc.)
- 1:30 *Beyond the Obvious: The Role of Bitter Cherry on the Northwest Coast.* Nola Nahirnick (Independent) and Jason Channel (SPSCC)
- 1:50 *Artifact Plant Material Identification—Cellular Analysis.* Kathleen Hawes (SPSCC)

- 2:10 *Sauvie Island Lithic Analysis—Comparisons of Blade-like-flake Tools with those from Qwu?gwes.* German Loffler (Washington State University)
- 2:30 *Projectile Points from Sauvie and Puget Sound—a Cladistic Analysis.* Dale Croes (SPSCC), Mark Collard (University of British Columbia), and Carolyn Dennler (SPSCC)
- 3:00 **BREAK**
- 3:20 *Discussants*—Robert Kentta (Confederated Tribes of Siletz Indians) Eirik Thorsgard, (The Confederated Tribes of Grand Ronde) Gail C. Celmer (U.S. Army Corps of Engineers), Kirstie Haertel (National Park Service) and Kenneth Ames (Portland State University)

Room: Todd Hall 216

Session 6: Cultural Resources on the Clearwater National Forest

Cheryl L. Harper (Clearwater National Forest / Washington State University)

- 1:30 *Heritage Resources on the Clearwater National Forest: Research, Management, and Interpretation.* Cheryl L. Harper (Clearwater National Forest / Washington State University)
- 1:50 *Fire and Volcanic Ash's Role in Altering a Landscape and Influencing the Human Dimensions Within: An Historic and Anthropological Perspective.* Robbin Johnston (Clearwater National Forest)
- 2:10 *Two Weeks, Two Months, Two Years: Uselife Duration and Preservation of Historic Logging Railroads on the Clearwater National Forest.* Cheryl L. Harper (Clearwater National Forest / Washington State University)
- 2:30 *The Lewis and Clark Trail: Is This It?* Erika Scheuring (University of Montana)
- 3:00 **BREAK**
- 3:20 *“Walking on Sacred Ground” Cultural Resources Protection Video – A Collaborative Project.* Christine Bradbury (Nez Perce National Historic Trail)
- 3:40 *The Seasonal Round of the 20th Century: Mining, Logging and Farming.* Robbin Johnston (Clearwater National Forest)

Room: Todd Hall 230

Session 7: Cultural Heritage and CRM in the Northwest and Beyond

Douglas H. MacDonald (University of Montana)

- 1:30 *Remote Sensing for CRM: A Cost/Benefit Silver Lining.* Alexander L. Baer (University of Montana)

- 1:50 *Let's Piece the Past Together: Developing a Middle-School Book on African Diaspora Archaeology.* Michelle C. San Antonio (University of Montana)
- 2:10 *Cultural Affiliation of a Late 19th-Century Burial from Eastern Montana.* Susan M. Craun, Ashley H. McKeown and Jennifer Sanders (University of Montana)
- 2:30 *A Study of the Cultural Significance of Bison to Yellowstone National Park's American Indian Tribes.* Sarah Tarka (University of Montana)
- 3:00 **BREAK**
- 3:20 *A Brief History of the Nez Perce Tribe Cultural Resource Program.* Kevin G. Cannell (Nez Perce Tribe)
- 3:40 *Traditional Cultural Property Compliance in the Confederated Tribes of the Colville Reservation.* Donald Shannon (Confederated Tribes of the Colville Reservation)
- 4:00 *Interstate Variation in Cultural Resource Management, Law, and Application in the United States.* Douglas H. MacDonald (University of Montana)
- 4:20 *A Comparative Study of Nationalism, Heritage, and Archeology in Iraq and Nazi Germany.* Matthew Schehl (University of Montana)

Room: Todd Hall 234

Session 8: Song to the Creator

Mary Collins (Washington State University)

- 1:30 *This Woman Lillian Ackerman.* Mary Collins (Washington State University)
- 1:50 *Indigenous Insights: Practical Approaches to Resource Management on the Columbia Plateau.* Vanessa Ross (Washington State University)
- 2:10 *Writing History: A Discussion of the Challenges and Successes of a Tribal Museum documenting & publishing Tribal history.* Feather Lyn Sams Huesteies (Tamástslíkt Cultural Institute).

2:30 **BREAK**

2:45-4:45 Panel Participants: **Dr. Ron Pond** (Umatilla)
Ann McCormack (Nez Perce)
Geraldine Jim (Warm Springs)
Lynette Miller (Washington State Historical Society Museum)

Room: Todd Hall 226

Session 9: General Session – Anthropological Perspectives on Religion

Nancy McKee (Washington State University)

- 1:30 *Feminist Interpretation of the Qur'an*. Israt Turner-Rahmen (Washington State University)
- 1:50 *Primal Partonomy: The Persistence of a Vedic Mythological Motif*. Elwyn C. Lapoint (Eastern Washington University)
- 2:10 *Hooked on the Fish: The Christian Sign of the Fish (and the Co-option Thereof) as Symbolic Capital*. Dave Beine (SIL International) and Kevin Pittle (BIOLA University)

Room: Todd Hall 220

Session 10: General Session – Historic Archaeology

Beth Horton (Washington State University)

- 1:30 *A Comparison of Spatial vs. Spectral Resolution in Analyzing the Patterns of Dredge Tailings in Elk City, ID*. Sarah Purdy (Oregon State University)
- 1:50 *Solving the Mystery of the "Beeswax Wreck" of Nehalem Beach, Oregon*. Scott Williams (Natural Resources Conservation Service).
- 2:10 *In Phil Sheridan's Shadow: The Impact of the "Great Man Syndrome" on the Archival and Archaeological Record at Two Western Military Sites*. David Brauner (Oregon State University)

2:30 *Try Dr. Davidson's Headache Powders: People and Medicine in Nineteenth-Century Tacoma, Washington*. William White, III (Northwest Archaeological Associates, Inc.)

3:00 **BREAK**

3:20 *Cemetery Investigations in Cultural Resource Management: Lessons Learned from the Old Snohomish Cemetery*. Sean D. Tallman and Yonara Carrilho (Northwest Archaeological Associates, Inc.)

3:40 *Sake Bottles and Tea Bowls: Japanese Worker in a Northwest Logging Camp*. Gretchen Kaehler (Historical Research Associates, Inc.)

4:00 *Hook Tenders and Rigging Rustlers - Uncovering the Remains of Wind River Lumber Company's Camp 3*. Cheryl Mack (USDA Forest Service)

4:20 *Last Ditch Effort: Lessons From A Fugitive Historic Feature in the Okanogan Highlands*. Bruce Crespin (BLM)

(1) www.lorecords.bl

Room: College Hall 260, Basement Hallway
Session 11: Poster Session

1:30-3:30 Presenters with posters

Thursday Evening

College Hall – Room 125
Northwest Anthropology Conference Business Meeting, 4:30 pm – 5:30 pm

Rico's Pub
Conference Social, 6 pm – 9 pm

Friday, On-going

Todd Hall – Outside 116
Conference Registration and Information, 7 am – 5 pm

College Hall – Second and Third Floor Hallways
Book room, 8 am – 5 pm

College Hall – Museum
People of the Plateau: The Indian Photos of Lee Moorhouse 1989-1915, 8 am – 5 pm

Holland Library, Ground Floor – MASC
Eye of the Beholder: Plateau Lands and Peoples in Historical Maps, 8:30 am - 4:30 pm

College Hall – 260, Basement Hallway
Poster sessions

Friday Morning

Room: Todd Hall Auditorium, 116
Welcome, opening remarks, and blessing
Mary Collins (Washington State University), Norma Joseph (Lushootseed)

Room: Todd Hall 216
Session 12A: Evolution and Human Behavior: Contributions from the Northwest
Adam Boyette (Washington State University)

- 8:30 *Dietary Intensification and the Archeological Record*. Karen D. Lupo (Washington State University)
- 8:50 *An integrated evolutionary approach to human responses to killer (or acute high mortality) epidemics*. Barry S. Hewlett (Washington State University, Vancouver)

- 9:10 *Rearing Environment and Male Sexual Behavior: Evidence for Adaptive Response and Cultural Influence.* Adam H. Boyette (Washington State University, Vancouver)
- 9:30 *How a Resource Can Have Utility Once Satiated.* Shane J. Macfarlan (Washington State University)
- 10:00 **BREAK**
- 10:20 *In Opposition: An Evolutionary Perspective on the Messages Used to Sponsor Cooperation or Opposition to War.* Tim Barela (Washington State University)
- 10:40 *Material Culture, Reproductive Fitness, and Costly Signaling Theory: Building a Model of Signaling Power in the Past.* Colin Quinn (Washington State University)
- 11:00 *Fitness-consuming consumption: The costliness of bogus fitness display.* Robert McKinnon Wilkes (Washington State University)
- 11:20 *The Problems and Pitfalls of Null Hypothesis Significance Testing in the Social Sciences.* Daniel Balliet (Washington State University)
- 11:40 *Patterns of cultural and genetic diversity in Cebus capucinus within western Costa Rica.* Sarah Neitzel, Jessica Lynch-Alfaro (Washington State University), G. Gutierrez-Espeleta (University of Costa Rica), and M.E. Alfaro (Washington State University)

Room: Todd Hall 230

Session 13: An Inconvenient Truth: Meeting the Challenges of Puget Basin Archaeology

Robert Kopperl (Northwest Archaeological Associates, Inc.)

- 8:30 *A wild past and a potentially inconvenient future: Dynamic Puget Basin shorelines as a point of inquiry and a methodological challenge.* Robert Kopperl (Northwest Archaeological Associates)
- 8:40 *Implications of Holocene Sea Level Elevation in Puget Sound and the Gulf of Georgia for Archaeological Landscape Studies.* Dennis Lewarch (Suquamish Tribe)
- 9:00 *Shoreline changes along the coast Port Angeles Harbor: Archaeological and geomorphologic data from Tse-whit-zen (45CA523).* Sarah Sterling (Portland State University), Donald Tatum (Museum of New Mexico), and Dennis Lewarch (Suquamish Tribe)
- 9:20 *Time, Pattern, and Process: Geoarchaeological Modeling of Puget Sound Shoreline Geomorphology.* Charles Hodges (Northwest Archaeological Associates)
- 9:40 *Post-depositional processes in a submerged shell midden deposit.* Sarah Campbell, Diana Barg, and Kim Owens (Western Washington University)

- 10:00 **BREAK**
- 10:10 *Twenty-First Century Sea Level Rise and the Northwest Coast Archaeological Record: Lessons from Underwater Archaeology.* Richard Hutchings (Independent)
- 10:30 *The Impact of Erosion on Shell Middens in the San Juan Islands.* Amanda Taylor (University of Washington)
- 10:50 *Storms, features and fibre; A small excavation shows where not to winter on Whidbey Island.* Kelly Bush (Equinox Research and Consulting International)
- 11:10 *Artifacts in a Bog - schaq^w* Astrida Blukis Onat (BOAS)
- 11:30 *The Ups, Downs, and Sunken Feeling of Northwest Coast Wet Site Explorations.* Dale Croes (South Puget Sound Community College)
- 11:50 *Thinking about the future along with the past.* Christian Miss (Northwest Archaeological Associates)

Room: Todd Hall 276

Session 14: Colville Confederated Tribes: A Diversified Approach to Cultural Resource Management

Camille Pleasants (Confederated Tribes of the Colville Reservation)

- 8:30 *Portraits of Guidance: Early Images of Traditional Leaders of the Twelve Tribes of the Colville Reservation.* Amelia AM Marchand (Confederated Tribes of the Colville Reservation)
- 8:50 *So, you are looking for a research topic?* Jacqueline M. Cook (Confederated Tribes of the Colville Reservation)
- 9:10 *Middle Columbia Salish Resource Gathering and Continued Use of the Big Bend Country.* Michael Finley and Brad Wazaney (Confederated Tribes of the Colville Reservation)
- 9:30 *Pictographs and Petroglyphs in North-Central Washington: A Management Assessment of Current Conditions.* Sean Hess (Confederated Tribes of the Colville Reservation)
- 10:00 **BREAK**
- 10:20 *Speaking for Ourselves: A Look at Mining and Political Power on the Colville Reservation and Beyond.* Jonathan Meyer (Confederated Tribes of the Colville Reservation)
- 10:40 *Chief Joseph Dam Cultural Resources Project and Kettle Falls: A Condition Assessment of Culture Chronology Type Sites.* John Pouley (Confederated Tribes of the Colville Reservation)

- 11:00 *Projecting the Past: Using Archival Data to Reconstruct Housepit Floors and Features with GIS at the Chief Joseph Dam Project.* Lawr V. Salo (U.S. Army Corps of Engineers)
- 11:20 *Chief Joseph Dam as a Fishery: Traditional Cultural Property Scoping.* Donald Shannon (Confederated Tribes of the Colville Reservation)

Room: Todd Hall 226

Session 15: Rock Art in Jeopardy

Carolynne Merrell (Archaeographics)

- 8:30 *Introduction.* Carolynne Merrell (Archaeographics)
- 8:50 *Graffiti and Rock Art: When does Graffiti have Value?* George Poetschat (Oregon Archaeological Society)
- 9:10 *Brand Rock Historic Petroglyphs.* Julie-Anna Rodman (Salmon Challis National Forest)
- 9:30 *Effigies and Travesties.* Mike Taylor (Instantiations Inc./Oregon Archaeological Society)
- 10:00 **BREAK**
- 10:20 *The Sacred Breath Project.* Rebecca Hawk Elwood (Yakama Nation)
- ~~10:40 *Native American Perspectives on Rock Art Jeopardy.* Darla Jackson (Nez Perce Tribe)~~
- 11:00 *Rock Climbers: Friend or Foe?* Lucinda Hemry (Kootenai National Forest)
- 11:20 *Discussant* – Kenneth Reid

Room: Todd Hall 220

Session 16: General session – Archaeology of the Interior

Robert Lee Sappington (University of Idaho)

- ✓ 8:30 *Preliminary Technical Analysis Report of Testing Done Near Bancroft Springs ID.* Stephanie Horton and Coral Moser (Idaho State University) *(I-20 Pass)*
- ✓ 8:50 *Data Recovery Results From the Harpers Bend Site, Clearwater River Region, North Central Idaho.* Jared Norman and Robert Lee Sappington (University of Idaho)
- ✓ 9:10 *Archaeology of the Drift Fence Site, an Upland Camp in the Blue Mountains, Northeastern Oregon.* Kathryn Boula (Washington State University)

9:30 *An Analysis of the Lind Coulee (45GR97) Faunal Assemblage: Implications for Paleoarchaic Subsistence Strategies on the Columbia Plateau.* Zach Wilson (Washington State University)

10:00 **BREAK**

10:20 *A Preliminary Report on the Analysis of the Faunal Remains Collected from Windust Cave C, 45FR46, by Harvey A. Rice during the 1959 to 1961 Excavations.* Sarah Jenkins (Washington State University)

10:40 *Wetland Areas in Pre-Contact Eastern Washington.* Michael Folsom (Eastern Washington University)

11:00 *A Statistical Reexamination of the Shellfish Remains at Marmes Rockshelter.* Diane Wallman (Washington State University)

11:20 *Results of Two Seasons of Excavation at the Wenas Creek Mammoth Site near Selah, Washington.* Patrick Lubinski, Jake T. Shapley (Central Washington University), Bax R. Barton (Central Washington University/Burke Museum), Karl Lillquist, and Morris Uebelacker (Central Washington University)

11:40 *Recent Archaeological Work in the Vicinity of the East Wenatchee Clovis Cache (45DO482).* James Schumacher (Western Shore Heritage Services, Inc.)

Room: Todd Hall 234

Session 17: General session – Cultural Anthropology 1

Sheila Baksi (Washington State University)

8:30 *Comparison of Two Village Tourism Development Models in Hunan Province, China.* Xianghong Feng (Washington State University)

8:50 *The Second Generation of Peruvian Immigrants in Santiago, Chile.* Jordan Levy (Eastern Washington University)

9:10 *A Dirty Little Word: Cajun Identity and Slang in Louisiana.* Michelle Fiedler (Washington State University)

9:30 *Mass-media and Social Change: A Study of Two Indian Villages.* Sheila Baksi (Washington State University)

10:00 **BREAK**

10:20 *Hair, Here and There: A Comparison of Hairstyling Practices in the United States and Belize.* Misty Luminais (Washington State University)

10:40 *Tibetans in Humla: Heritages and Livelihoods.* Catherine Sanders (University of Montana)

- 11:00 *Balance for Progress: Women in Development, Nepal.* Pasang Sherpa (Lewis-Clark State College)
- 11:20 *Producing for Changing Coffee Markets: A View from Costa Rica.* Julia Smith (Eastern Washington University)

Friday Afternoon

Room: Todd Hall 216

Session 12B: Evolution and Human Behavior: Contributions from the Northwest
Adam Boyette (Washington State University)

- 1:30 *Non-reproductive mounting in wild black horned capuchin monkeys, Cebus nigratus.* Jennifer Krauser and Jessica Lynch Alfaro (Washington State University).
- 1:50 *Linking social learning and brain size in a comparative evolutionary framework.* Jessica Lynch Alfaro and Meredith Schulte (Washington State University)

Room: Todd Hall 276

Session 18: AWA Annual Workshop: Designing and Implementing CRM Archaeology Projects
Patrick McCutcheon (President of Association of Washington Archaeology)
Stephenie Kramer (Association of Washington Archaeology)

3:00-5:00 *Workshop and Discussion*

Room: Todd Hall 226

Session 19: Current Issues in Curation Workshop
Paula Johnson (Paragon Research Associates)

- 1:30-3:30 Panel Participants: **Paula Johnson** (Paragon Research Associates)
Steve Denton (Burke Museum)
Laura Phillips (Burke Museum)
Jacqueline Cook (Confederated Tribes of the Colville Reservation)
Katie Chobot (Paragon Research Associates)
Mary Collins (Washington State University)
Maureen Zehendner (AINW)
Angela Neller (Wanapum Heritage Center)

Room: Todd Hall 220

Session 20: General Session – Exploring Lewis and Clark: Historic Archaeology
John Jones (Washington State University)

- 1:30 *Rock Fort: Searching for a Lewis and Clark Expedition Campsite.* Kathleen Black, Ken Karsmiski, and Casey Zingg (Columbia Gorge Discovery Center)
- 1:50 *Archaeological Investigations at the Rock Fort Site, The Dalles, Oregon.* Casey Zingg, Ken Karsmizki, and Kathleen Black (Columbia Gorge Discovery Center)
- 2:10 *Changing Landscape: Lewis and Clark's Rock Fort.* Ken Karsmizki (Columbia Gorge Discovery Center)

Room: Todd Hall 220**Session 21: General Session – Physical Anthropology**

David Schmitt (Washington State University)

- 2:50 *An Analysis of Mandibular Molar Occlusal Size Progression Patterns in Three Species of Australopithecus.* Jamie Litzkow (Eastern Washington University)
- 3:10 *Aphrodite's waist-to-hip ratio.* Claudio Da Soller (Western Oregon University)
- 3:30 *People of the Plateau.* Ryan Harrod (University of Idaho)
- 3:50 *Recovery and analysis of human remains from a plane crash in Kittitas County Wa.* Lourdes Henebry-DeLeon (Central Washington University)
- 4:10 *The Life and Times of the Ancient One.* James Chatters (AMEC)

Room: Todd Hall 216**Session 22: General Session – Northwest Archaeology**

Karen Lupo (Washington State University)

- 2:40 *Progress Report on Results of 2005 Excavations at 45KI703 on the Duwamish River, Washington.* Philippe LeTourneau (BOAS, Inc.)
- 3:00 *Technological & Functional Variability in the Sunrise Ridge Borrow Pit (45PI408) Lithics.* Kevin Vaughn, Todd Volkenand, and Patrick McCutcheon (Central Washington University)
- 3:20 *Preliminary Technical Analysis of the Buried Beach Site.* Coral Moser and Paul Santarone (Idaho State University)
- 3:40 *Two Upland Sites Above the Klamath River, Southern Cascades.* Joanne Mack (University of Notre Dame)
- 4:00 *A Decade of Geoarchaeology in the Lower Salmon River Canyon: Progress and Prospect.* Loren G. Davis (Oregon State University)
- 4:20 *A Decade of Archaeology in the Lower Salmon River Canyon: Progress and Prospect.* Loren G. Davis (Oregon State University)

- 4:40 *Archaeology and Geoarchaeology at Desert Field: Catlow Valley, Oregon.* Dustin Kennedy, Dennis L. Jenkins and Peter J. Mehringer (University of Oregon)

Room: Todd Hall 234

Session 23: General Session – Cultural Anthropology 2

Marsha Quinlan (Washington State University)

- 1:30 *Quilts (and Quilters) of the Palouse.* Annie Oakes (Eastern Washington University)
- 1:50 *A cognitive approach to ethnographic understanding.* Maia Clay (Washington State University)
- 2:10 *Polyamory: A Look at Social Polygamy.* George Mead (E-Cat Worlds)
- 2:30 *The Internet's Contributions to the Discipline of Parkour.* M. Elizabeth Huetter (Independent)
- 3:00 BREAK
- 3:20 *Common Ground: Uniting Environmentalists and Sportsman in Conservation.* Zachary Holmes (Eastern Washington University)
- 3:40 *The Philosophy of Game Meat: Smart Choice in a World of Unhealthy Foods or Antiquated Practice Better Left to the Past.* Linda Jerofke (Eastern Oregon University)
- 4:00 *Methodology behind the Compilation of an Ethnodendrology: A Holistic Approach to Looking at Coeur d'Alene Forest Practices.* Jennifer DeRose (University of Idaho)
- 4:20 *Mother's Self and Desires: S. Korean Education Mothers and Homeschooling.* Jae Hun Jung (Washington State University)

Room: Todd Hall 230

Session 24: General Session – Recent Studies in Archaeology

Andrew Duff (Washington State University)

- 1:30 *Pre-Columbian Mortuary Pillars at the Panteón de la Reina, Costa Rica.* James Schumacher (Proyecto Arqueología Rivas/Panteón de la Rein)
- 1:50 *All Bagged Up: Human Transport as an Agent of Flake Edge Damage.* Jennifer Ferris (Washington State University)
- 2:10 *An Exploratory Analysis of Human/Plant Interaction at Harappa: The Use of Phytoliths and Pollen to Determine Plant Utilization.* David Zepeda (Washington State University)

- 2:30 *Grinding Away: Palynological Investigations at Cox Ranch Pueblo.* Patrick Dolan and Chris Kiahtipes (Washington State University)
- 3:00 **BREAK**
- 3:20 *Ceramic Technological Style and Ethnicity in Prehistoric New Mexico.* Melissa Elkins (Washington State University)
- 3:40 *Paste Color Analysis at Cerro Pomo Pueblo.* Darin McDougall (Washington State University)
- 4:00 *Searching for Sergeant Ordway: Geophysics at the Cougar Bar Lodge Depression, Hells Canyon, Idaho.* Kenneth Reid (Idaho State Historic Preservation Office) and Kenneth L. Kvamme (University of Arkansas)

Friday Evening

Gladish Community and Cultural Center – View Room

6:00 Banquet Dinner

Banquet Keynote Speaker – Jack Nisbet

“David Thompson on the Columbia Plateau: 1800-1812”

Saturday Morning

Todd Hall – Outside 116

Conference Registration and Information, 7 am – 12 pm

College Hall – Second and Third Floor Hallways

Book room, 8 am – 12 pm

College Hall – Museum

People of the Plateau: The Indian Photos of Lee Moorhouse 1989-1915, 8 am – 12 pm

Room: Todd Hall Auditorium, 116

Welcome, opening remarks, and blessing

Mary Collins (Washington State University)

Room: Todd Hall 234

Session 25: University of Idaho Student Research in Anthropology

Kurt Perkins (University of Idaho)

- 8:30 *The Social Significance of the Watson Store to the Community of Spalding, Idaho.* Sarah Heffner (University of Idaho)

✓ 8:50 *Case Study: Life as a Solitary Pagan in North Idaho.* Angela Sowers (University of Idaho)

~~9:10~~ *Unified by Belief: the Cataldo Mission of the Sacred Heart.* Alexander J. S. New (University of Idaho)

~~9:30~~ *Preliminary Results of Scraper Analysis from the Clearwater and Snake River Watershed.* Kurt Perkins (University of Idaho)

10:00 **BREAK**

~~10:20~~ *Decline in the Spiritual Marketplace: Jodo-Shinshu Buddhism in the United States.* Brad Codr (University of Idaho)

Room: Todd Hall 230

Session 26: Geophysical Surveys for Archaeology

Kenneth L. Kvamme (Archeo-Imaging Lab, University of Arkansas)

8:30-10:30 *Discussion and demonstration*

Room: Todd Hall 220

Session 27: General Session – CRM and Practical Methods in Archaeology

Mary Collins (Washington State University)

8:30 *The Disappearance of the Blue Lake Survey Region in Portland, Oregon: An Archaeological Tragedy.* Susan Lynn White (Oregon State Historic Preservation Office)

8:50 *Automating Field Data Collection with Strategic Mobile Software.* Marcus Grant (Geo-Marine, Inc.)

9:10 *The Fort Hood 3D Database: An Experiment in Data Sharing and Public Outreach.* Duane Peter and Michelle D. Wurtz (Geo-Marine, Inc.)

9:30 *Where Are Our Archaeological Collections? A Review of the Oregon SHPO Archaeological Permit Process.* Sarah Purdy (Oregon SHPO)

10:00 **BREAK**

10:20 *GIS and Lomatium gathering at Yakima Training Center, Washington.* Gideon Cauffman (Central Washington University)

Room: Todd Hall 276

Session 28: General Session – Archaeology on the Northwest Coast

Lyle Nakonechny (Washington State University)

- 8:30 ***Projectile Point Analysis of the Meier and Cathlapotle sites in the Portland Basin.*** Sara Davis (Portland State University)
- 8:50 ***A 9,000-year Record of Climate Change Reconstructed From a Fossil Beetle Assemblage in the Northern Willamette Valley, Oregon.*** Martin Adams (Portland State University)
- 9:10 ***Fire Modified Rock Characteristics of Features at the Renton High School Indian Site (45KI501).*** Kate Shantry (Northwest Archaeological Associates)
- 9:30 ***Old John's House.*** Melissa Darby (Lower Columbia Research & Archaeology)
- 10:00 **BREAK**
- 10:20 ***Fishing for Birds: Mist Nests in Puget Sound.*** Daniel Meatte (Washington State Parks)
- 10:40 ***Warfare in the Pacific Northwest: Direct and Indirect Evidence an Increase in Warfare at 1000 AD.*** Ashley Williams (Western Washington University)

Abstracts of the 60th Annual Northwest Anthropological Conference
March 14-17, 2007
Washington State University
Pullman, Washington

Panel and Workshop Abstracts

Association for Washington Archaeology 4th Annual Work Shop on Designing and Implementing CRM Archaeology Projects

Patrick McCutcheon (President of Association of Washington Archaeology)
Stephenie Kramer (Association of Washington Archaeology)

Identifying data gaps and preparing research designs that direct fieldwork to fill those gaps are integral components of archaeological excavations in both CRM and academic archaeology. Thus, modern archaeology fieldwork requires archaeologists to understand what role a research design plays, to know how to write research questions, and to understand how sampling strategies influence the fieldwork. The objective of the workshop is to teach participants how research questions can influence archaeological sampling methods and excavation strategies used in testing and data recovery excavations. Workshop participants will read, discuss, and critique relevant research designs from Washington State in small groups with professional archaeologist discussion leaders. **Session 18.**

Professional Responsibility and Relevance: Crafting CRM Recommendations that Make a Difference

Mary Rossi (Applied Preservation Technologies)
Kelly Bush (Equinox Research and Consulting International)
Stephenie Kramer (Washington State Dept of Archaeology and Historic Preservation)
Reuben McKnight (Historic Preservation Officer, City of Tacoma)
Darby Stapp (Pacific Northwest National Laboratory), and
Lyz Ellis (US Army Corps of Engineers)

No permitting process is perfect. Many are not written or are not implemented to address impacts to cultural resources; however, sometimes permit processes do trigger the consideration of cultural resources. When called upon, are we meeting our professional responsibility to produce recommendations that make a difference? Are our recommendations relevant to the protection of cultural resources and the preservation of our collective history? This panel session will provide strategies for: 1) generating effective CRM recommendations, and 2) ensuring clients, often unfamiliar with CRM, incorporate recommendations during project implementation. Tangible benefits include more effective cultural resource protection and increased understanding among the various stakeholders in the development process. Presenters with experience crafting meaningful CRM recommendations will describe ways to generate options and apply the most effective option(s) to the situation. Presenters who have experience as CRM clients will describe their role in soliciting and then implementing recommendations. **Session 2.**

Geophysical Surveys for Archaeology

Kenneth L. Kvamme (Archeo-Imaging Lab, University of Arkansas)

This workshop will summarize the principle methods of geophysics as they are applied in archaeology. The basic theory and field methods behind magnetometry, electrical resistance, electromagnetic induction, and ground-penetrating radar surveys will be reviewed. Focus will be placed on the nature of results as illustrated by a series of case studies from the Northwest and other regions. Findings at prehistoric settlements, historic buildings, trading posts, cemeteries, battlefields, and other site types will be reviewed. Considerable emphasis will be placed in reviewing the benefits of geophysics in archaeology, including site discovery, the pinpointing of specific features for excavation, and the intrasite mapping of settlement components. A number of instruments will be displayed and a demonstration of their use will be given. **Session 26.**

Current Issues in Curation Workshop

Paula Johnson (Paragon Research Associates)

Steve Denton (Burke Museum)

Laura Phillips (Burke Museum)

Jacqueline Cook (Confederated Tribes of the Colville Reservation)

Katie Chobot (Paragon Research Associates)

Mary Collins (Washington State University)

Maureen Zehendner (AINW)

Angela Neller (Wanapum Heritage Center)

Each informal 30 minute session will involve a brief discussion of the major issues surrounding each topic with input from a variety of curation specialists and then allow time for Q&A from participants. Resources for more information and handouts will be available.

Topics:

Curation of Digital Photographs

A discussion of naming conventions, submission guidelines at area repositories, printing options, associated documentation, and other related topics

Pre-Field Curation Considerations

Topics will include survey- and excavation-specific issues, planning for responsible culling of redundant collections, working with repositories, record keeping, issues specific to working with private landowners.

Funding and Cost of Curation

Who pays for curation when there is no federal agency involvement? What do curation fees cover?

Long-term storage and Future Analysis

How do storage methods impact future analysis? Information about long-term curation of various materials, analysis-specific concerns (blood residue analysis, botanicals, c14, etc), long-term access to collections, collection documentation needed to allow the best results for future analysis. **Session 19.**

Symposium Abstracts

Evolution and Human Behavior: Contributions from the Northwest

Organizer: Adam Boyette (Washington State University)

There is a burgeoning, diverse community of evolutionary-based social scientists in the Northwest. Washington State University, host of this year's conference, is home to a number of such researchers and is growing as a source of novel applications of evolutionary theory to anthropological issues. This session will feature presentations by evolutionary anthropology faculty, as well as WSU undergraduate and graduate students interested in applying evolutionary theory to a variety of topics. The session will include presentations on parental investment and sexual behavior, human cognitive adaptations for sharing, the evolutionary psychology of political rhetoric, capuchin monkey phylogenetics, dietary intensification and the archeological record, costly signaling and material culture in the Neolithic, and the behavioral ecology of consumer debt. **Session 12.**

An Inconvenient Truth: Meeting the Challenges of Puget Basin Archaeology

Organizers: Sarah K. Campbell (Western Washington University), Charles E. Hodges (Northwest Archaeological Associates, Inc.), Dennis E. Lewarch (Suquamish Tribe), Christian J. Miss, (Northwest Archaeological Associates, Inc.), Robert Kopperl (Northwest Archaeological Associates, Inc.)

Current research on global warming indicates sea level rise will occur at an unprecedented rate, with most of us likely to witness climate-driven changes to the Puget Sound shoreline. As governments begin to muster the political will to respond to this impending crisis, information from a wide range of disciplines will be required to respond appropriately. Archaeology and its sister disciplines are in a unique position to offer insight into past environmental and cultural change. Sea level alterations resulting from earlier global warming since the end of the Pleistocene have had profound effects on the creation, preservation, and investigation of archaeological sites in the Puget Basin. The papers in this symposium consider the current and future state of our knowledge from multiple disciplinary perspectives and range from case studies based on fine-grained data to landscape-scale studies of Puget Sound and its sub-basins to programs for future research and preservation. **Session 13.**

A Song to the Creator

Organizer: Mary Collins (Washington State University)

In 1996 an exhibit of old and contemporary objects manufactured in the traditional ways of the women of the Plateau opened at the WSU Museum of Art. Ten years in the making, the exhibit became the most well attended of any in the Museum's history and went on to be a successful traveling show for a number of years. The show was the culmination of a larger collaboration of story and image gathering by a group of dedicated individuals including Museum curators and

Native artists. Participating in this project, as editor of the exhibit catalog, was one of the highlights of Lillian Ackerman's career at WSU. This panel brings together some of the key individuals involved in this project to reflect on how it came to be and what the lasting impacts has been. **Session 8.**

Panel Participants: Dr. Ron Pond (Umatilla)
Ann McCormack (Nez Perce)
Geraldine Jim (Warm Springs)
Lynette Miller (Washington State Historical Society Museum)

The Social and Ecological Conditions of Global Scale Capitalism and Indigenous Peoples in Northwest North America

Organizer: Benedict J. Colombi (Idaho State University)
Discussant: John H. Bodley (Washington State University)

Global scale perspectives on the social and ecological conditions of capitalism and indigenous people in Northwest North America illuminate how socioeconomic growth is an elite-directed process that concentrates social power and socializes the costs. Case studies of global scale corporate development are drawn from water and energy development, fisheries, and indigenous self-governance. These cases highlight the contrast between global and local models of development intended to improve human well-being. The success of tribal and community scale development models that emphasize diffusion of social power and sustainability, rather than growth, suggest that power concentrating global models are neither superior nor inevitable. **Session 3.**

Recent Excavations at Sauvie Island (Sunken Village) Wet Site (35MU4), Portland, Oregon.

Organizers: Dale Croes (South Puget Sound Community College) and **Michele L. Punke** (Archaeological Investigations Northwest, Inc.)
Discussants: Robert Kentta (Confederated Tribes of Siletz Indians), **Eirik Thorsgard** (The Confederated Tribes of Grand Ronde), **Gail C. Celmer** (U.S. Army Corps of Engineers)
Kirstie Haertel (National Park Service) and **Ken Ames** (Portland State University)

Archaeological investigations at National Historic Landmark wet site 35MU4 have been designed to provide a limited evaluation of the portion of the site that have been impacted during riprap repair of 1060 linear feet (320 meters) of earthen levee. The project was conducted in September 2006 while the waters in Multnomah Channel were at a low level. The testing included 4 1x1 meter test units, drainage trenches 10 cm wide extending from three of the test units (dug in 10cm levels), the cross-sectioning of 5 round acorn leaching pit features in these drainage trenches, cross-sectioning and bulk sampling of one fairly complete acorn leaching pit feature, surface mapping down to the waterline of all (a) *in situ* wooden stakes (n=34), (b) *in situ* acorn leaching pit features (n= 60), and (c) surface cultural materials, including lithics, animal bone, wood chips, basketry strips, and split wood. A 1 Meter wide by 50 cm deep exposure was excavated into the bank and, in line with this exposure, a series of 4 cores were taken to a maximum depth of 25 feet on top of the levee. The cores provide enough sediment for litho-and

bio-stratigraphic studies. Approximately 6,400 artifacts were recovered (items that are the result of human activity), of which 70% were wood and fiber items, 19 % were lithic pieces, and 11% were faunal remains. **Session 4.**

Cultural Resources on the Clearwater National Forest

Organizer: Cheryl L. Harper (Clearwater National Forest / Washington State University)

Extending from the rolling hills of the Palouse east to Lolo Pass in the Bitterroot Mountains, the Clearwater National Forest encompasses a wide range of environments in North-Central Idaho. Heritage Resources on the Clearwater are just as diverse, from prehistoric camps and trail systems through the mountains, to historic logging, mining, and homesteading sites of the 19th and 20th centuries. This symposium aims to bring to light the broad nature of cultural resources on the Clearwater, as well as highlight recent work conducted by the Clearwater National Forest Heritage Program in partnership with other stakeholders to document, manage, protect, and interpret these resources. **Session 6.**

Water, Land, and People: A Focus on Current Research Within Pacific Northwest National Parks

Organizer: Beth Horton (Washington State University) and Heidi Pierson (Fort Vancouver National Historic Site)

The National Park Service encourages a wide range of anthropological research to help preserve and interpret cultural histories in the Pacific Northwest. This symposium draws upon a spectrum of academic topics undergoing research in our parks by both NPS employees and students. Projects such as these allow the National Park Service not only to advance our scientific knowledge and help develop and implement future resource management plans, but also provide information which can enhance the interpretive encounters of our visiting public as they Experience our America. **Session 1.**

Cultural Heritage and Cultural Resource Management in the Northwest and Beyond

Organizer: Douglas H. MacDonald (University of Montana)

This session provides an eclectic mix of papers dealing with the topic of cultural heritage and resource management. The diversity of papers presented here reflects the enormous variety of approaches to the study of heritage and resource management within the northwest, the nation, and the world. **Session 7.**

Rock Art in Jeopardy

Organizer: Carolynne Merrell (Archaeographics)
Discussant: Kenneth Reid (Idaho State Archaeologist)

Pictograph and petroglyph sites have always held an attraction and fascination for people throughout the world. While most respect these special sacred sites there are others who have damaged and abused the rock art and surrounding location, either willfully or out of ignorance. Some sites are deteriorating through natural or human generated environmental changes. Although these issues have always concerned those seeking to preserve and protect pictograph and petroglyph sites, recent years have brought a marked increase in damage to these sites. With an increase in commercial or residential land development, recreational activities such as rock climbing, hiking, 4 wheeling, hunting, river running and detailed travel guides, rock art sites are becoming increasingly vulnerable to those who are not sensitive to, or are unaware of the pictographs and petroglyphs. Papers in this session will address some of these issues, and describe proactive stances being taken by land managers, tribal agencies and others to effectively protect and preserve this irreplaceable legacy from the past. **Session 15.**

University of Idaho Student Research in Anthropology

Organizer: Kurt Perkins (University of Idaho)

The University of Idaho has a long tradition of involvement in anthropology and this session represents a continuation of that tradition. The papers cover a variety of topics including prehistoric archaeology, historic archaeology, to the study of religion. The common theme uniting these papers is that the work presented is the product of student-driven research. The papers represent an array of investigations of the peoples of the northwest from all times, prehistoric to modern. Further, this session represents a concerted effort on the part of the anthropology faculty at the University of Idaho to move students beyond the classroom, into the professional realm as part of their graduate and undergraduate training. While topically diverse the papers presented offer an insight into the ongoing research at the University of Idaho. **Session 25.**

Colville Confederated Tribes: A Diversified Approach to Cultural Resource Management

Organizer: Camille Pleasants (Confederated Tribes of the Colville Reservation)

This session highlights the work of the Confederated Tribes of the Colville Reservation's (Colville Confederated Tribes or "CCT") History/Archaeology Program. Since the 1970s, the History/Archaeology Program has worked to protect tribal interests and preserve tribal traditions, document places of traditional importance, and enhance the archaeological record. The History/Archaeology Program was instrumental in promoting the creation of Tribal Historic Preservation Officers (THPOs), a position that strengthens the rights of tribal governments throughout the United States. Staff consists of sixteen full-time employees (both tribal and non-tribal members), including historians, archaeologists, cultural anthropologists, and traditional cultural specialists. One result of this diversity is the ability to function as representatives for the Tribes' interests throughout our traditional territories. Our staff advises other tribal programs regarding cultural resource concerns, assists federal agencies to comply with cultural resource laws, conducts ethnographic interviews, and monitors the regional power industry's impacts on the Columbia River. **Session 14.**

Individual Paper and Poster Abstracts

MARTIN E. ADAMS (Portland State University)

A 9,000-year Record of Climate Change Reconstructed From a Fossil Beetle Assemblage in the Northern Willamette Valley, Oregon

A monolith core from a late-Pleistocene to early-Holocene peat deposit was sampled for insect remains and used to track paleoenvironmental changes in the Willamette Valley. Geochemical analysis of a tephra layer present in the deposit confirms it is from the 7,700 year old eruption of Mt. Mazama, and five other radiocarbon dates – including one from another core taken a few meters away – provide a chronology from 5,000 to almost 14,000 years ago. The Mutual Climatic Range (MCR) method is employed, which quantitatively measures temperature change over time through the presence of non-herbivorous beetle remains. Other insects, such as herbivorous beetles, ants, wasps, and aphids, can complement temperature reconstructions by providing insight on the vegetation of the area. Preliminary reconstructions of temperature are presented. Because insects respond more quickly to environmental change than plants, these reconstructions should prove more precise than botanical proxies. Furthermore, precise measurements of the timing and magnitude of large-scale climate events such as the Younger Dryas and the 8.2 ka cooling event should be evident. Lastly, as paleoenvironmental studies are an integral part of archaeological research, this study has important implications for late-Pleistocene human occupation in North America as well as understanding how large-scale climate change affected past human populations. **Session 28.**

KENNETH M. AMES, SARA DAVIS, and KRISTEN A. FULD (Portland State University)

Dart and Arrow Points on the Columbia Plateau

The timing of the introduction and spread of the bow and arrow and its replacing the atlatl are important research questions in North American prehistory. Answering them requires distinguishing between archaeological dart and arrow points. To do this, researchers have developed quantitative methods based on ethnographic specimen. These measures were applied to a large sample (n = 274) of Early to Mid-Holocene projectile points from Hatwai (10NP143) in central Idaho. The measures were also applied to reported projectile point assemblages from the Lower Snake River region spanning the full Holocene. Among the results: Windust points are small dart points, probably arming fletched darts; Cascade points are very small dart points, considerably overlapping large arrow points in size; and Hatwai-eared points are unambiguously medium to small arrow points. Hatwai-eared points date between ca. 5000 and 3000 b.p., much earlier than commonly accepted dates for the presence of the bow and arrow on the Plateau. This result suggests that either the accepted dates are wrong, or Hatwai-eared points armed darts much smaller and lighter than any present in ethnographic/museum collections globally. If so, that challenges the ability of the currently available measures to objectively determine the presence of the bow and arrow. **Session 11.**

ALEXANDER L. BAER (University of Montana)

Remote Sensing for CRM: A Cost/Benefit Silver Lining

Recent work undertaken at Coloma Ghost Town in Western Montana shows that ground-penetrating radar and magnetic testing can detect subsurface anomalies at historic mining camps even while inundated with metal artifact surface scatters. More importantly, after only a short

time processing these data sets, archaeologists can gain an accurate understanding of a site's settlement patterns. These two remote sensing techniques are examined here in a cost/benefit analysis compared to standard CRM survey practice.

Remote sensing work has largely been left to professional geophysicists or consultants who have trained and practiced with their equipment for months, and they charge appropriately for this expertise. This study shows that these popular remote sensing tools can be rented and effectively used by any interested archaeologist in the hopes of furthering this sub-discipline in today's archaeological practice. **Session 7.**

SHILA BAKSI (Washington State University)

Mass-media and Social Change: A Study of Two Indian Villages

Since independence in 1947, Indian society has undergone rapid social change due to modernization. While these changes are more pronounced in cities, the countryside has also experienced considerable change. Using participant observation and in-depth interviews, this paper describes how the introduction of mass media has changed rural life in the state of West Bengal. As illiterate villagers cannot read printed materials, electronic media such as radio, television, film and video that are recent phenomena in these villages have been important agents in culture change. Most villagers use the media for entertainment: music, dance, movies, sports and other related programs, while village women exhibit a marked fondness for soap operas ("serials"). Only few educated people watch or listen to the news regularly. Since the nearest cinema hall is three miles away, in recent years three video halls have been conveniently built where young people go frequently to watch videos. Viewers are bombarded by a variety of advertisements that influence their buying habits. The young people imitate certain dress, behavior and speech style that they see on the screen. Various effects of mass media are manifest in consumerism, improved hygiene, a sense of individualism, as well as in change in relationships within the family and gender relations. While the young people emphasize the positive impact of mass media, the elders focus on the negative aspects. This paper will address these issues with specific examples, including several that highlight not only the benefits of mass media, but also its detriments. **Session 17.**

DANIEL BALLIET (Washington State University)

The Problems and Pitfalls of Null Hypothesis Significance Testing in the Social Sciences

Null hypothesis significance testing (NHST) is common practice in the social sciences. In this procedure scientists assume no relationship between variables and test the data against this null hypothesis. There are several problems with this inferential statistical procedure which are often overlooked. Some shortcomings of NHST include the crud factor, power, publication criteria, and experimenter misinterpretation. These issues may curb the development of research and ability to test theory. Research that promotes the use of confidence intervals, effect size, and meta-analyses may reduce these problems and aid in appraising theory. **Session 12A.**

TIM BARELA (Washington State University)

In Opposition: An Evolutionary Perspective on the Messages Used to Sponsor Cooperation or Opposition to War

Organized conflict in state-level societies is an intensively cooperative venture that should be distinctly tied to the communication between ruling elites and the segment of the population

whose behavior they wish to influence. In attempting to manipulate opinion and behavior, it can be construed that elites are working within constructs of behavioral ecology, and more specifically, signaling. As such, it is expected that signals tied to reproduction, resources, or predatory threats should have the greatest potential to influence behavior, as these directly affect reproductive fitness. It is also expected that communications that are honest, reliable and unambiguous will have greater impact on the receiver, as deceptive displays concerning the signaler's motives or quality should be eventually discounted during the assessment of the message. To test these and further predictions, a cross-cultural sample of 116 transcripts of speeches and prepared remarks concerning the current conflict in Iraq and the Vietnam War were examined using content analysis. This analytical tool, so infrequently used in anthropology, provides the researcher the ability to quantify context in order to determine the intentions and motivations of the signaler. **Session 12A.**

DAVE BEINE (SIL International) and KEVIN PITTLE (BIOLA University)
Hooked on the Fish: The Christian Sign of the Fish (and the Co-option Thereof) as Symbolic Capital

Enjoying a recent RESURGENCE in popularity, the fish symbol that emblemized the first-century Christian community has recently RESURFACED and has been co-opted by various other movements for differing purposes. A number of groups have used the sign of the fish as symbolic capital in recent years: In the 1980's atheistic evolutionists adopted it—with land-adapted legs. This evolutionary modification has fueled an escalating “fish war” between advocates of evolution and the fundamentalist Christians who evolutionists most closely associate with a Creationist position. American entrepreneur capitalists, playing on the recent popularity of the “dueling fish” theme, have now expanded the “FISH MARKET” to include any other group with a statement to make. Symbols are often used as a way of marking identity, and the public display of symbols as a way of expressing pride in, and the dignity or distinction of, that identity—a kind of symbolic capital. This presentation traces the evolution of the use of the sign of the fish from its early Christian origins to its modern usage and tropes (emblemizing specific groups and ideologies), focusing on the symbolic capital associated with it, and its use as a quasi-religious symbol. **Session 9.**

JENNIFER BERTOLANI (Central Washington University), TRICIA GABANY-GUERRERO (University of Connecticut), STEVEN HACKENBERGER, MARC FAIRBANKS, and TABITHA TROSPER (Central Washington University)
Archaeological Applications of GIS at LaLoma: Investigating, Interpreting and Representing a Postclassic Settlement, Michoacan.

Ongoing archaeological investigations, in partnership with a Purépecha comunidad indígena, are exploring the origins of highland culture in Michoacán. Most recently our interdisciplinary team has uncovered occupations of an “elite residence” within a Postclassic settlement (AD 700 to 1450) located outside of Parangaricutiro (San Juan Nuevo). In July of 2005 and 2006 we mapped and collected artifacts in plowed fields: ceramic vessels and pipes, obsidian blades and tools, and house rubble. In 2005 we located the outline of a possible structure and in 2006 we cleared and tested the residence area as outlined by stone rubble and pavement. Based on associated artifacts we ascribe elite status to the house occupants. We also offer inferences regarding the nature of the structure, compound, and household unit based on historic comparisons. The results of our field work are represented with GIS maps and 3-D images.

More general reflections on our collaboration are considered within the context of Purépecha cultural heritage. **Session 11.**

KATHLEEN BLACK, KEN KARSMISKI, and CASEY ZINGG (Columbia Gorge Discovery Center)

Rock Fort: Searching for a Lewis and Clark Expedition Campsite

Evidence of Lewis and Clark's Corps of Discovery campsites has been elusive. The object of our 2006 site testing was to determine if signs of their journey could be found at the suspected Rock Fort site in The Dalles, Oregon, where it is believed the expedition stayed on October 25-28, 1805. Testing was conducted in three possible locations of the camp within the ten-acre site, all being large depressions surrounded by basalt outcroppings on cliffs near the Columbia River. While no definitive signs of the expedition was uncovered, the results were far from disappointing. Excavation in Area 1 revealed an early Native American occupation, Area 2 indicated a strong 1800s historical presence, and Area 3 contained some curious geology, balls of clay from 15 cm to over 50 cm in diameter surrounded by Mount Mazama ash. Excavation in Area 2 was not completed because of approximately six feet of road-construction fill that covered the area and that needs to be removed before adequate testing can proceed. **Session 20.**

ASTRIDA BLUKIS ONAT (BOAS)

Artifacts in a Bog - schaq^w

After a massive flood event on the Sauk River in October 2003, artifacts were found eroding from a riverbank adjacent to a large bog. The outlet of the bog was enlarged by the flood and artifacts also were eroding from the gully that formed in the bog. The artifacts around the bog are different from the ones eroding from the bog. The bog was known to the Sauk-Suiattle elders as a source of cranberries and Labrador tea and other culturally useful plants. Earthwatch Institute volunteers conducted a shovel probe survey and culturally useful plant inventory of the bog area in May and September of 2005. In addition to revealing human use of the bog area, investigations also reveal the dynamic geomorphology of the western side of the Cascades and how dramatically local topography can alter in a short time. **Session 13.**

KATHRYN M. BOULA (Washington State University)

Archaeology of the Drift Fence Site, an Upland Camp in the Blue Mountains, Northeastern Oregon

The Drift Fence site (35UM169) is located on the Umatilla National Forest in the south-central Blue Mountains of northeastern Oregon, approximately 10 km south of the town of Ukiah. Proposed upgrades of a campground occupying this known site required cultural resource surveys by the Forest. Testing and excavation between 1993 and 1999 revealed a more extensive site than originally realized, with evidence of a wide variety of subsistence activities. Carbon 14 dating of several charcoal samples along with time-diagnostic projectile points suggested a maximum age for the site of 2,500 B.P., with most recent occupation around 500 B.P. The lithic assemblage was diverse and included chipped stone and ground stone tools and high densities of debitage. Coarse-grained basalt and chert were the primary local lithic resources. Obsidian was an important component of the projectile point and debitage assemblages; however the source location was more than 40 km distant. The absence of obsidian cores, bifacial blanks or large flakes indicated that obsidian was brought to the site in an already-reduced form. Five cultural components were delineated based on radiocarbon dates and time-diagnostic projectile points.

Four hearth features, one occupation surface and two concentrations of fire cracked rock were found during excavations. The Drift Fence site occupies an ecotone between stands of forest and open grassland near the top of a ridge. The immediate area offers a variety of subsistence resources including salmon, resident fish, big game and fur-bearing mammals, game birds, camas, other food and medicinal plants and reliable water sources. The primary emphasis of this investigation was to document the artifact collection relative to presumed seasonal occupation and subsistence resources at the largest and most complex site described to date in this area of the Blue Mountains. **Session 16.**

ADAM H. BOYETTE (Washington State University, Vancouver)

Rearing Environment and Male Sexual Behavior: Evidence for Adaptive Response and Cultural Influence

According to life history theory, differences in the timing of events relevant to reproduction reflect an organism's parental investment strategy. In humans, evidence suggests that characteristics of one's rearing environment indicate what strategy will have the highest fitness payoff later in life. Quinlan [Quinlan (2003) *Father absence, parental care, and female reproductive development. Evolution and Human Behavior 24:376-390*] has shown that parental divorce early in a female's life, and the consequent absence of her mother or father, is associated with earlier age of first sex, first pregnancy, a greater number of sex partners, and a first marriage of shorter duration. This suggests that human females adopt a quantity over quality reproductive strategy in response to a lack of social support in their rearing environment, and begin an appropriate developmental trajectory. Here, using a sample of 4,928 American men and controlling for age, income, education, ethnicity and effects of social learning, I apply Cox proportional hazards analysis and general linear modeling to show that males respond similarly to parental divorce, and demonstrate earlier sexual behavior and fathering, greater number of sex partners, and shorter first marriages. Lastly, ethnicity turns out to have an independent and stronger effect on reproductive behavior than parental divorce. Attempting to control for regional variation and individual feelings toward fatherhood, I argue that this is evidence for cultural models of fertility behavior acting in concert with adaptive responses. **Session 12A.**

CHRISTINE BRADBURY (Nez Perce National Historic Trail)

"Walking on Sacred Ground" Cultural Resources Protection Video – A Collaborative Project

In preparation for increased visitation to the Lolo Trail National Historic Landmark during peak Lewis & Clark commemoration years and beyond, Forest Service managers faced balancing recreation needs of citizens with protecting sensitive cultural and natural resources along the route. Several years of pro-active collaboration with the Nez Perce Tribe and National Park Service resulted in a 15 minute resource protection video: *Walking on Sacred Ground*. While initially designed for Bicentennial visitors, this timeless video captures the unique characteristics of the Lolo Trail, and educates travelers how to enjoy AND preserve this spiritual place. **Session 6.**

DAVID BRAUNER (Oregon State University)***In Phil Sheridan's Shadow: The Impact of the "Great Man Syndrome" on the Archival and Archaeological Record at Two Western Military Sites***

Fort Hoskins and Fort Yamhill, situated in the Coast Mountain Range of western Oregon, were both established in 1856 in response to Federal Indian removal policies. The forts continued operation through the Civil War and were decommissioned in 1865 and 1867 respectively. As a young second Lieutenant, Philip Sheridan was stationed at both forts. The Sheridan mystique still informs our constructed history in the Pacific Northwest. The Sheridan persona has, to the present day, impacted the history and archaeological record at both forts in unanticipated ways. Recent archaeological work at Fort Yamhill has reinforced the notion that the shadow of Philip Sheridan is long and dark over our Coast Range forts. **Session 10.**

ARIANA BURNS (University of Idaho)***Secularization and Religious Resurgence in the American 1950s***

A brief overview of the forces at play in the 1950s regarding modernity seen through secularization and the religious boom that peaked in the mid-1950s. **Session 11.**

KELLY BUSH (Equinox Research and Consulting International)***Storms, features and fibre; A small excavation shows where not to winter on Whidbey Island***

In a previously unrecorded archaeological site at Greenbank on the eastern shores of Whidbey Island a small mitigative data recovery project reveals how even in an emergency permit process, consideration of the nature and characteristics of a site can provide data that may help interpret the cultural deposition and winter storm events in a small project area. The subject property is a waterfront lot on a classic spit/lagoon landform. This project is an example of how small cultural resource management projects can collect data that help tell the story of changes in coastal storm and climatic patterns. This simple project can be built on with other projects in this neighborhood to create a synthetic picture of landform development and taphonomic processes in this newly recorded archaeological site. **Session 13.**

CRYSTAL CALLAHAN (Idaho State University)***Subsistence in the Modern Political Climate: Native Fishing Rights and Alaskan Legal Structures***

Native subsistence is a volatile topic, and Alaska is a prime example of this phenomenon. Current statutes and regulations that govern the area are amendments to the Alaska Native Claims Settlement Act (ANCSA) of 1971 as well as the Alaska National Interest Lands Conservation Act (ANILCA) of 1980. This paper explores the expression of these statutes in current legislation and management practices. The aim is to illuminate the core values in opposition between traditional indigenous societies and the legislative body of the governing state. Subsistence provisions are a unique Alaskan situation, the relationship between each region, tribe and village is continually negotiated with the federal government, the state, and the needs of the people living within the global economics of the fishing industry. Understanding these different arrangements within the frame work of regulations and Native subsistence activities will flush out these compromises, be they good, bad, or ugly. **Session 3.**

SARAH CAMPBELL, DIANA BARG, and KIM OWENS (Western Washington University)

Post-depositional processes in a submerged shell midden deposit

Changing sea levels complicate post-depositional processes in coastline sites. Submergence of former terrestrial sites changes the chemical environment, affecting preservation. It also places the deposits into a new environmental zone, or biotic habitat. In the case of shell middens, this may result in culturally deposited shell forming a substrate for the growth of new intertidal organisms, which may include taxa present in the cultural deposit. Investigation of a subtidal shell deposit in Chuckanut Bay, Northwestern Washington revealed complex taphonomic processes in operation. Based on the presence of fire-cracked rock and lithic debitage, it was anthropogenic, and the presence of terrestrial snail shells among the marine invertebrate remains indicated that it was terrestrial. A single Cascade projectile point found on the surface of the site suggested a potentially old date, and the extreme weathering of the shell and the near absence of bone seemed consistent with this. Yet historically introduced bivalve species *Mya arenaria* and *Crassostrea*, were also found in the deposit, and the radiocarbon estimates for two shell samples (excluding introduced species) fall between 600 and 1000 years ago. This paper discusses the implications of intrusive species in submerged sites for reconstructing faunal abundances and for utilizing shell samples for radiocarbon dating and suggests criteria for recognizing post-depositional infauna, whether introduced or native species. **Session 13.**

KEVIN G. CANNELL (Nez Perce Tribe)

A Brief History of the Nez Perce Tribe Cultural Resource Program

The Nez Perce Tribe reserved several rights under various treaties executed between the Tribe and the United States. In addition, the traditional territory and the ceded area of the tribe overlap portions of four states. These factors have lead to a diverse array of projects performed by the program since its inception in 1989. This paper describes the history of the Nez Perce Tribe and how it relates to the formation of a cultural resource program and examples of some projects. **Session 7.**

GIDEON CAUFFMAN (Central Washington University)

GIS and *Lomatium* gathering at Yakima Training Center, Washington

The practice of root gathering is an essential cultural practice of the Wanapum, Yakama, and other American-Indian groups on the Columbia Plateau. *Lomatium* among other plant species have been gathered on Yakima Training Center. However, due to Training Area closures it has become increasingly difficult for the Yakama and Wanapum to gather in known traditional areas. The creation of a plant ecology model will broaden the scope of areas that may be utilized for the gathering of roots. The use of Solar Analyst, a GIS extension, and ground truthing later this spring will assist these groups in their traditional cultural practice of root-gathering. **Session 27.**

JASON CHANNEL and DALE CROES (South Puget Sound Community College)
Woodworking—Split wood, Wooden and Antler Wedges and Experimental Archaeology

Split wood, mostly Western red cedar (*Thuja plicata*) was abundant at the Sauvie Island wet site, Portland, Oregon. Measurements indicate that split wood was done to create small wooden sticks and probably as the result of shaping other split wood items. Some of the split wood items fit well into the forming of blanks in producing cedar “arrow” shafts found at the site, that themselves exhibit whittling and shaping use blade-like-flakes found at the site. Other examples appear to be thin boards possibly used in producing bent-wood boxes. And still others are large boards, probably split using the wooden wedges found at the site. Experimental archaeology is used in replicating the “arrow” shafts being produced and in forming the adzes and wooden/antler wedges that would be used in splitting out larger boards as blanks in shaft production, bent-wood box forming and in creating boards, possibly splitting out canoes and/or creating firewood from drift wood. **Session 4A.**

JAMES C. CHATTERS (AMEC)
The Life and Times of the Ancient One

Studies of musculoskeletal stress markings (MSM) and pathologies have provided a wealth of information on the everyday behavior of the 9400 year-old skeleton known as Kennewick Man. MSM are areas of bone overgrowth and bone loss resulting from stress on the skeletal musculature; the more habitual and loaded an activity, the more pronounced the markings. Pathologies such as osteoarthritis and injury often are related in some way to these same activities. The MSM study addressed two primary questions: 1) Was this man an atlatl hunter or did he instead emphasize other subsistence-related activities, such as net fishing or boating. 2) Did the projectile point in his right pelvis affect his gait in any way? Twenty-three upper limb and 14 lower limb attachment sites were scored for robusticity and stress lesions. Results provide definitive answers to the two questions and indicate a close relationship between habitual activities and the ways individual pathologies manifest themselves. They also provide clues to the man’s actual age and the timing of his many injuries. Kennewick Man was an atlatl hunter above all else. This practice contributed to bone overgrowth at his right shoulder joint and to the form taken by a series of rib fractures in his right chest. Most injuries probably occurred late in life, as indicated by the facts that the rib fractures would have limited his atlatl use, a chip in his shoulder joint occurs in the overgrown bone, and the projectile wound had no perceptible effect on his leg musculature. MSM expression, which increases with age, indicates the ‘Ancient One’ was also an older man. **Session 21.**

MAIA CLAY (Washington State University)
A Cognitive Approach to Ethnographic Understanding

The concept of empathy has been (and continues to be) an underlying point of contention in the dialogue between Western trained social scientists and the indigenous peoples and communities that are often the focus of our study. Hermeneutic tools have been useful in analyzing what and how we write of such dialogues/interactions, but perhaps we need to ask why we possess this drive to comprehend presumably disparate peoples and cultures. We strive towards understanding, but what are some of the ways in which we construct such a process? Aside from the fundamental human condition that we all share, the socio-biological ability to understand others is one that needs more consideration in the search for meaningful ethnography. **Session 23.**

BRAD CODR (University of Idaho)

Decline in the Spiritual Marketplace: Jodo-Shinshu Buddhism in the United States

Religiosity in the United States has undergone dramatic change with the rise of the Baby Boom generation. The context, characterized by individual “spiritual quest,” secularization and pluralism has fostered a “spiritual marketplace.” Suppliers and consumers negotiate and construct meaning in this context, to survive suppliers must adapt to the changing needs of consumers. Research suggests that while many streams of Buddhism are adapting and growing, Jodo Shinshu Buddhism is on the decline. This paper explores religious decline in the spiritual marketplace through historical analysis, comparative studies, participant-observation and interviews with three members of the Buddhist Churches of America. **Session 25.**

MARY COLLINS (Washington State University)

This Woman Lillian Ackerman

Lillian Ackerman has made important contributions to the ethnography of the Plateau, gender studies, and the community of scholars in the Department of Anthropology at Washington State University. Working outside of the traditional tenure track system Dr. Ackerman has an outstanding publication record and has made significant impacts on the training of several graduate students. Her story is one that reflects the challenges facing many women scholars of her and later generations of balancing scholarship, community, and family responsibilities. With grace and humility she has made an important and lasting contribution to our community. As she prepares to “retire” we take this opportunity to reflect on these contributions and share our gratitude and affection for her. **Session 8.**

BENEDICT J. COLOMBI, KATHERINE REEDY-MASCHNER, and HERBERT D. G. MASCHNER (Idaho State University)

Local Producers, Global Consumers: Salmon and the Organization of High Latitude Communities

Salmon are a globally unifying cultural and economic commodity. Salmon link social, economic, and political processes at both global and local levels, and are of immense social value on multiple spatial and temporal scales. Today, salmon are at once a subsistence and commercial species, wild and domesticated, gifted and sold, a staple and a delicacy, found in cat food and in the finest restaurants, and trophy fished for sport. Both wild and farmed-raised salmon are mobile objects, recently introduced to the southern polar regions in the age of global-scale capitalism. This project draws from multidisciplinary perspectives in social, ecological and applied anthropology, cultural geography, and conservation biology to study the phenomena of globalization. The study team will link historical processes and contemporary outcomes of the varying rates of global-scale commercial integrations of indigenous people and salmon. Dramatic changes from direct drivers of global-scale corporate development and the cultural integration of indigenous peoples in globalization are coupled with indirect drivers of demographic, socio-political, economic, biological, and cultural factors drawn from individual case-studies in the United States, Canada, Norway, Russia, Chile, and Tasmania. **Session 3.**

JACQUELINE M. COOK (Confederated Tribes of the Colville Reservation)***So, you are looking for a research topic?***

The Colville Confederated Tribes' History/Archaeology Repository curates 4000 cubic feet of cultural material from the Canadian border to the Wenatchee covering some 200 miles of the Columbia River.

Masters and PhD candidates from Northwest Universities searching for a research topic often end up selecting a topic out of the region. The CCT Repository contains five major archeological collections which present seemingly endless possibilities for research that would contribute to Plateau prehistory: The Kettle Falls Collection, The Chief Joseph Dam Cultural Resource Project Collection, The Wells Archaeological Project, The River Mile 590 Project, and The Grand Coulee Dam Project Area.

This presentation will highlight some of the sites and artifacts from the collections curated at the CCT History/Archaeology Repository. **Session 14.**

SUSAN M. CRAUN, ASHLEY H. MCKEOWN and JENNIFER SANDERS (University of Montana)***Cultural Affiliation of a Late 19th-Century Burial from Eastern Montana***

Human skeletal remains detected eroding from a deposit on private property in eastern Montana were sent to the University of Montana for analysis. Forensic analysis indicates that the remains are consistent with a Native American male, aged 16 to 18 years. Numerous historical artifacts were recovered with the burial including a wooden box or chest with a brass bail handle and brass locking device, grommets, hawk's bell, hard rubber comb with brass decoration, hand-made hand mirror, five brass rings, and numerous beads of various shapes and colors. The artifacts date to the late 19th century and research on location of the burial, the patent marks on the locking device and comb, along with bead pattern analysis suggests that this individual most likely belonged to the Blackfoot Confederacy. **Session 7.**

BRUCE CRESPIAN (BLM)***Last Ditch Effort: Lessons From A Fugitive Historic Feature in the Okanogan Highlands***

Seven miles east of the north-central Washington town of Tonasket in the Bonaparte Creek Valley of the western Okanogan Highlands, efforts to document and evaluate the commonplace occurrence of an old water ditch resulted in a history lesson. The unknown origins and defunct utility of this mundane facility allowed for simple scientific description to address practical management considerations, while in depth archival research was likely impractical, given that no direct information might exist. However, by "drilling down" into the old General Land Office plat maps and official original survey notes that accompany the GLO plats, and using such historic documents in the context of local cultural practices, a better understanding of the behavior of local residents in the historic period and site function may be realized. In this instance, it will be suggested that the irrigation canal is "speaking to us", and that more than mere physical description and significance assessment can be attained. Rather than a just a typical earthen water canal that has no known origin or beneficiaries, the "big picture" is one of an unpatented Indian allotment that neighboring settlers trespassed by constructing this feature to irrigate their adjoining fields, without any benefits to the Indian allottee, and certainly also without his help. This paper will show how to obtain good useful information that may not be

available elsewhere, that may give “legs” to otherwise deficient research, to better orient field activities, and certainly to provide a basis for more interesting and creative hypotheses to validate about historic site functions and origins. **Session 10.**

DALE CROES (South Puget Sound Community College)

The Ups, Downs, and Sunken Feeling of Northwest Coast Wet Site Explorations

I have experienced wet sites that have tectonically risen 3 meters on the NW tip of the Olympic Peninsula, Washington (Hoko River), subsided 3 meters instantaneously by earthquake on the SW corner of the Olympic Peninsula, Washington (Qwu?gves), and now one that has been considered a sunken village on the juncture of the Willamette and Columbia River in Oregon (The Sunken Village wet site). The Hoko River and Qwu?gves sites reflect the tectonic tilting of the Olympic Peninsula due to pressures of the Continental Drift. The Sunken Village wet site has probably been the most stable of the lot, reflecting the use of the intertidal to create abundant acorn leaching pits to passively process hundreds of thousands of acorns. Each site is preserved by aquifers pumping through the grounds from behind the site, and none are the result of actual preservation due to sea level or river level rise (or fall). However they could be detrimentally affected by these changes in the future. **Session 13.**

DALE CROES (South Puget Sound Community College), MARK COLLARD (University of British Columbia), and CAROLYN DENNLER (South Puget Sound Community College)

Projectile Points from Sauvie and Puget Sound—a Cladistic Analysis

A cladistic analysis of ancient projectile point styles throughout Puget Sound has proven to be a chronologically sensitive and useful for placing undated sites into their proper temporal position in their ancestral sequence. We have used this study to establish cultural history hypotheses concerning ethnic continuity in the Puget Sound regions (Croes, Williams, Ross, Collard, Dennler and Vargo 2007). Here we are expanding our use of cladistic tree-building methods derived from evolutionary biology to investigate how the 4,000 year evolution of Puget Sound projectile point styles links well with the past 3,000 years of Columbia River basin projectile point styles from these separate regions. Our Columbia River Basin data base derives from recent testing of the well-preserved Sauvie Island site (35MU4) and five other well recorded sites in the Columbia River basin. When cladistically testing the separate projectile point styles and regions, we hope to see if they link up chronologically or separate out as distant different cultural regions and thereby ancient ethnicities as they are into the contact period. The preliminary results suggests that there was a guarded transmission of information regarding the manufacture and use of projectile points that remained separated for millennium between these regions into the present. **Session 4B.**

DALE CROES (South Puget Sound Community College), JOHN FAGAN and MAUREEN ZEHENDNER (Archaeological Investigations Northwest)

*Sauvie Island National Heritage Landmark Wet Site (35MU4), Portland, Oregon—
First Limited Archaeological Investigation and RipRap Repair, September 2006*

Archaeological investigations at National Historic Landmark wet site 35MU4 have been designed to provide a limited evaluation of the portion of the site that have been impacted during riprap repair of 1060 linear feet (320 meters) of earthen levee. The project was conducted in September 2006 while the waters in Multnomah Channel were at a low level. The testing

included 4 1x1 meter test units, drainage trenches 10 cm wide extending from three of the test units (dug in 10cm levels), the cross-sectioning of 5 round acorn leaching pit features in these drainage trenches, cross-sectioning and bulk sampling of one fairly complete acorn leaching pit feature; surface mapping down to the waterline of all (a) *in situ* wooden stakes (n=34), (b) *in situ* acorn leaching pit features (n= 60), and (c) surface cultural materials, including lithics, animal bone, wood chips, basketry strips, and split wood. A 1 Meter wide by 50 cm deep exposure was excavated into the bank and, in line with this exposure, a series of 4 cores were taken to a maximum depth of 25 feet on top of the levee. The cores provide enough sediment for litho-and bio-stratigraphic studies. Approximately 6,400 artifacts were recovered (items that are the result of human activity), of which 70% were wood and fiber items, 19 % were lithic pieces, and 11% were faunal remains. **Session 4A.**

ROBERT CROMWELL (Fort Vancouver National Historic Site)

“Where Ornament and Function are so Agreeably Combined”: A New Look at Consumer Choice Studies Using English Ceramic Wares at Hudson’s Bay Company Fort Vancouver

This paper focuses on my recently completed doctoral dissertation, where I analyzed over 20,000 English-manufactured ceramic ware sherds excavated from archaeological households at Fort Vancouver National Historic Site, Vancouver, Washington. These archaeological households are located both within the ca. 1829-1860 Hudson’s Bay Company Fort Vancouver palisade site, as well as in the associated employee (Kanaka) Village site. This allows for an attempt to synthesize the data and compare household dynamics from a broad spectrum of socio-economic class associated households. Data from archaeologically recovered ceramic sherds were synthesized to define the minimum number of vessels of varying forms and decorative patterns by household, and these data were used to create economic value indexes utilizing both the George Miller CC Index, and a newly created Fort Vancouver (FOVA) specific value index. This study utilizes the concept of consumer choice in a setting that integrates the relationship between consumer behavior and goods consumption within a capitalist market economy. It expands this relationship, to the choices of the various socio-economic and job classifications represented by class and ethnic differentiated archaeological households. Finally, the well-documented spatial definition of the various ethnic groups living and working at Fort Vancouver provides an ideal setting to explore the complexities of culture, class, and identity. **Session 1.**

JASON DABLING (Central Washington University)

Regional Significance and Research Potential of Archaeological Sites in the Upper Klamath River Canyon, Oregon

Cutting through approximately 250 meters of volcanoclastic rock deposited over the Pliocene, the upper Klamath River Canyon contains three distinct biomes in just over eighteen river miles. The study area, just south of Klamath Lake in south central Oregon, is one of extreme beauty and diverse resources which have been utilized by people for thousands of years. This unique area intrigues archaeologists not only because of its geographic situation at the cusp of multiple physiographic and cultural regions, but also because of the abundant material remains present. To aid the Klamath Falls Bureau of Land Management (BLM) office in developing management plans and National Register of Historic Places eligibility nominations, I revisited 20 archaeological sites along the river during the summer of 2006 to evaluate and assess their integrity and significance. In order to do this, I used numerous historical and contemporary documents to contextualize these sites within the appropriate regional and temporal frameworks; I also incorporated my own field observations and compared previous and current site

conditions. Additionally, I compared my study sites with 22 other known sites in the canyon to determine relative rarity and uniqueness of cultural material depth and abundance. Comparative studies like this contribute to a better understanding of the prehistoric patterns of resource utilization in the canyon, and allow us to explore further questions without additional excavation. **Session 11.**

MELISSA DARBY (Lower Columbia Research & Archaeology)

Old John's House

A photograph of a plank and bark house from Wapato Valley was recently discovered. This remarkable image illustrates architectural details that heretofore have only been described in ethnographic and ethnohistoric accounts. The plank and bark house-type is noted for the Willamette Valley and described along the Columbia River from The Dalles to the mouth of the Columbia. This house was built on the ground level or just below grade. The cedar planks used on this house type were smaller than on the elite house. Effectively this made the house easier to build and repair. The bark-roof house could be joined together easily into long house rows. The entries were often on the roof-slope side of the structure rather than the gable-end. This paper will present this image and discuss applicable ethnographic and ethnohistoric accounts of Chinookan and Kalapuyan houses. **Session 28.**

CLAUDIO DA SOLLER (Western Oregon University)

Aphrodite's waist-to-hip ratio

During the last two decades numerous studies based on evolutionary theory have focussed on the role of a woman's waist-to-hip ratio (WHR) as a major determinant of men's judgments of her physical attractiveness (men prefer a low WHR in a woman because it indicates greater reproductive potential). The evidence from cross-cultural studies, however, remains mixed, and no studies to date have focussed on the historical and prehistorical evidence. If a low WHR provides an evolutionary advantage, then we should be able to find evidence in humanity's past. This study analyzes the WHR of 256 artistic representations of the Greek goddess Aphrodite, the epitome of female beauty. The representations range from depictions on vases, coins and mirrors to stone carvings, terracotta figurines and marble statues, dating from the eight century BC to the third century AD. The results shows that the (male) artists and artisans who made Aphrodite's representations had a clear preference for a low WHR, just as studies of male preference in contemporary western societies show. **Session 21.**

LOREN G. DAVIS (Oregon State University)

A Decade of Geoarchaeology in the Lower Salmon River Canyon: Progress and Prospect

Geoarchaeological studies in the lower Salmon River canyon of western Idaho conducted between 1996-2006 provide many perspectives on issues relating to the late Quaternary paleoenvironmental context of past human societies, local paleoclimatic proxy indicators, alluvial history, canyon geomorphology and stratigraphy, and archaeological site formation and distribution. In years to come, geoarchaeological research will pursue more detailed understanding of current issues, and will work toward the realization of new research goals. These goals include: the development of diachronic and synchronic models of landscape-scale vegetation patterns through a new phytolith study; strengthening the existing chronostratigraphic

framework through the investigation of sediment provenance and chemostratigraphic correlation; and launching a raw material sourcing program. **Session 22.**

LOREN G. DAVIS (Oregon State University)

A Decade of Archaeology in the Lower Salmon River Canyon: Progress and Prospect

Archaeological research conducted in the lower Salmon River canyon of western Idaho spanning the period 1997-2007 has provided a rich dataset of human occupation spanning the last 13,000 calendar years. Examples of major discoveries made and research themes developed during this time include: the recovery of a late Pleistocene occupation and equipment cache at Cooper's Ferry; perspectives on the Paleoarchaic-Archaic cultural transition; early to middle Holocene foraging in canyon riparian corridors under the operation of an Oasis Effect; the Two Rivers hypothesis and the forager-collector continuum. In years to come, efforts will be made to strengthen existing datasets, address questions relating to existing research themes, and to develop new research questions. **Session 22.**

SARA DAVIS (Portland State University)

Projectile Point Analysis of the Meier and Cathlapotle sites in the Portland Basin

Projectile points can be among the most important artifact types recovered from archaeological sites. Formal projectile point types are widely used to date sites and establish chronologies. Many of the assumptions underlying the use of projectile points as temporal and ethnic markers are challenged when two contemporary sites, which are functionally identical and closely adjacent, contain significantly different proportions of projectile point types. Such an anomaly occurs at two sites in the Wapato Valley Region of the Lower Columbia River. Meier and Cathlapotle are located 5.2 miles apart on the Columbia River flood plain below Portland, OR. Both are large residential sites containing permanent houses and associated with the same ethno-linguistic group. This paper provides a preliminary description and analysis of the single largest artifact class at these two sites. **Session 28.**

JENNIFER DEROSE (University of Idaho)

Methodology behind the Compilation of an Ethnodendrology: A Holistic Approach to Looking at Coeur d'Alene Forest Practices.

This paper discusses, clarifies, and attempts to validate the reliability and contribution of a new research method developed during the author's thesis research concerning Schitsu'umsh (Coeur d'Alene) forest practices. Archaeological, archival, and ethnographic records were combined with interdisciplinary silviculture forest measurement techniques for a methodological approach focused on better understanding forest practices enacted by the Schitsu'umsh Tribe from past pre-colonial times to the present. This methodological approach facilitates the better understanding of benefits, properties, qualities, customs, and lore forests offer the Coeur d'Alene, ultimately creating an ethnographic ethnodendrology. This ethnodendrology effectively furthered academic knowledge through advantageous methods, and aided in the generation and documentation of traditional information beneficial for the Schitsu'umsh Tribe, Tribal CRM and natural resource personnel. **Session 23.**

MELANIE DIEDRICH (Evergreen State College)
Setting the Stage—The Environment at Sauvie Island

During the centuries of Native habitation, the location of Sauvie Island, OR, on the Columbia River, its climate, and geomorphology provided a unique setting for food gathering, processing and trading. The continuous stratified vegetal mat layers within the waterlogged sediment at the Sunken Village Archaeological Site (35MU4) are a mixture of culturally and naturally deposited material. Analysis of very small seeds, wood fiber, and charcoal recovered by floatation and wet-site sieve methods, along with evidence of acorn leaching pits, mammal and fish bone, stone debitage, points, and basketry provide clues to the local ecology and economic resources of the area. The biological and cultural analysis are combined with the geology, general hydrology, sedimentation, yearly flood cycles, evidence of periodic flood events, and cataclysmic events of the past, providing us with a preliminary summary regarding the unique ecology and changing land forms of this portion of the Lower Columbia River Basin. This study will provide a preliminary basis for future inquiry toward a clearer picture of the seasonal and year-round land use by the Native Tribes that populated Sauvie Island prior to European settlement. **Session 4A.**

MELANIE DIEDRICH (Evergreen State College) JAMES W. GOEBEL JR., TRESSA PAGEL (South Puget Sound Community College) and VIRGINIA BUTLER (Portland State University)
100% Sample Micro-Analysis—The Method and Preliminary Results

Developed under primarily dry-site archaeology excavation conditions flotation is the accepted method among archaeologists for extracting small seeds, charcoal and other organic material from the soil matrix. In a wet archaeological site where vegetal mat layers have been preserved in anoxic waterlogged conditions, extracting small organics from the matrix by flotation methods requires drying, a step avoided when preserving many other wet-site artifacts because of its destructive results. This experiment was carried out to compare traditional flotation methods with fine-screen water separation under controlled conditions in the lab. Two 10% samples were taken from ten randomly chosen “100%-sample” strata from four Sauvie Island acorn leaching pits. The organics from each were separated, counted and compared, with special attention to possible damage caused by desiccation. The results of this study will provide information regarding the best method to utilize for further analysis of the remaining 100%-samples. The small seeds, fish bones, charcoal and other fragments found in the samples taken for the experiment should provide additional clues to local fauna and flora. **Session 4A.**

PATRICK DOLAN and CHRIS KIAHTIPES (Washington State University)
Grinding Away: Palynological Investigations at Cox Ranch Pueblo

Grinding stone tool technologies; specifically manos, metates, and mortars, have traditionally been an underutilized resource in the reconstruction of past societies. However, there is clear potential for their use in the resolution of palaeoecology, human diet, and tool technology. We examine a sample of grinding stone tools from the Cox Ranch Pueblo site in New Mexico and use evidence from preserved pollen grains to make suggestions about the site's occupant's reliance on wild plant foods and domesticated plants. The pollen evidence also suggests that individuals may have been selecting specific materials for the processing of specific plant types, such as *Zea mays* (corn) and *Cheno-ams*. The sample of grinding stones from the site come from a variety of contexts, allowing us to also make suggestions about the homogeneity/heterogeneity of the consumption and use of plant foods at Cox Ranch Pueblo. **Session 24.**

ELAINE DORSET (Portland State University)

The Diverse Roles of Dr. McLoughlin's Garden: An Archaeological Investigation of Nutrition, Health and Social Practice at the Hudson's Bay Company's Fort Vancouver

John McLoughlin's formal garden represented survival and health for Hudson's Bay Company employees at the remote 19th century headquarters post of Fort Vancouver, but also served early American pioneers. The garden also represented social identity for the Hudson's Bay Company, functioned as an imperialistic device, and played a significant role in scientific research relating to the identification and adaptability of plants transported from around the globe. Current archaeological investigations are addressing questions relating to nutrition, health, social practice and the disruption and adaptation of Native American lifeways related to this most visible colonial landscape feature. **Session 1.**

MARK EBERT (University of Victoria)

The Resonance of Material Culture: Carving and Weaving the Past

Artifacts and objects are typically viewed as material embodiments of cultural ideas and thought, with the result being that they are imbued with meaning. The difficulty with this conception is that it rigidifies and circumscribes the meanings of these objects so that their contemporary use must be linked to past uses. I argue, in contrast, that "material culture" has no meaning inherent in itself, but that meaning adheres to it through the coupling and resonance of movement and actions in the present with those of the past. One implication of such an argument is that we then need to reconceptualize the relationship between the past and the present as illustrated through recent revivals of canoe carving and basket weaving. **Session 5.**

MELISSA ELKINS (Washington State University)

Ceramic Technological Style and Ethnicity in Prehistoric New Mexico

Archaeological ceramic data including ware type, vessel size, and distribution can be applied to research questions involving ethnicity and the migration of prehistoric people. Two prehistoric Great House sites in west-central New Mexico, Cerro Pomo and Cox Ranch, contain ceramic evidence for the co-residence of two ethnic groups: the Mogollon and the Pueblo. Each of these groups manufactures signature pottery types which include Mogollon plain brown ware and Pueblo painted red ware. In addition, the study sites are geographically situated at the southern frontier of the Chaco Regional System, a wide-ranging network of complex communities reaching its height in the American Southwest during the 11th and 12th centuries.

Mogollon brown ware pottery dominates the assemblage at Cerro Pomo and Cox Ranch, and many of them have smudged interiors. Pueblo decorated red ware bowls are comparatively rare at the study sites. I argue that the technique of smudging pottery is decorative rather than functional, and I explore the possibility that smudged brown ware was used in place of red ware as serving bowls, a potential indicator of historical practice. This paper documents the distribution of this ceramic pattern, its technological attributes, and the possible implications for social organization. **Session 24.**

REBECCA HAWK ELWOOD (Sacred Breath of the Columbia River Gorge/Yakama Nation)

The Sacred Breath Project

The Sacred Breath Project is an inter-tribal, Environmental Protection Agency (EPA) funded project to accomplish two goals: 1) To give a tribal voice in the political arena of air quality issues in the Columbia Gorge National Scenic Area; and, 2) To assess the link between air pollution and detrimental effects to sensitive plant species (lichen), fish, and rock images. One component of the Project includes a partnership with the University of Washington Earth Initiative Program. Though the study of rock images is only part of the overall work, it has become the most cumbersome and in many ways the most rewarding portion of the project. **Session 15.**

LOWELL TAVIS EVANS (Central Washington University)

Use-Wear Analysis of the Beech Creek Stone Tool Assemblage: Methods and Preliminary Results

Excavations at the Beech Creek Site (45LE415) in 1990 and 2006 yielded a diverse stone tool assemblage. The Beech Creek site is unlike other sites in the Upper Cowlitz Valley in its high artifact density and its place on the landscape: on a terrace above the Cowlitz floodplain near the present town of Packwood, WA.

In a comprehensive report on the Beech Creek site, McClure (1992) gives multiple calls for a formal use-wear analysis of the stone tool assemblage. The site exhibits an early Holocene artifact assemblage that has been used to determine the presence of what has been called the Olcott complex of the Old Cordilleran Culture (Butler 1961). Leaf shaped projectile points, often referred to as Cascade points, are the principal indicator of the Olcott culture historical unit. Dancey (1969) has noted that use of leaf-shaped (Cascade) forms is difficult to ascertain. He reports Cascade points exhibiting unusual wear patterns at Mossyrock reservoir sites. At the Tolt River site, LeTourneau and Stone (2001: 7.191) report: "Use wear analysis indicates that projectile points, especially Cascade points, may have been multifunctional tools for cutting, scraping, as well as piercing." Researchers have noted that "cobble choppers" do not exhibit use-wear patterns that indicate chopping uses, but that they may have been cores.

These lines of evidence indicate a data gap in our understanding of the function of stone tools at archaeological sites exhibiting an Olcott component. I propose a use-wear analysis to address this data gap. A paradigmatic classification is utilized to identify use-wear. Those tools exhibiting use wear will be subjected to use-wear analysis using a stereo-microscope capable of magnifications from 40x-160x. I will then determine if the tool was used to cut, scrape, or pierce soft, medium-hard, or hard material after Odell and Odell-Vereecken (1980). **Session 11.**

XIANGHONG FENG (Washington State University)

Comparison of Two Village Tourism Development Models in Hunan Province, China

In 2002, Fenghuang County in rural Hunan granted 50-year leases for development rights over eight tourist sites to Yellow Dragon Cave Corporation headquartered in Changsha City, the capital of Hunan. Based on the findings in the summer of 2006, this paper analyzes two village tourism development models, one elite-directed and the other collectively organized, to demonstrate how they differ in management practices, benefit distribution, and generation of

social conflict, and how they have a similar effect on gender roles and traditional values. Identification of local stakeholders, personal networks, and power structures reveals the insecurities resulting from social and economic impacts of tourism development. **Session 17.**

JENNIFER M. FERRIS (Washington State University)

All Bagged Up: Human Transport as an Agent of Flake Edge Damage

Functional interpretations are a fundamental aspect of lithic analyses in attempts to understand past human behavior. To identify tool function, many experimental analyses have tried to define signatures of use wear and post depositional damage to offer deeper explanations of archaeological stone tool assemblages. However, transport, a major component of prehistoric stone tool usage, has not received as much attention in recent lithic studies. The present experimental replication study presents preliminary results for transport damage on unmodified obsidian flakes. Transport damage was found to be both extant and recognizable for two different transport-packaging methods, including bags and wraps. As an ancillary measure, cutting hide was used as a low impact activity to compare to transport. Bag transport was found to cause more damage to flakes than wrap transport or cutting, as measured by a ratio of microchip damage to maximum edge length. Transport in both packages removed microchips of various sizes in clusters. Additionally, transport damage characteristics were found to be similar to damage caused by trampling (see McBrearty et al. 1998; Pryor 1988), such as surface location, microchip orientation and termination, superposed configuration and half-moon breakages. These results suggest that erroneous interpretations of tool function may result if transport damage is not addressed. **Session 24.**

MICHELLE Y. FIEDLER (Washington State University)

A Dirty Little Word: Cajun Identity and Slang in Louisiana

The word “coonass” is a peculiar linguistic phenomenon. There are few other words that carry the same ambivalent ethnic, political, and cultural significance. “Coonass” exists in a single population, limited by geographical and cultural boundaries. It is both loved and hated by the very people it describes – the Cajuns. The results of a preliminary survey of residents of Southern Louisiana and elsewhere in the United States, Canada and France show that there exists a demographically based range of opinions attached to the term “coonass”. This research is intended to address the role of a single word, “coonass”, in reinforcing or undermining ethnic and cultural identities.

In 2005, I conducted an online survey involving 70 participants of varying ages and backgrounds. Preliminary results demonstrate considerable diversity and interesting patterns in attitudes based on demographic information such as gender, age, income and education level. For instance, women are more likely not to use the word and to feel negatively towards its use by anyone, whereas men are more likely to use “coonass” and find it non-offensive.

Informant comments illustrate the range of attitudes toward the word “coonass”. For example, an informant who favored the term defined “coonass” as “a working class person of Cajun background who is proud of his background” while another who disliked it said a “coonass” was “a dirty Cajun, a backwards or ‘uncivilized’ person of French Acadian descent”. Clearly, statements such as these demonstrate the power of the word “coonass” goes beyond age, gender and social status to encapsulate informant’s feelings about their personal and public identities as Cajuns. **Session 17.**

MICHAEL FINLEY and BRAD WAZANEY (Confederated Tribes of the Colville Reservation)

Middle Columbia Salish Resource Gathering and Continued Use of the Big Bend Country

Most scholars accept that Plateau people utilized resources throughout the Big Bend country—a hypothesis supported by an assortment of historic, ethnographic, and archaeological sources. This presentation examines these materials and addresses several aspects of resource gathering in the region by the Confederated Tribes of the Colville Reservation (CCT). Additionally, interviews were conducted with contemporary CCT Tribal members who continue to utilize resources in the region, emphasizing the sustained significance of traditional practices. Their responses enhance our understanding of the traditional territories of the CCT, and aids in preserving and perpetuating traditional cultural understanding. Confirming the occurrence of region-wide resource procurement in the Big Bend area may also assist the CCT in future questions regarding territorial and resource issues. **Session 14.**

MICHAEL FOLSOM (Eastern Washington University)

Wetland Areas in Pre-Contact Eastern Washington

Wetlands in pre-contact times were abundant and widespread in the semi-arid grass prairies and sage steppe regions of Eastern Washington. The wetlands were commonly small, isolated and seasonal but remarkably numerous. The forested regions had fewer wetland areas. In the 150 years since the arrival of widespread grazing and agriculture the majority of the wetland sites have been shrunk or eliminated by a combination of ditching and filling. The prior geography of wetlands can be recognized by the pattern of hydric soils as shown in modern county soil surveys, along with local evaluation of topographic features. In many parts of the Channeled Scablands as much as 90 percent of the wetlands have been lost. **Session 16.**

WILLIAM C. GARDNER-O'KEARNY (Portland State University)

Scratched Thermally Altered Rock and Cobbles from Two Portland Basin Archaeological Sites

Artifact assemblages at the Meier (35CO4) and Cathlapotle (45CL1) sites in the Portland Basin contain more than 100 thermally altered rocks and cobbles with multiple thin scratches. These scratches are finer and shorter than normal abrader v-shaped grooves. Further, in the case of scratched thermally altered rocks, many of the scratches appear to have been inscribed after the rocks were heated. At Meier most of these artifacts were recovered from excavation units at the northern end of house, with very few located in midden deposits. However, one non-midden exterior unit has a higher concentration of the artifacts than any other single unit. Examples at Cathlapotle are more evenly distributed between house interior and exterior. These types of artifacts are mentioned infrequently and then only in passing in the archaeological literature of the Pacific Northwest. This poster describes the characteristics of these artifacts, alerts the archaeological community to their existence, and describes their distribution within these two sites. **Session 11.**

RICHARD GARVIN (University of British Columbia)

Culture Contact and Culture Change on Northwest Coast: The Gingolx Cemetery

Death is the only rite of passage that leaves frequent archaeological traces, through burial and mortuary rituals. It provides us with a rare opportunity to move beyond material culture and goods and glimpse the cognitive, ritual and ideological aspects of a society, bringing archaeology closer to addressing broader anthropological questions. Cemeteries, then, can provide a rich data set for analysis by various social science disciplines and in particular, archaeology. For example, grave markers can be used for most of the attribute analyses performed on other artifacts and are reliable sources for the examination of temporal and/or spatial distributions. Grave markers also often reflect the social status of the individual while they were alive. Finally, the mourning and other ceremonies that take place at cemeteries add a social dimension unknown in most archaeological contexts. Using textual, stylistic, and spatial data collected from eleven historic Native cemeteries, this paper examines changes in the perception of kinship, identity and self-image among the Tsimshian speaking peoples of the Northwest Coast of British Columbia from 1831 to the 1920's. A particular focus of this research has been the nature and extent of the Colonial discourse and the negotiated relationships which develop between the Indigenous populations and the colonizers in the region. **Session 5.**

ERIC GLEASON and JACQUELINE CHEUNG (Fort Vancouver National Historic Site)

The Exploding Sutler Store at Vancouver, Washington: Commercial Trade at a Western Military Fort

Limited excavations associated with a redevelopment project in 2004 have yielded structural features and a wide variety of debris associated with the mid 19th Century Sutler store at the US Army's-Columbia Barracks (later Fort Vancouver Military Reserve and Vancouver Barracks). These features and artifacts when combined with archival research have helped fill in some of the history of this venture. The store started as a partnership between Elisha E. Camp of Sackets Harbor, New York and then Brevet Captain Ulysses S. Grant. The partnership ended with a financial loss to Grant, a mental breakdown for Camp, and an explosion at the store. Artifacts recovered included distinctive French transferprinted ceramics, military uniform fragments, munitions, alcohol and medicinal bottles, textiles, faunal remains and cans. **Session 1.**

MARCUS GRANT (Geo-Marine, Inc.)

Automating Field Data Collection with Strategic Mobile Software

Archaeologists have attempted since at least the 1980s to automate the data collection and organization process, with mixed results. Since the late 1990s these efforts have focused on the use of GPS receivers, which have expedited the mapping process but have proven challenging as data entry devices for non-spatial items, such as site form contents.

This paper describes the development and use of data recording applications for the Windows Mobile 2000 operating system. Site recording tasks are broken into small, strategic packages for use by multiple recorders who may work simultaneously on one task or on separate, divergent tasks. Inexpensive PDAs inside weatherproof and shock proof containers that allow the use of touch screen technology are used as hardware. Spatial recording tasks are left to a GPS operator. Only non-spatial data, such as artifact and debitage attributes, soils types, etc. are recorded. Spatial and non-spatial data are later linked via key fields, if desired.

The applications, which were built in NS Basic 6.5, are designed to allow maximum flexibility in modifying form contents to facilitate rapid and inexpensive transitions among geographic regions or research designs. The field forms remain standardized in appearance while data organization and output to specific sites forms or other formats are handled by a series of SQL statements that create a range of MS Access reports after the field data have been uploaded to a desktop system or network. Results from large projects in the southern Great Basin and the limestone forests of northern Guam are reviewed. **Session 27.**

ASHLEY HALLOCK and JOHN JONES (Washington State University)

Actun Halal: Pollen Evidence from a Paleoindian Age Cave in Belize

A detailed examination of fossil pollen from sediments collected at Actun Halal, Cayo District in Belize, reveals a complex record of past human activities at the site. Although the oldest sediments do not contain well preserved pollen, Archaic age deposits contain an abundance of types, including evidence for past cultivation of both maize and cotton. Preceramic agriculture has been documented in many places in the Maya lowlands but is poorly understood. The presence of some pollen types may signify past ceremonial or ritual use, consistent with Maya beliefs concerning the connection between caves and the Maya underworld. The pollen also provides a good record of past environments in the area as well as modifications made by the Maya to their landscape. **Session 11.**

FAITH HANEY (Central Washington University)

Anthropology Field Notes

Anthropology Field Notes, produced and hosted by Central Washington University graduate student Faith Haney (Resource Management program), is an educational television program exploring cultural resource conservation. The program focuses on current field research in Cultural Anthropology, Archaeology, Visual Anthropology, and Primatology in the Pacific Northwest – and beyond! The poster presentation will illuminate the importance of outreach and education regarding Anthropology, and presents an accessible venue for other researchers to “get the word out”. The program highlights science-based, real world field projects. No fedoras or whips here! Guests include: Karl Heider, famed Visual and Cultural Anthropologist; Trent de Boer, Dept. of Transportation Archaeologist and creator of Shovel Bum comic ‘zine; Jean-Michel Cousteau, ocean explorer and founder of the Ocean Futures Society; Bob Steelquist, the Olympic Coast Marine Sanctuary’s education and outreach coordinator; and many more. Most episodes will also present current graduate research, lots of fun “archyfacts” to ponder, and clips from the field. The first episode will air in March on KCWU-TV, Ellensburg (cable channel 15). Podcasts and other venues are in the works. **Session 11.**

CHERYL L. HARPER (Clearwater National Forest / Washington State University)

Heritage Resources on the Clearwater National Forest: Research, Management, and Interpretation

The Clearwater National Forest in North-Central Idaho incorporates a varying array of environmental zones. As a result, heritage resources on the Forest are just as varying. The remains of these activities are still visible on the ground, preserved to answer potential research questions regarding the nature of both prehistoric and historic lifeways in the region. This paper will attempt to give a snapshot of these activities and outline their place in archaeological research in Idaho as an introduction to the following symposium papers. **Session 6.**

CHERYL L. HARPER (Clearwater National Forest / Washington State University)
Two Weeks, Two Months, Two Years: Uselife Duration and Preservation of Historic Logging Railroads on the Clearwater National Forest

During the early 20th century, logging activities in the White Pine forests of North-Central Idaho were dependent upon a vast railroad system connecting mill towns to the logging camps and timber harvest areas. As the white pines disappeared under the axes of the lumbermen, so, too, was the railroad abandoned. The remains of the railroad can still be seen in nearly all drainages and meadow systems in the Bovill area. Like a river system, the railroad branches, with spur lines diverging and converging on main lines. However, each branch and main stem has its own story. Differing requirements for length of use for each piece of the rail line structured the construction methods and amount of construction time and effort placed into that line. These differences limit the preservation of railroad lines in present day contexts. **Session 6.**

RYAN HARROD (University of Idaho)
People of the Plateau

The following paper is a preliminary investigation of skeletal variability among Native Americans in the Plateau. The compiled measurements will be evaluated both in terms of their cultural affiliation and environmental location. The study will consist of analysis and comparison of measurements taken from 314 cranial, 294 right femoral, 297 left femoral, 214 right humeral, 213 left humeral, 247 right tibial, and 260 left tibial remains. The purpose of the study is to establish a biologically-based demographic at the same time determine whether or not climate has a significant biological or evolutionary effect on non-agriculturally based cultures. The design of this project is based on similar research done among Plains cultures by Cole, III (1994) and Byrd and Jantz (1994). For the purposes of this paper only, basic analysis will be performed. In the future more comprehensive statistics will be done as well as an evaluation of pathologies and dentition. **Session 21.**

KATHLEEN HAWES (South Puget Sound Community College)
Artifact Plant Material Identification—Cellular Analysis

The use of cellular analysis in identification of artifact plant material was pioneered by Dr. Janet Friedman in her research of wooden artifacts excavated at the Ozette archaeological site on the Olympic Peninsula in Washington State. This research is being continued to identify wood and fiber artifacts recovered from the Sunken Village site on Sauvie Island, Oregon; including numerous woodchips and split wood debris, a wooden wedge with intact collar found in situ during excavation, twigs and branches lining one of the numerous pit features found on the shore above the waterline, and the remains of an ancient cross-twined acorn basket found in one of the pit features. Samples are carefully taken from the artifacts, which are documented and photographed before and after the process; thinly sliced with a razor blade from three different orientations: cross-section, tangential, and radial. These samples are then mounted on slides and examined microscopically. Comparisons are made with a database of slides prepared from contemporary examples of local plants. This information is used to verify identification based on traditional uses and visual examination, adding to the understanding of the plant resources used by Native People of Sauvie Island. **Session 4B.**

KATHLEEN HAWES and TYLER GRAHAM (South Puget Sound Community College)
Woodworking—Woodchips, Adzes and Experimental Archaeology

Woodchips are produced by woodworking activities and vary in shape and size depending on carving techniques and types of tools used. The geometric shape of a woodchip is defined as a profile, which is determined by measuring the angles of blade entry and exit on a woodchip, and then placed in one of four profile categories: flat, triangular, trapezoidal, and parallelogram. Thickness, width, and length are also recorded. Feathering frequently occurs at the point of blade entry, and is indicative of tool use. Woodchips are also examined for faceting, which is a result of multiple cuts through a wooden object. These data are then used in comparisons with woodchip data from other wet sites, and then used to identify possible woodworking activities at these sites. Woodchips created using replicated tools can be used for comparison with those recovered from excavations. Research indicates that woodworking adzes in this region are primarily the "D" adze style, with a small number of the "U" and elbow adzes also represented. Adze blades were usually made from (but not limited to) nephrite, serpentine, and jadeite. We followed ethnographic procedures to saw nephrite into a rough blade outline and then ground it to the final shape as seen at Qwu?gwes. Replication of the methods used to manufacture the nephrite blades provided an indication of time and labor to finish a blade. The blade is used to determine if angle of entry and direction to the grain of the wood has a tendency to produce the types of wood chips found at Sauvie Island and Qwu?gwes wet sites. **Session 4A.**

SARAH HEFFNER (University of Idaho)
The Social Significance of the Watson Store to the Community of Spalding, Idaho

This paper will look at the function of The Watson Store as a “third place” in the town of Spalding, Idaho. Ray Oldenburg defines the “third place” as “a generic designation for a great variety of public places that host the regular, voluntary, informal, and happily anticipated gatherings of individuals beyond the realms of home and work” (1997: 16). The Watson Store served both Nez Perce and white clientele for over 50 years (1911-1964) providing them with a convenient place to shop. The store was a “third place” in the sense that it brought the community together in a friendly and social environment where everyone was treated equally, regardless of race or status. Using interviews, information gathered from the Park’s Watson Store Papers, and analyses of artifacts from the Park’s Watson Store Collection, I will illustrate the importance of the Watson Store as a “third place” in the community of Spalding, Idaho and examine the decline in business at the store due to the advent of the automobile and the growth of nearby Lewiston, Idaho. **Session 25.**

RHIANNON HELD (Washington State University)
Temporal Change in Columbia Plateau Textiles

Textiles such as baskets, mats, and cordage are often presumed to have great temporal continuity, and archaeological textiles on the Columbia Plateau are often assumed to be fairly recent in age, and not worth dating. However, new radiocarbon dates on textiles from McGregor (45FR201) and Porcupine (45FR202) Caves push the oldest directly dated textile on the Plateau back to approximately 3100 BP and suggest a change in textile types around 1200 BP, which may be linked to subsistence changes or changes in housing related to the switch to the Winter Village pattern. This analysis explores these patterns, and the further possibilities for the use of directly dated textiles chronologies in this region and others. **Session 5.**

LUCINDA HEMRY (Kootenai National Forest)***Rock Climbers: Friend or Foe?***

There are numerous reports throughout the Northwest of damage to rock art sites caused by rock climbers who are either unaware of the rock art or worse, have no regard for the fragile nature of the images they are negatively impacting. Conscientious rock climbers and their organizations are attempting to turn these irresponsible actions of a few into responsible actions that can have a positive effect for protecting and preserving these sacred landscapes. The area of the Koocanusa Reservoir in northwest Montana offers the type of cliffs rock climbers love to scale. In encouraging a win-win situation the Forest and Confederated Kootenai and Salish Tribe are working with rock climbing groups to provide areas for the climbing activity away from the sacred sites and in turn have the climbers report any new finds or other suspicious activity to the authorities. **Session 15.**

LOURDES HENEBRY-DELEON (Central Washington University)***Recovery and analysis of human remains from a plane crash in Kittitas County Wa.***

On June 26 2005 Kittitas County Sheriff's Deputies located a Jet which disappeared in the mountains between Snoqualmie Pass and Lake Kachees on October 19, 2004. The impact left a hole in the ground about 15 feet by 20 feet across and 5 feet deep. Debris was scattered around the area for about a quarter of a mile. Assisting the Kittitas County Sheriff Department, Central Washington University 2005 Skeletal Analysis Field School participants unearthed additional aircraft wreckage as well as personal effects and human remains. The skeletal remains consist of cranial and post cranial fragments of two adult males nearly the same age at death. Dental remains recovered from the crash site allowed identification of both individuals. **Session 21.**

SEAN HESS (Confederated Tribes of the Colville Reservation)***Pictographs and Petroglyphs in North-Central Washington: A Management Assessment of Current Conditions***

Accelerating residential development, the rise of "tagging" as a form of expression, and even changes in the natural environment have combined to place pictographs and petroglyphs in increasing danger. The last major review of pictograph and petroglyph conditions region wide was conducted almost 30 years ago, and new data was needed regarding current conditions so that appropriate management decisions could be made. Twenty previously recorded pictograph and petroglyph sites in the traditional territories of the Confederated Tribes of the Colville Reservation in north-central Washington were revisited and documented on up-to-date site forms using GPS technology. Four additional sites were recorded along the Okanogan River near McLoughlin Falls. For those sites that were at risk, letters were addressed to the land-owners alerting them of the hazardous conditions. The archaeological community also needs to address problems in the systematic updating of site forms to alert fellow researchers about their findings. **Session 14.**

BARRY S. HEWLETT (Washington State University, Vancouver)***An integrated evolutionary approach to human responses to killer (or acute high mortality) epidemics***

Few systematic anthropological studies of acute high mortality epidemics have been conducted. Existing studies indicate that human behaviors are maladaptive because people tend to panic and

flee areas of infection which in turn leads to the collapse of social institutions that might restore order and implement control measures. This paper uses field data from Ebola outbreaks in central Africa and ethnographic and historical data from other high mortality epidemics to identify common human responses to acute epidemics. An evolutionary biocultural model is proposed to explain the common human responses to epidemics and suggests that human evolved psychology and accumulated cultural knowledge interact to produce adaptive behaviors in most contexts. **Session 12A.**

CHARLES HODGES (Northwest Archaeological Associates)

Time, Pattern, and Process: Geoarchaeological Modeling of Puget Sound Shoreline Geomorphology

Shoreline features such as spits, fans, deltas, and tidal wetlands around Puget Sound often contain well-preserved repositories of paleoenvironmental and archeological data. Some of these features have persisted for relatively long periods of time, others are much more recent, but each possesses a unique formation history representing a complex response to the interplay of natural shoreline processes over time. In the normal course of documenting site structure and formation history, we typically build one- and two-dimensional representations of a site's archaeological and lithologic stratigraphy and then use these representations to infer site formation history and its relation to human land use patterning. Staying within a geomorphic framework for the purposes of this presentation, I compare methods of modeling clastic shoreline depositional environments with emphasis on multi-scalar three-dimensional analysis of the architectural elements comprising an archaeological site and its landform. **Session 13.**

ZACHARY HOLMES (Eastern Washington University)

Common Ground: Uniting Environmentalists and Sportsman in Conservation

For many years, two separate entities have advocated the conservation of our wildlife and wildlands, but have failed to combine their efforts in a substantial manner, due primarily to preconceived notions about one another. This study examines the roots of the ideological divide between environmentalists and sportsmen, and how recent attempts to bridge this gap have produced substantial achievements. Environmentalists and sportsmen often cite the same scientific evidence to support their causes, and the aim of explaining abstract scientific studies and findings to the population remains one of the primary dilemmas of both groups. Still, preconceived notions have made it too easy for sportsman to write off potentially valuable allies in environmentalists because they are often viewed as sensationalistic, granola-eating yuppies, and for greens to disregard hunters because of their image as insecure men needing to kill animals to feel good about themselves. This study examines how groups of environmentalists and sportsmen in the Inland Northwest are beginning to establish partnerships and conceptual frameworks for working with one another. If successful, there is the potential for the formation of highly influential, bipartisan groups of sportsmen and environmentalists capable of producing lasting and popular policy changes that will benefit the natural world and attempt to cushion natural resources, ecosystems, and wildlife from the juggernaut of development. **Session 23.**

AMY HOMAN (Simon Fraser University)

Pre-contact use of isolated wetlands on the Columbia Plateau, Eastern WA. Using GIS to quantify our knowledge of this rare landscape.

The Scablands of Eastern Washington are a unique landscape to the Columbia Plateau Region where a variety of diverse wetland ecosystems thrive across an otherwise arid landscape. Contemporary Native Americans of the Columbia Plateau continue longstanding use and stewardship traditions associated with these wetlands. This poster presents an introduction to my current research where I am using GIS as an approach to understanding the long-term changes in pre-contact uses of a wetland landscape. I will be working with existing archaeological data which varies in detail and where the archaeological site types are vast. This dynamic in data integrity is precisely why I would like to analyze it as whole. As well, a driving factor in this research has to do with the current environmental legislation threatening these types of isolated wetlands throughout the United States. The goal of this research then is to enhance our understanding that wetlands played in past settlement and subsistence patterns, and also contribute to more representative and effective cultural heritage management strategies. **Session 11.**

BETH HORTON (Washington State University)

Restaurant or residence? Faunal Remains From the Earliest Occupation of the Fort Vancouver Sutler Store Privy

Faunal remains from a nineteenth century Sutler Store privy at Fort Vancouver, Washington provide an opportunity to understand the lives of residents of military communities in the Pacific Northwest. Sutlers provided sundry items and services not offered by the US Army, such as postmaster and banker. However, documentary evidence suggests that sutlers were engaged in providing cooked meals to the soldiers. Enlisted men had few choices in their diet as it was controlled by the US Army. Eating at the sutler's store allowed soldiers from Northwest frontier communities a venue to assert their dietary preferences. This paper examines whether the faunal materials represent food remains from a residential or restaurateur occupation, and focuses on these food choices and their role in the creation and maintenance of social roles in a military environment. **Session 1.**

STEPHANIE HORTON and CORAL MOSER (Idaho State University)

Preliminary Technical Analysis Report of Testing Done Near Bancroft Springs ID

This paper presents the preliminary results from 2006 investigations and excavations at site 10EL231 on the Snake River near Bancroft Springs in Elmore County, Idaho. In response to CRM compliance needs, Shane Baker, the senior archaeologist with Idaho Power, contacted the Anthropology Department at Idaho State University (ISU) to arrange for a field school to gain a greater understanding of the area, its cultural resources, stratigraphy and geochronology. Under the direction and supervision of Dr. E.S. Lohse, students from ISU conducted auger testing and excavated six test units. This paper will present the preliminary technical and functional analysis of the site assemblage found near Bancroft Springs. **Session 16.**

FEATHER LYN SAMS HUESTIES (Tamástslikt Cultural Institute)
Writing History: A Discussion of the Challenges and Successes of a Tribal Museum documenting & publishing Tribal history

The planning for Tamástslikt Cultural Institute was 10 plus years in the making before the initial ground breaking in 1995. In the beginning there were criticisms. There were those operating under the assumption that this project would never come to fruition because of its size, because the story of our people and our relationship to this land is an impossible one to tell. Since Tamástslikt opened its doors in 1998, this non-profit Tribal museum, owned and operated by the Confederated Tribes of the Umatilla Indian Reservation, tells the story of the people now known as the Cayuse, Umatilla and Walla Walla. Most recently, Tamástslikt has broken trail and initiated several smaller publishing projects that share the history and culture of the three Tribes. Each of these smaller projects has led to the newly published history book *Wiyaxayat/Wiyaakaa'awn "As Days Go By, Our History, Our Land and Our Culture"* in which Tribal authors provide the stories, scholarship and ancestral knowledge of the CTUIR. This session will explore the journey that Tamástslikt has taken into writing and publishing tribal history and document the challenges and successes along the way. **Session 8.**

M. ELIZABETH HUETTER (Independent)
The Internet's Contributions to the Discipline of Parkour

This paper explores the relationship between the Internet and a physical discipline called parkour. The paper demonstrates how the Internet is a major contributor to the international spread of parkour. This parkour-Internet relationship has fostered an international community among the discipline's followers, both online and off, and has promoted athleticism, cultural understanding, and respect and responsibility among its practitioners. **Session 23.**

RICHARD HUTCHINGS (Independent)
Twenty-First Century Sea Level Rise and the Northwest Coast Archaeological Record: Lessons from Underwater Archaeology

Characterizing the various effects eustatic sea level rise and subsidence-induced submergence have on the preservation and visibility of coastal archaeological deposits has long been, and continues to be, an important component of underwater archaeology. This emphasis on "inundated" or "drowned" terrestrial landscapes makes the discipline uniquely situated to contribute to discussions about the implications of twenty-first century sea level rise on the coastal archaeological record. Currently, however, very little is known about either cultural or non-cultural drowned terrestrial landscapes on the Northwest Coast. As a consequence, a paucity of information exists about post-depositional site formation processes associated with marine inundation. In this paper I explore two key questions relevant to twenty-first century eustatic sea level rise: What types of relevant underwater archaeological data currently exists for the Northwest Coast? What major data gaps currently exist and how could these various lines of evidence be used to enhance the success and efficiency of future cultural resource strategies? **Session 13.**

DARLA JACKSON (Hanford Cultural Resource Specialist, Nez Perce Tribe)
Native American Perspectives on Rock Art Jeopardy

Native American Tribes are struggling to maintain the protection and integrity of sacred sites in an encroaching world of development and public invasion. Many of these sites include rock images that are being threatened. Views of several tribal members who have been raised or lived around rock art sites have been recorded and are presented in order create a greater sensitivity and understanding for these sacred sites. Somewhere a resolve must be made as the Tribes try to find a balance between maintaining the sanctity of these sites and reconciling the inevitable development, and increased public use of formerly isolated sacred landscapes. **Session 15.**

SARAH L. JENKINS (Washington State University)
A Preliminary Report on the Analysis of the Faunal Remains Collected from Windust Cave C, 45FR46, by Harvey A. Rice during the 1959 to 1961 Excavations

Windust cave contains some of the most important temporally diagnostic projectile points for the Paleo-Indian period on the Columbia Plateau of North America. This collection contains faunal assemblages spanning from 9,000 years ago all the way to the historic period. The projectile points were compared to those found at other sites in the area to obtain a relative chronology for the cave. Despite the importance of the lithic assemblage as time-markers for some of the earliest human inhabitants in this region, very little is known about the associated faunal assemblage. A cultural sequence was established by Harvey Rice for the completion of his Masters thesis in 1965, which focused primarily on the lithics. Since Rice's report on the Windust Phase for the Lower Snake river in 1975, no additional analyses have been conducted on the materials. As my Thesis project, I am currently working on the analysis of the faunal assemblage from Windust Cave C. This paper will cover the species that have been identified, taphonomy, and the elements that are most prominent, from varying levels and units. This analysis represents about 15% of the total faunal assemblage, and provides a sample of what to expect from the entire collection. **Session 16.**

LINDA JEROFKE (Eastern Oregon University)
The Philosophy of Game Meat: Smart Choice in a World of Unhealthy Foods or Antiquated Practice Better Left to the Past

Life in rural United States has many endearing aspects, but none as controversial as hunting for large and small game. It is a way of life for many rural residents as well as enthusiasts from larger cities. Hunting is not only considered a sport—it is a way of life. Families look forward to hunting season and men, women and children participate in this long waited activity. The togetherness of hunting camp along with the promise of delicious game meat is very tempting and few people involved in this activity are willing to give it up. They insist that the meat is safer, cheaper, better tasting and healthier to eat due to low levels of fat. On the other side of the issue are people who abhor the practice of hunting and believe it to be a part of the past – a part that should be left behind. Opponents believe that hunting equates with abuse of animals, collection of trophy heads and antlers and that there should be a better way to manage game herds. This essay will present the philosophical arguments for and against hunting large and small game. **Session 23.**

SARAH JOHNSON (Samish Indian Nation) and DIANA BARG (Western Washington University)

A Locarno Beach Artifact Assemblage at Weaverling Spit, Anacortes Washington?

This analysis of the artifact assemblage from 45SK43, located on Weaverling Spit in Anacortes Washington, attempts to place the site in the established Northwest Coast chronology. As a result of construction activity in the area, a number of limited data recovery projects have been conducted in recent years. This site is atypical in that a small volume of material has been excavated, yet a large number of artifacts have been recovered. One radiocarbon date, obtained from the periphery of the site, yielded a date of 1080 ± 70 years BP. However, there is a strong correlation between this artifact assemblage and those typical of the Locarno Beach Phase ranging from 3300-2350 BP. The Weaverling Spit artifact assemblage includes quartz microblades, labrets, ground stone, abraders and a Gulf Island Complex object, all of which are characteristic of the Locarno Beach Phase. Further radiocarbon dating is needed to explain this discrepancy. **Session 11.**

ROBBIN JOHNSTON (Clearwater National Forest)

Fire and Volcanic Ash's Role in Altering a Landscape and Influencing the Human Dimensions Within: An Historic and Anthropological Perspective

Mazama Ash while viewed as a time indicator in the field of archaeology represents on the Clearwater National Forest an ecological catalyst for the spread of moisture dependant plant species. Prior to and after the arrival of Mazama Ash at 6,800 BP fires within the North Fork and Lochsa River drainages changed in intensity from mixed severity to stand replacing. Fires in the years of 1910, 1914, 1919 and 1934 changed plant successional stages that benefited ungulates. With the expansion of ungulates and the hunting economy in the 20th century a view is put forth concerning the process of vegetative change and fire that directly influence the spread of human communities after 6,800 BP within these drainages. While environmentally deterministic this discussion suggests that the presence of Mazama Ash was the catalyst that set in motion the scale of the changes which influenced early, and late plant secession stages which indirectly created the economy which affected the spread and movement of human communities in the prehistoric past within these drainages. **Session 6.**

ROBBIN JOHNSTON (Clearwater National Forest)

The Seasonal Round of the 20th Century: Mining, Logging and Farming

Prior to the Second World War families and family members on the Palouse moved over and occupied a variety of landscapes in order to acquire needed resources. Set within behaviors associated with people following a seasonal round those participating in the seasonal round include Indian and non Indian populations. While occupying and coexisting on similar landscapes the actions, behaviors and sought after resources of families interviewed were at times integrated and separate dependant upon group, family or individual associations and circumstances. **Session 6.**

JAE HUN JUNG (Washington State University)

Mother's Self and Desires: S. Korean Education Mothers and Homeschooling

The myth of social mobility through educational success captures most South Korean middle class parents. "Education fever" makes them invest more financial and psychological resources

in their children's education than ever. In such a social milieu, growing numbers of parents take their children out of the competitive school system. Christian belief and political resistance are other major driving forces. Homeschooling parents are discontented with the uniform school education and they feel desperation to save their children from a detrimental school environment and to provide them with better learning opportunities.

Mothers play a pivotal role in homeschooling: they organize curricula and supervise children's learning and time-management. The mothers' extended roles contribute to reconstructing mother-child relationships as well as to contesting the conventional Korean motherhood and femininity. Despite their burdensome responsibilities as a home educator, mothers are exhilarated by their homeschooling experiences, expecting that their pedagogic individualism and emphasis on autonomous learning will promote their children's intellectual independence and creativity. In this paper, I investigate the desires of/for mothers in home schools and how these desires become maternal commitment. I critically examine the popular myth of sacrificial motherhood, by which I erect maternal subjectivity and agency. I argue that homeschooling experiences reaffirm the mutuality between the mother and the child, which, in turn, contributes to a heightened mothers' gratification and a deepened maternal commitment. **Session 23.**

GRETCHEN KAEHLER (Historical Research Associates, Inc.)

Sake Bottles and Tea Bowls: Japanese Worker in a Northwest Logging Camp

Little information exists about the everyday life of Japanese workers in Northwest logging camps. Site 45TN264, currently located within the boundaries of Fort Lewis Military Reservation, Thurston County, Washington, may be the location of the Japanese section of a logging camp. Called "Jap Camp" by locals and non-Asian employees, this section of camp was the temporary home of Japanese employees of the Union Lumber Company (ULC). Artifacts recovered from Site 45TN264 have yielded information about this marginalized group including insights on dietary, social, and medical practices. **Session 10.**

KEN KARSMIZKI (Columbia Gorge Discovery Center)

Changing Landscape: Lewis and Clark's Rock Fort

Lewis and Clark's Rock Fort campsite appears to have been located at a site that is now within the urban area of the City of The Dalles. NASA analyst digitized maps drawn by Clark and superimposed the expedition on digital elevation models. The results were used to help define a target area for on-the-ground remote sensing and archaeological testing. The results also emphasized the kinds and extent of historic impacts the site and vicinity have undergone. This paper examines those impacts and specifically how they have compromised the cultural deposits, known and potential. **Session 20.**

DUSTIN KENNEDY, DENNIS L. JENKINS and PETER J. MEHRINGER (University of Oregon)

Archaeology and Geoarchaeology at Desert Field: Catlow Valley, Oregon

The UOs Northern Great Basin field school excavated at the Desert Field rockshelters, located in the Catlow Valley of southeastern Oregon, in 2006. This site was chosen for its potential to contain intact Late Pleistocene/Early Holocene cultural deposits and the possibility of prehistoric people utilizing the unique geomorphology of the area as a large game trap. Archaeological investigations in caves 3 and 4 of the site complex yielded a myriad of artifacts including

Northern Side notch, Elko, and Rose Spring projectile points, bifaces, scrapers, lithic debitage, bone, basketry, cordage, beads, and an arrow nock. The artifacts indicate the site was occupied during the Middle and Late Holocene. Radiocarbon dates range from 6530 to 1070 BP 14C; however some of these cultural deposits are lying directly on Pleistocene lake gravels, suggesting that possibly 6000 years of deposits have eroded from these caves. Stratigraphic evidence and obsidian studies (sourcing and hydration) provide data to address geoarchaeological issues. **Session 22.**

HEATHER KENNELLY and LOWELL EVANS (Central Washington University)
Zooarchaeology in the Upper Cowlitz Valley: A Faunal Analysis of Stump's (45LE401) and B-Squared (45LE292) Rockshelters

Faunal analysis is being conducted on archaeo-faunal assemblages from Stump's and B-Squared rockshelters. These rockshelters are located in the Gifford Pinchot National Forest. The research questions of this analysis are: 1) do the faunal remains exhibit evidence of cultural or non-cultural processes; and 2) how do the remains compare to regional rockshelter faunal assemblages, such as those recovered from Judd Peak and Layser Cave?

Stump's rockshelter is located SSE of Randle, Washington, in the Cispus River Drainage. The assemblage includes a large (n= 800) faunal assemblage associated with lithic debitage recovered from one shovel test and three one by one meter test units. B-Squared rockshelter is located six air miles NNW of Packwood, Washington, on Dixon Mountain. The assemblage includes a small amount of faunal remains recovered in association with a bifacial blank, a uniface, and lithic debitage.

The analysis of test units from Stump's rockshelter has begun with initial segregation of faunal remains into centimeter increment size classes. This is followed by utilization of Central Washington University's comparative collection to determine element, taxon, and/or size class identification. Next, results are entered on to faunal tabulation forms, which will then be entered into the CWU faunal analysis database.

Preliminary analysis indicates digestive pitting and edge rounding on bone fragments recovered from Stump's rockshelter. The digestive pitting may be indicative of these remains being non-cultural. **Session 11.**

DANA KOMEN (Eastern Washington University)
A Quiet Voice: The Search for Women's Presence at The Stemilt Creek Site, 45CH302

Although gender is one of the fundamental structuring principles for all human societies, it has not been common archaeological practice to integrate gender research with standard analytical methods. While recognizing the need for gendered archaeology, many archaeologists lack a practical approach for accomplishing this goal. The Stemilt Creek Site, 45CH302, provided the opportunity for a gendered analysis designed specifically to search for the presence of women's economic activities. First excavated in 1986 by Eastern Washington University, 45CH302 is a highly complex arrangement of filled house and outbuilding depressions, hearths, roasting ovens, pits and other feature types, located along the Columbia River near Wenatchee, Washington. This paper will present the results of a recent re-examination of artifacts, features, and raw materials from the Stemilt Creek Site, and examine their relationship with women's economic activities. The paper will conclude with a discussion of the usefulness of employing this type of

multi-dimensional approach in Plateau archaeological sites in the continued search for the presence of "The Invisible Woman." **Session 5.**

ROBERT KOPPERL (Northwest Archaeological Associates)

A wild past and a potentially inconvenient future: Dynamic Puget Basin shorelines as a point of inquiry and a methodological challenge.

Much recent attention has been paid by the general public to the prospects and causes of modern global climate change. Archaeologists working in the Puget Basin have been gathering data for decades that can address this issue. We are at a point where increased interdisciplinary communication with other local scientists can be combined with our efforts to synthesize archaeological data to make a real contribution. Not only can fine-scale data from geologic and fisheries sciences, for example, aid in our creation and testing of models of human shoreline settlement throughout the Holocene, but archaeological data are directly applicable to the problems these other fields examine that involve change over time. This paper introduces the symposium contributions by framing the issue of sea level and shoreline fluctuations in terms of a) reconstructing past changes in the Puget Basin shore, b) examining the ways in which the present shoreline and archaeological record may be vulnerable to short-term changes in sea level, and c) anticipating some of the ways that doing archaeology may change as we confront climate-driven landscape changes in the future. **Session 13.**

JULIE KRAMER (Idaho State University)

Early Relations on the Northwest Coast: A History of the Fur Trade to A.D. 1850

This paper will discuss the development and implications that the fur trade and its associated activities between Europeans and Native populations had on native cultures and the environment on the Northwest Coast. Main topics will include social changes in the frequency and intensity of intertribal warfare, natural resource use, and the growth of global-scale capitalism in Northwest North America. The fur trade was an international phenomenon that had an impact on riverine environments, cultural practices, and local faunal. It became a global phenomenon connecting producers in the New World to consumers in the Old World in beaver, seal, and most notably, here, in sea otter pelts to China. Contact trade created new opportunities in global-scale corporate development of companies such as Hudson Bay and the Northwest Company, and created new opportunities as well as changed and exacerbated Native models of social power and wealth. Indigenous populations were not action-less bystanders but participated in shaping and guiding changes in socio-cultural constructions. However, the balanced relation gave way to imbalance as natives became subordinate producers and increasingly relied on external trade for subsistence. **Session 3.**

JENNIFER KRAUSER and JESSICA LYNCH ALFARO (Washington State University)

*Non-reproductive mounting in wild black horned capuchin monkeys, *Cebus nigritus**

Early Darwinian models about reproductive strategies assumed that sexual behaviors could increase fitness only through direct reproductive benefits. However, on-going research on Old World monkeys, apes and humans has revealed that catarrhine primates engage in a variety of non-reproductive sexual behaviors across social contexts. Functional hypotheses for non-reproductive mounting include its use to reduce social tension, to reconcile after aggressive acts, and to build alliances. While non-reproductive sex is common in Old World primates, it is little studied in New World primates. Here behavioral data are analyzed from a group of wild black

horned capuchins (*Cebus nigrinus*) from Brazil to elucidate contexts of same-sex and female-on-male mounting behaviors during a 12-month period. For the group as a whole, mounting behavior was relatively infrequent, comprising about 0.13% of the activity budget. However, all age and sex classes participated in mounting behavior. Female-on-male mounts were most common during copulatory activity, in which two individuals would “take turns”, alternating between male-on-female and female-on-male mounts. Male-male mounts were seen in the most diverse social contexts, including: play, intergroup encounters, environmental threats, reunion displays, and within-group aggression. Relative dominance rank did not predict male roles as “mounter” or “mountee”. Female-female mounts also occurred in reunion and play contexts, at a low frequency, and females occasionally included thrusting behavior in their mounts, a typically male behavior in mammals. The flexibility in expression of capuchin monkey sexuality may be an important mechanism for maintaining both same-sex and across-sex social relationships throughout the life cycle. **Session 12B.**

KIM KWARSICK (Washington State University/ Olympic National Park)

What the Grind Left Behind: Palynological Investigations at 45-JE-216, A Stratified Rock Shelter in the Olympic Mountains

Shelter Rock, site 45-JE-216, located at 5,100ft in the Olympic Mountains of Washington State, was tested over the course of three field seasons during a compliance project by the National Park Service. Testing revealed a dense and stratified prehistoric lithic scatter unique to the subalpine region of these mountains and yielded an uncalibrated radiocarbon date of 1700 BP +/- 70 years. Pollen was extracted from seven ground stone artifacts including one large grinding slab and samples were identified to taxonomic species. While previous research has emphasized hunting as the main activity in the Olympic Subalpine, this study, however, shows plant gathering/processing may have been locally important in the Shelter Rock vicinity and suggests a broader spectrum of resource procurement activities in the Olympic Subalpine in general.

Session 1.

ELWYN C. LAPOINT (Eastern Washington University)

Primal Partonomy: The Persistence of a Vedic Mythological Motif

A recurring theme in the Sanskritic scriptures of India posits a structural parallel between anthropogenesis and cosmogenesis. First articulated in the hymns of the ancient Vedas, the theme also appears in Sanskrit classics of more recent times. Though the narrative and ritual context of this structural homology may shift, the theme itself persists as a powerful expression of pantheism. Due to the continuing importance of pantheism in Indian religion, the symbolic equation of human microcosm and universal macrocosm retains its theological relevance throughout the history of Hinduism. **Session 9.**

PHILIPPE D. LETOURNEAU (BOAS, Inc.)

Progress Report on Results of 2005 Excavations at 45KI703 on the Duwamish River, Washington

45KI703 is a well-preserved, stratified, late prehistoric site on the bank of the Duwamish River in Tukwila. The site consists of a sequence of fine-grained alluvial sediments with three stratigraphically discrete units containing dense deposits of fire-modified rock, charcoal, and burned fish, mammal bone, and bird bone. Geoarchaeological, pollen, paleobotanical, faunal, lithic, and protein residue analyses are complete. Eleven AMS dates on the lower two

occupations document a main occupation about 580 years ago and at least one earlier, smaller, occupation about 850 years ago. At least nine separate taxa of fish, four of birds, and eight of mammals were identified. Plant remains are dominated by wood and bark, presumably largely fuel remains; food plant remains are conspicuously lacking. Pollen preservation was relatively good. The pollen record yielded evidence of the presence of a wide variety of trees, shrubs, forbs, grasses, sedges, and cattail growing in the vicinity of the Duwamish River throughout the time period represented. Protein residue analysis identified proteins from mammals, birds, and plants. Lithic artifacts were primarily the product of generalized core reduction, with some bipolar and bifacial reduction, and include a tool assemblage dominated by unifacial scrapers. The site shares some similarities with others nearby, but is quite different in other respects. **Session 22.**

JORDAN LEVY (Eastern Washington University)
The Second Generation of Peruvian Immigrants in Santiago, Chile

Chile, one of the wealthiest Andean nations, has in recent years received an increased level of immigration from its neighboring states, Peru being by far the largest contributor. Following a world-wide trend in immigration, women compose the majority of people leaving Peru in search of work in Santiago. Their children, born in either Peru or Chile, make up the second generation of Peruvian immigrants. This project focuses on innovative approaches to promote the acculturation that the children of Peruvian immigrants go through in adapting to Chilean society; these approaches also facilitate further understanding within Santiago of Peruvian culture. Drawing on information gathered from participant observation with an organization dedicated to uniting children of immigrants and Chilean youth, this paper will discuss the struggles and benefits that the second generation of Peruvian immigrants experience while living in one of the more impoverished areas of the city. The organization holds weekly planning meetings and facilitates events such as educational excursions and pleasurable activities designed to promote intercultural exchange between Chilean children, the children of Peruvian immigrants, and those of other immigrants from neighboring countries in a barrio in Santiago. Through the means of this organization, the children of immigrants and Chilean youth are able to share experiences and get to know each other on a friendly basis. This type of intercultural exchange, happening at such a young age, is expected to promote understanding between these two culture and ethnic groups and decrease xenophobia and ethnocentric perceptions. This exchange is interesting as a contemporary example of a nation-state accommodating a minority group and as an innovative model for multi-ethnic communities elsewhere. **Session 17.**

DENNIS LEWARCH (Suquamish Tribe)
Implications of Holocene Sea Level Elevation in Puget Sound and the Gulf of Georgia for Archaeological Landscape Studies

Samples from more than 20 localities document sea level elevation in Puget Sound and the Gulf of Georgia during the Holocene. Rising sea level over the past 11,000 years inundated or eroded portions of the marine littoral archaeological record, affecting archaeological interpretations of subsistence-settlement patterns. Examples from central Puget Sound demonstrate how archaeological landscape studies are enhanced by estimating sea level elevation and positions of former shorelines. Topics include archaeological resource probability estimates in littoral, lacustrine, and riverine settings, taphonomic processes affecting preservation of archaeological deposits, and probable effects of future sea level rise on the archaeological record. **Session 13.**

JAMIE LITZKOW (Eastern Washington University)

An Analysis of Mandibular Molar Occlusal Size Progression Patterns in Three Species of Australopithecus

The study of hominid evolution remains a dynamic field of inquiry. While trends in recent research have focused on the genetic basis of evolution, traits that may contribute to classification of early hominid species derived from morphological analysis remain uninvestigated. This research examines one of those traits by analyzing in situ mandibular M1-M3 samples currently assigned to the species *Australopithecus anamensis*, *A. afarensis* and *A. africanus*. The purpose of this analysis is to determine if there are characteristic patterns present in mandibular molar occlusal surface size progression/regression that could be used to distinguish each species and whether as a result some individual specimens can be seen as anomalous in the context of their current taxonomic group. The existence of these anomalies may or may not be significant in re-evaluating the current classification of a specimen, but at a minimum, the consistency of a progression pattern in the majority of specimens assigned to each of the three species would indicate that this trait is a useful component to include in the species' description. By exploring the occurrence of variation in molar occlusal surface size sequence present within each of several widely accepted classification groups, this research suggests a potentially useful approach in morphological analysis of early hominid specimens. **Session 21.**

GERMAN LOFFLER (Washington State University)

The Turchin-Korotayev model for Population Dynamics and Internal Warfare in the north Northwest Coast: a Tlingit Case

It is often argued that increasing population pressure leads to increasing social instability. Turchin and Korotayev propose that population and warfare are dynamical variables. They propose a model to predict internal warfare and population patterns in small-scale stateless societies with negligible immigration or emigration factors. The models they propose have two state variables: "N," the population density, and "W," the warfare intensity. In the models a high value of warfare intensity decimates the population and leads to a rapid decline of warfare. The pattern that emerges is population peaks followed by warfare peaks which drive population densities down that in turn drive warfare down. In this paper, I apply the Turchin-Korotayev models to a north Northwest Coast, culture area – the Tlingit – from 0 ACE to 1850 ACE. Overall, the model predicts the data well with population peaks followed warfare peaks in similar period but out of phase – as is expected. The phase-plot diagram models the data counterclockwise and returning to an equilibrium point, also like expected. Lastly a linear regression of lagged population (50 years) to warfare intensity has a statistically significant fit, also much as expected. Future and ongoing work will attempt to add resolution to this preliminary analysis. **Session 5.**

GERMAN LOFFLER (Washington State University)

Sauvie Island Lithic Analysis—Comparisons of Blade-like-flake tools with those from Qwu?gwes

Microware analysis—with the aid of an electron microscope—on blade-like-flake tools from Sauvie Island (35MU4) near Portland, Oregon are juxtaposed with those from the Qwu?gwes waterlogged (wet) site (45TN240), on Mud Bay, near Olympia, Washington to compare possible similarities of these blade-like-flake tools function from both sites. The microscopy analysis identifies signature wear characteristics of specific activities on the flake tools for what seems to

be wood and fiber artifact production. Three microware attributes on the tools are observed and used in a discriminate function analysis to designate the “activity-life” of blade-like-flake tools at both sites. From the analysis emerges a high likelihood that at both Sunken Village and Qwu?gwes, the blade-like-flake tools were used in similar “cutting” and “scraping” activities.
Session 4B.

PATRICK M. LUBINSKI, JAKE T. SHAPLEY (Central Washington University), BAX R. BARTON (Central Washington University/Burke Museum), KARL LILLQUIST, and MORRIS UEBELACKER (Central Washington University)
Results of Two Seasons of Excavation at the Wenas Creek Mammoth Site near Selah, Washington

A second season of investigations of the locale where mammoth remains were found in 2005 has revealed a more complex site than initially suspected, with additional faunal species and a human artifact. The site is located on a hillside above Wenas Creek, a tributary of the Yakima River, in central Washington. First discovered during road construction, the locale has now been subject of two seasons of excavations by Central Washington University students and faculty. In the first two seasons, we have exposed near-complete and fragmentary remains of left and right mammoth humeri, and a number of mammoth-sized elements (scapula, metapodial, phalanx, and vertebrae). Within the same stratum and closely associated with the mammoth bones we recovered a left metatarsal cannon bone and left fused 2nd/3rd tarsal from a bovid, probably a bison. A single human artifact, a cryptocrystalline flake, was recovered about 15 cm above one of the mammoth bones. We do not believe it to be associated with the mammoth, although this is still under investigation. Four bone samples were submitted to three laboratories for radiocarbon dating; three from the mammoth left humerus, and one from the bovid metatarsal. These have returned three plausible age estimates. When taken in conjunction with two infrared-stimulated luminescence dates on sediment adjacent to the right humerus, ages of about 13,000-14,000 RCYBP or 15,500-17,000 CALYBP are inferred for both the mammoth and bovid.
Session 16.

MISTY LUMINAIS (Washington State University)
Hair, Here and There: A Comparison of Hairstyling Practices in the United States and Belize

Almost everyone has hair. It can be valued as a status marker or seen as a form of pollution. Many social scientists since Freud have analyzed hair as a symbolic marker of the intersection between public and private. Although much attention has been given to hair as a symbol, much of the anthropological literature has ignored how the act of hairstyling promotes or deters communitas. In Belize, many women style one another's hair as a social act. In the United States, hairstyling practices are often confined to the salon and follow a “for purchase” model. I will discuss how the distinctions between public and private are blurred in both Belize and the United States. As Belize becomes more enmeshed with global market forces, salons modeled on the “for purchase” style found in the United States have been introduced. Beauty as a commodity follows the introduction of a capitalist market. Hair practices that are purchased often hold more prestige than those done at home or by friends. Interestingly, the types of women-centered spaces that some feminists in the United States long for can be found among the women in Belize. However, this may be partially a function of poverty and the inability to afford purchased hairstyling. The closeness that occurs among women in Belize doing friends' hair is replaced by the “emotional labor” performed by paid hairstylists in the United States. One can also see the model of “emotional labor” becoming more prevalent in Belize as women

go to the salon more often or practice traditional hairstyles, such as plaiting, on tourists. Hairstyling practices can be examined to further understand the commodification of beauty and the blurring of the public and private domains. **Session 17.**

KAREN D. LUPO (Washington State University)
Dietary Intensification and the Archeological Record

Resource intensification among prehistoric hunters-gatherers is often viewed as a marker of resource depression resulting from prey over-exploitation. When viewed within the context of NeoDarwinian foraging models, resource intensification resulting from prey overexploitation often accompanies a shift towards lower-ranked resources and declining foraging efficiency. Many nominate resource intensification as one of a constellation of conditions associated with the rise of social, political and technological complexity among hunter-gatherers and as a catalyst for declining health and fertility, increased interpersonal violence and major changes in life history. Identification of resource intensification in the archaeological record usually relies on several different lines of evidence. I evaluate key zooarchaeological markers of resource intensification using ethnoarchaeological data from forest foragers in the Central African Republic. In this example, I contrast two different populations of foragers who are small game specialists, but occupy different forest zones. One zone has undergone significant prey depletion while the other is game-rich. Data from these two populations show that increased diet breadth as measured by evenness, but not taxonomic richness, reflects differences in the availability of high-ranked prey. Differences in the range of prey exploited by these two populations are, however, manifested at a finer scale of resolution. These results suggest that gross comparisons of prey richness cannot be used to monitor changes in resource intensification, especially in habitats characterized by high prey diversity. **Session 12A.**

JESSICA LYNCH ALFARO and MEREDITH SCHULTE (Washington State University)
Linking social learning and brain size in a comparative evolutionary framework

In order to frame social learning in an evolutionary context, we outline a new heuristic model for the evolution of brain size. This model predicts when natural selection would favor an increase in learning and memory abilities in a given environment, by comparing the effect of the learned behavior on inclusive fitness in this environment to the increase in “operating costs” of neurological machinery. Implications stemming from this model are compared to previous hypotheses about brain size evolution, many of which have been based largely on positive correlations found in empirical data. Our central argument is that social learning abilities should evolve only when they “pay for themselves”—so that different types of learning and concomitant size and specialization of neural matter will evolve in different conditions. An implication is that given identical ecological circumstances and equal individual fitness benefit from social acquisition of a particular behavior, increased learning abilities will be more likely to evolve in: 1) organisms that transfer more information to kin, either through increased time spent in social contact, increased efficiency of information transfer, increased longevity, and/or increased kin network; 2) organisms with a higher overall energetic input or more efficient energy storage, because incremental cost of brain size increase will be proportionally smaller compared to overall energetic budget; and 3) organisms that invest relatively little energetic output in growth and reproduction through time, as these strategies decrease maximum non-maintenance energy use throughout life history. Brain size and social learning capacities may evolve differently for each sex in sexually dimorphic species; and learning abilities will always carry higher fitness value when information can be passed on to kin, so that *individual* learning abilities may not be

“worth” evolving in solitary species even if social species evolve both individual and social learning skills in similar ecological conditions. **Session 12B.**

WILLIAM H. LYONS (Earth Materials Laboratory)

Error and Acceptance in Raw Material Source Assignments

Set theory can approach raw material sources and their analyzed samples as sets within multiple universes—sets to which an artifact may belong with some estimated probability. The likelihood a source designation for an artifact is wrong is the sum of statistical and counting error within the analyzed universe, plus the effect of untested sources within human range of the recovery site. Accuracy reflects how completely all sources are known, and precision considers enough attributes (usually trace elements) and an equal number of specimens to separate source sets within an analyzed universe. As a universe becomes crowded with sources, precision has to increase. No region is completely sampled, thus source attributions are useful when the analyst shows acceptable control of all the errors. **Session 5.**

DOUGLAS H. MACDONALD (University of Montana)

Interstate Variation in Cultural Resource Management, Law, and Application in the United States

Within the United States, federal laws demand fairly uniform cultural resource management across state and commonwealth boundaries; however, significant variation exists in two key areas: 1) each state’s treatment of traditional cultural properties; and 2) each state’s own cultural resource laws. For federal undertakings requiring NHPA compliance, archaeological sites and historic structures are considered similarly in all 50 states; however, the treatment of traditional cultural properties (TCPs) varies dramatically by region. This paper evaluates cultural resource management across the 50 United States with a focus on the two key differences, TCPs and state laws. **Session 7.**

SHANE J. MACFARLAN (Washington State University)

How a Resource Can Have Utility Once Satiated

One question in the evolutionary anthropological literature that remains elusive is: does one mechanism have primal importance to explain resource transfers. Three mechanisms identified to explain resource transfers include (but are not limited to): inclusive fitness, reciprocal altruism, and tolerated theft. These mechanisms have been treated as mutually exclusive; however, it may be more useful to conceive of them as independent variables within a multivariate framework. Considered simultaneously, it is possible that some resource transfers are an owner’s attempt to maximize the utility of a resource characterized by a diminishing marginal utility through preferential access via close kin and close allies. This paper will: 1) review each mechanism; 2) provide a synthetic model of inclusive fitness, reciprocal altruism, and tolerated theft; 3) discuss how the synthetic model can reconcile contradictory explanations of resource transfers witnessed in the ethnographic record; 4) demonstrate how the synthetic model allows for an other regarding utility to be evolutionary viable; and 5) offer predictions for future research. **Session 12A.**

CHERYL MACK (USDA Forest Service)***Hook Tenders and Rigging Rustlers - Uncovering the Remains of Wind River Lumber Company's Camp 3***

A proposal to remove a 1930's-era dam on the grounds of a Forest Service administrative site prompted the need for data recovery investigations into remains of an even earlier dam and associated lumber camp at the site. The Wind River Lumber Company built a splash dam and logging camp at Camp 3 in 1903, and continued to occupy the site until 1910. The camp was then occupied by the Forest Service and developed into a Ranger Station compound, tree nursery, and Civilian Conservation Corps Camp, and the log splash dam was replaced with a concrete dam used for power generation. In spite of nearly a century of development at the site, a surprising array of historic artifacts and features relating to the lumber camp were recovered. Aside from providing insight into the lives of the people who labored at this camp in the early 1900's, the results of our investigation emphasize the importance and potential information value of "highly disturbed" sites. **Session 10.**

JOANNE MACK (University of Notre Dame)***Two Upland Sites Above the Klamath River, Southern Cascades***

Two sites located on the side of the collapsed caldera of Secret Spring Mountain are situated just above several villages sites along the Klamath River, near the California-Oregon border. Both sites are rather shallow, but testing has recovered evidence of their use and occupation from approximately 5000 BCE to AD 1850. The artifact assemblage indicates cultural linkages primarily with the Upper Klamath River cultures in northern California and southwest Oregon, rather than the cultures of the Klamath Basin. **Session 22.**

AMELIA AM MARCHAND (Confederated Tribes of the Colville Reservation)***Portraits of Guidance: Early Images of Traditional Leaders of the Twelve Tribes of the Colville Reservation***

This presentation showcases early twentieth-century photographs of various traditional leaders of the Confederated Tribes of the Colville Reservation (CCT). The CCT is comprised of twelve culturally and linguistically diverse Tribes whose territories extend into all of eastern Washington, southern British Columbia, northeastern Oregon and central Idaho. Discussion will briefly focus on the interpretation of the term "chief" and its use, as well as brief accounts of each of the Tribal leaders whose portrait is being showcased. **Session 14.**

JACQUELINE MARCOTTE (Portland State University)***Submerged Cultural Resources and the Community: Working Together Toward Protection and Preservation***

A re-survey of the Hudson's Bay Company (HBC) waterfront, located on the lower Columbia River at Fort Vancouver National Historic Reserve, aids in the archaeological Site Condition Assessment by evaluating impacts on the site from natural and cultural factors. The waterfront has three *submerged* sites: the Benoit Observation, a historic site from the U.S. Army occupation; the Quartermaster East, a combination of HBC and U.S. Army era artifacts; and a Pre-Contact site that has yet to be investigated. The scope of the research includes: (1) setting up an underwater grid; (2) recording of historical and Pre-Contact artifacts and features; (3) spatial analysis of artifacts; and (4) determination of the Quartermaster East site location with Global

Positioning System (GPS) technology. Aside from assisting the National Park's Site Condition Assessment, this survey brings together local divers and archaeologists in a collaborative effort toward fostering awareness of our non-renewable historic resources, preserving and protecting submerged archaeological sites, and reducing the damage done by looters. **Session 1.**

BETHANY MATHEWS (South Puget Sound Community College)

The Acorn Pits of Sauvie Island: Macroflora analysis, comparison of regional acorn use, and population size estimate

Acorns are known to have been a staple food in parts of North America, but little is known about the processing and use of acorns in the Pacific Northwest. The acorn-leaching pits on Sauvie Island, Oregon are evidence that acorns may have been a significant part of the diet of that region. Examining pit construction and content provide a measurement of what this food represented economically to the population living at this site. Estimates of population size based on data collected from these pits suggest that this resource was capable of supporting a community as a staple food, or when used more moderately it is possible acorns were traded to other communities. The ideal location of these pits on the Multnomah Channel slough indicates that the population living at or near this site was accustomed to the process of passive leaching. Guided by ethnographic information on acorn harvest, processing, and use, research on the acorn-leaching pits of Sauvie Island indicates how important this little-known food source could have been to past peoples of the Pacific Northwest. **Session 4A.**

DARIN MCDUGALL (Washington State University)

Paste Color Analysis at Cerro Pomo Pueblo

Cerro Pomo Pueblo is located in west-central New Mexico, south of Zuni but north of the Mogollon rim. It was occupied during the Pueblo II period and appears to be a Chacoan Architectural Complex. Yet its location at the southern border between the Anasazi and Mogollon cultural groups places Cerro Pomo in an interesting context. Due to its location, two distinct cultural traditions are present at Cerro Pomo in the form of ceramics. In order to further look at the identities and cultural backgrounds of the inhabitants of Cerro Pomo, paste color was analyzed. Paste Color analysis suggests that there was a variety of clay sources near Cerro Pomo and that all ceramic types present at Cerro Pomo can be made from multiple clay sources. **Session 24.**

ROBERT MCKINNON WILKES (Washington State University)

Fitness-consuming consumption: The costliness of bogus fitness display

Status-display competition in the industrialized world often takes the form of consuming conspicuous prestige-indicating purchases. However, these costly purchases may not contribute to reproductive success as has been observed in prior research on other types of costly signaling in other societal contexts. A research paper is proposed that would investigate the relationship between consumption of status-indicating purchases and individuals' reproductive capital, especially in the context of widely-available consumer credit in the industrialized US. In addition, this paper makes a theoretical contribution by adding a fifth type of capital, reproductive capital, to Bourdieu's four-class typology of capital. **Session 12A.**

GEORGE R. MEAD (E-Cat Worlds)
Polyamory: A Look at Social Polygamy

Polyamory is a fairly recent new form of family structure as of yet unreported in any of the Social Science literature. This lack of awareness may stem from a lack of adequate terminology to describe the new and unusual. **Session 23.**

DANIEL MEATTE (Washington State Parks)
Fishing for Birds: Mist Nets in Puget Sound

Mist Nets are long, narrow mesh nets suspended from tall poles strategically located on the landscape to capture waterfowl. At contact times, early explorers noted numerous tribes employing mist nets throughout the Puget Sound region. Descriptions from these accounts and later ethnographic studies are reviewed to explain the construction and operation of these nets. Available data indicate ducks and geese were the most sought-after species, though lesser species were also harvested. The overall role of fowling products in the native economy is explored. **Session 28.**

CAROLYNNE MERRELL (Archaeographics)
Rock Art in Jeopardy

Pictograph and petroglyph sites have always held an attraction and fascination for people throughout the world. While most respect these sacred sites there are others who have damaged and abused the rock art and surrounding location, either willfully or out of ignorance. Some sites are deteriorating through natural or human generated environmental changes. Although these issues have always concerned those seeking to preserve and protect pictographs and petroglyphs, recent years have brought a marked increase in damage to these sites. With an increase in commercial/residential land development, recreational activities, and environmental problems, rock art sites are becoming increasingly vulnerable to those who are not sensitive to, or are unaware of the pictographs and petroglyphs. Papers in this session will address some of these issues, and describe proactive stances being taken by land managers, tribal agencies and others to effectively protect and preserve this irreplaceable legacy from the past. **Session 15.**

JONATHAN MEYER (Confederated Tribes of the Colville Reservation)
Speaking for Ourselves: A Look at Mining and Political Power on the Colville Reservation and Beyond

Mining practices indisputably impacted the tribes now residing on the Colville Reservation. Mining served as an impetus for non-Native American settlers into the region, spurring the creation of reservations whose borders were dictated by mining interests. Later, prospectors entered the Reservation itself, leaving an enduring mark on the landscape that is clearly visible in the archaeological record. Today, the Colville Confederated Tribes still find themselves involved with mining issues. Whether it be struggles with pollution of tribal resources due to mines, protecting cultural sites against mining enterprises, or evaluating the costs and benefits of new mining ventures on the Colville Reservation. This paper briefly explores the political environment that originally permitted mining in the Pacific Northwest and compares it to that of today. Particular emphasis is paid to the evolution of the decision-making power of Colville tribal members regarding their land versus that of other residents of the United States. **Session 14.**

CHRISTIAN MISS (Northwest Archaeological Associates)***Thinking about the future along with the past***

Our purpose in organizing this session was to begin gathering practitioners of archaeology in the Puget Basin and to have them present work that addresses past, present, and future climate-driven shoreline change. We hoped for two results: first, to bring together data and models that contribute to the synthesis of regional prehistory in a way that is more than a tag-on or footnote to discussions of the Northwest Coast culture area; and second, to begin dealing with the challenge of preserving information for the future. This paper elaborates on these two expectations and suggests possible next steps, fanciful and far-reaching as well as pragmatic and possible. **Session 13.**

CORAL MOSER and PAUL SANTARONE (Idaho State University)***Preliminary Technical Analysis of the Buried Beach Site***

In the summer of 2006 the Idaho State University fieldschool, in cooperation with the State Historic Preservation Office and the Idaho Department of Parks and Recreation, conducted test excavations at Castle Rock, Cassia County, Idaho. These excavations revealed intact cultural deposits extending nearly two meters below the current ground surface, with historic, prehistoric and paleoindian components. The early lithic assemblage indicates that this site was used as a toolstone procurement locale for the acquisition of local quartzites. The artifact assemblage shows a formalized blade technology being imposed on these local materials. Large bifacial reduction is also evident. This paper discusses the extent of the work at the site, the results of a preliminary technological analysis of the lithic assemblage and the plans of for future work in the area. **Session 22.**

MERIS MULLALEY (Portland State University)***Integrating Evidence for a Multitude of Peoples: Using Multiple Lines of Data at the Fort Vancouver Employee Village***

Fort Vancouver's 1825-1860 employee village has been the subject of archaeological explorations since 1968. The most recent project, carried out in 2001-2003 as part of the Public Archaeology Field School held by National Park Service, Portland State University, and Washington State University, used 50x50 cm shovel tests, larger excavation units and remote sensing to obtain more information about the dimensions of the village and the community itself. The remote sensing techniques included magnetometry and ground-penetrating radar, and were conducted each year as part of a demonstration for the field school and a 2002 National Park Service workshop. This paper presents an analysis integrating the remote sensing data with the excavation results to help clarify the layout of the village and provide more meaningful patterns in our interpretations of these datasets. This information will help guide future archaeological projects in the village. **Session 1.**

MINORI MURAMOTO (Central Washington University)***The Robber's Roost Site (45KT800) Historic Glass Analysis***

The Robber's Roost Site (45KT800) is a historic archaeological site located in downtown Ellensburg, Washington. This site was where the first European American settlers came and established a trading post in Ellensburg in 1870. This site was excavated in 1986 and 1988, but never analyzed. The goals of this undergraduate research project are to analyze a sample of the

historic glass artifacts in order to determine: 1) the minimum number of vessels, 2) what functional types of glass were found, 3) what technology was used, 4) where and when the glass was made, and 5) the date of the historic component of this site. A total of 982 specimens were examined, representing a minimum of 468 separate vessels from the sample. The vessel functions were medicine, alcohol, beverage, and condiment bottles, as well as dining ware, such as dishes, bowls and tumblers, unknown jars, and household bottles, such as toiletry and ink-bottles. This site was used by saloons and restaurants. Two Ellensburg druggist bottles, D. O. Woodworth and Harry S. Elwood, were dated from 1889 to 1939. Heinz's horseradish and catsup condiment bottles were found. Lea & Perrins' Worcestershire sauce bottle closures were found dating about 1880. Over two-thirds of the vessels were manufactured in Eastern states, especially Illinois. The Owens-Illinois Corporation made at least 21 vessels. The oldest vessel, a case gin bottle, was made sometime before the early 1870s. Manufacturing technologies were either mold-blown or machine-made. No free-blown bottles were found in the sample. Based on the glass analysis, the historic component in the site dates from about 1870 to 1970. **Session 11.**

NOLA NAHIRNICK, (Independent) and JASON CHANNEL (South Puget Sound Community College)

Beyond the Obvious: The Role of Bitter Cherry on the Northwest Coast

Through wet sites, ethnographic research and replication we explore the role of *Prunus emarginata*, "Bitter Cherry", by ancient Northwest Coast Peoples. Recent data from the Sauvie Island and Q^wu?g^wes Archaeological wet sites is presented along with an overview of recorded instances of bitter cherry use in other Northwest Coast wet sites. A parallel is drawn between ethnographic uses of bitter cherry and how it appears to be used in the archaeological record. At the Sauvie Island site, 35MU4, 21 small fragments were uncovered. Comparative measurements will be discussed from the 9 existing wet sites, dating to as early as 3,000 BP.

Bitter Cherry is indigenous to North America. The First Nation people used the bark of the tree as a binding tool, as well as for medicine, basketry, and as a fuel source. Cherry bark is resistant to decay, it doesn't expand or contract when moving from wet to dry. Fresh bark is slight elastic, making it a superior binding material. When whipped for making tools, it makes a smooth union. With ancient wet site contexts, ethnographic studies and experimentation we explore the long-term use of this product. **Session 4B.**

LYLE NAKONECHNY (Washington State University)

Direct and Indirect Effects of the School Fire, Umatilla National Forest, Washington

The 2005 School Fire burned nearly fifty thousand acres within Southeast Washington's Columbia and Garfield Counties. The Umatilla National Forest's School Fire archaeological survey recorded fire-related natural and cultural processes that have the potential to alter or disturb archaeological deposits and artifacts within a burned forest environment. The poster outlines some direct and indirect effects of the School Fire on cultural resources in order to illustrate how significant "pyroturbation" can be to archaeological site formation. **Session 11.**

LYLE NAKONECHNY (Washington State University)

The Willapa Holocene Project

The Willapa Holocene Project poster presents geomorphic and GIS predictive modeling research that was produced to facilitate the process of locating early Northwest Coast archaeological

assemblages. The goal of the Willapa Holocene Project is to identify late Pleistocene to middle Holocene archaeological materials and contexts in Washington State's southern Willapa Bay region. Modern bathymetric and deposition data for the Columbia River Littoral Cell is used to illustrate the rising post-glacial Holocene Pacific Ocean shoreline and its relationships to known archaeological sites and preserved early landforms. Additionally, the inductive weights of evidence GIS predictive model is used to produce regional archaeological predictive maps, and learn about prehistoric landscape use. **Session 11.**

OLIVIA NESS, DALE CROES (South Puget Sound Community College), ROBERT KENTTA, BUD LANE (Siletz tribe), and PATRICIA COURTNEY GOLD (Wasco, Warm Springs tribe)

Analyzing the Sauvie Basketry, Basketry Waste Materials and Experimental Archaeology

The Sauvie Island wet site is well known for its unique and well made basketry items. In our limited two week excavation and surface mapping of the site, we found some excellent examples of typical (from collector's examples) cross-warp twined, cedar root "acorn" baskets, cedar bark checker weave matting, shredded cedar bark edging from a fine gauge cape/skirt, and woven braid and twisted cordage. From limited observations of collector basketry and those from our controlled excavations, preliminary cladistic analyses reflect the distinction and, no doubt, cultural uniqueness of Sauvie Island basketry styles on the Northwest Coast. Limited basketry waste element discard at the site, compared to the abundance at Qwu?gwes wet site in Puget Sound, indicates that basketry construction was not a major activity at this actual location. Replication of the basketry provides good insights on how these examples were constructed, used and fit into the cultural practices of the ancient Chinookans. Current observations by Master Basket weavers, Bud Lane and Robert Kentta (Siletz) and Patricia Courtney Gold (Wasco, Warm Springs) provide technical and functional definition to these ancient basketry items. **Session 4A.**

SARAH NEITZEL, JESSICA LYNCH-ALFARO (Washington State University), G. GUTIERREZ-ESPELETA (University of Costa Rica), and M.E. ALFARO (Washington State University)

Patterns of cultural and genetic diversity in Cebus capucinus within western Costa Rica

Recent examinations of social traditions in capuchin monkeys in Costa Rica have revealed considerable cross-site variation in foraging strategy, vocal communication and social behaviors. However, until now, there has been little assessment of how patterns of genetic diversity might correlate with such cultural variability. *Cebus capucinus* within Costa Rica provide an interesting framework for a meta-analysis of previous behavioral data and a phylogeographic analysis. We sampled skin, blood or hair from 74 individuals from the western provinces of Puntarenas, Alajuela and Guanacaste. We sequenced mtDNA fragments of genes 12s (328 bp), cytb (346 bp) and dLoop (321 bp) to determine genetic differences between populations, and constructed a haplotype network to compare genetic and geographic distance. Our preliminary results show genetic structuring across geography in the *Cebus* samples, with a clear separation between northern and southern populations in Costa Rica. Known behavioral variation is compared to the genetic results from our study. **Session 12A.**

ALEXANDER J. S. NEW (University of Idaho)
Unified by Belief: the Cataldo Mission of the Sacred Heart

The Mission of the Sacred Heart, the oldest extant building in Idaho, has a colorful history beginning with the territorial settlement period and continuing through present day. Recently the Mission has been restored as recognition of its role in Idaho's history has grown. The Jesuits were among the first Europeans to settle in Northern Idaho, the artifacts left behind develop a story of the early Euro-American life with Native Americans deep in the wooded forests of Idaho. An analysis of the glass, ceramics, and bone will be presented to generate a more informed understanding of the Mission and the surrounding society. **Session 25.**

CHRISTOPHER NOLL, WILLIAM ANDREFSKY, JR., and JOHN JONES (Washington State University)
Environmental Context of the Northern Great Basin Late Archaic Period: The View From Birch Creek (35ML181)

The Late Archaic Period of the Owyhee River Canyon is not as well understood given the lack of excavated sites in this area. We do know that other areas of the Northern Great Basin are believed to have undergone a migration or invasion of people with a new and different lifeway and subsistence economy than previous people. Several researchers have found evidence which indicates that there was a long dry climatic period beginning roughly 2000 years ago which may have influenced the change in adaptive strategies. The Birch Creek site (35ML181) on the Owyhee River in southeast Oregon contains a recently excavated well preserved Late Archaic component. Pollen samples from the 2006 excavation of this component indicate that the occupants of this site experienced a relatively dry period similar to other areas of the Great Basin at this time. The new evidence from Birch Creek will help researchers understand the range, intensity, and pace that people in the Great Basin adjusted to changes in environmental productivity. **Session 11.**

JARED NORMAN and ROBERT LEE SAPPINGTON (University of Idaho)
Data Recovery Results from the Harpers Bend Site, Clearwater River Region, North Central Idaho

The University of Idaho conducted a field school at the Harpers Bend site (10NP463) in summer 2006 in response to the proposed development of a recreation area by the Bureau of Land Management. Excavation was limited to the area to be disturbed by subsurface construction with most of the site to be preserved or capped by a parking area. Seventeen contiguous 1 x 1 m were excavated to depths of 2.7 m bs where cultural material terminated. Nine historic and prehistoric features were encountered. Three radiocarbon assays ranging from ca. 3000 to 200 BP were obtained. Ten obsidian samples were correlated to Timber Butte in southwestern Idaho and to two sources in eastern Oregon. Results from protein residue analysis for 20 lithic tools are pending. Based on faunal remains, lithic tools, the absence of housepits, and other data, Harpers Bend appears to have used intermittently as a campsite for the past several thousand years. **Session 16.**

ANNIE OAKES (Eastern Washington University)

Quilts (and Quilters) of the Palouse

Palouse quilters of an earlier era used fabric scraps and feedsacks to make works of art that served as humble bedcoverings. Modern quilters are still predominantly female, come from all walks of life, and tend not to think of themselves as "artists." Often inspired by Palouse landscapes and seasonal changes, quilters combine traditional patterns with modern technology and materials despite "competition" from cheaper, ready-made imports from Asia retailed by large US department stores. Inheriting a quilt can be a mixed blessing, and quilt preservation is at odds with quilt restoration. Fabrics from the 19th and 20th centuries can disintegrate from 21st century treatments. The presentation will show representative examples of Palouse quilts and discuss preservation decisions and methods. **Session 23.**

HALEY PAUL (Washington State University)

Perspectives on Progress: What the History of Anthropological Theory Can Offer

In order to better understand what changes will be needed to make global capitalism a viable socio-cultural system, this paper reviews the relevant theories of several historically- prominent social scientists: Lewis Henry Morgan; Herbert Spencer; Max Weber; Margaret Mead; Paul Radin; and Bronislaw Malinowski. Although they represent widely divergent perspectives, these theorists offer us a chance to challenge the traditional meaning of progress, and suggest how the scale of cultural change may be a determinant factor in framing the global sustainability debate and growth oriented socio-cultural development. **Session 3.**

PHILIP PEDACK, MICHAEL MARTIN (South Puget Sound Community College), and DAVID W. COX (Archaeological Investigations Northwest)

Mapping the Sauvie Site and Numerous in situ Acorn Leaching Pits and Wooden Stakes

The Sauvie Island, Sunken Village mapping project is a joint effort by Archaeologist David Cox, computer animation drafting Professor Mike Martin and archaeology field technician Phil Pedack. Roughly sixty acorn leaching pits were electrically recorded, sketched and photographed on this ancient Chinookan site. The graphic representation of these pits--and several stake features--will not only allow for this cultural resource to be stored electronically, it will also serve as a means to monitor the rate of erosion at the site by tidal current and as a result of the newly placed rip-rap rock facing on the bank. The map itself is designed to give the user an initial impression of exactly where the pits lay on the site along with their characteristics. Maps are also divided into 25 M transects, focusing on Transects III-VI, the main areas for acorn leaching pit placement. Further work is being done to allow the user to be able to 'click on' any particular pit and additionally be able to view the photographs, sketches and contents of that particular feature. **Session 4A.**

KURT PERKINS (University of Idaho)

Preliminary Results of Scraper Analysis from the Clearwater and Snake River Watersheds

The analysis of lithic tools has presented a great deal of information to archaeologists about human behavior, subsistence, and their place on the landscape. The primary focus of many archaeologists has been on projectile points and their morphology. However, I believe it is through the analysis of scrapers archaeologist's will be able to have a better understanding of prehistory. The following paper outlines some of the preliminary research that has been

conducted from analysis of scrapers in the Clearwater and Snake River watersheds and is a small part of an ongoing study. The purpose of the study is to determine whether style or function is the more important factor in the production of the lithic tools known as scrapers. **Session 25.**

DUANE PETER and MICHELLE D. WURTZ (Geo-Marine, Inc.)

The Fort Hood 3D Database: An Experiment in Data Sharing and Public Outreach

Fort Hood, Texas and ERDC-CERL sponsored this project to determine if three-dimensional laser scanning has the potential to alleviate a persistent problem in archaeology -- the unavailability of artifacts to both researchers and the public. Artifacts that must be curated, stored, or repatriated can be recorded and used for digital comparative collections or educational material. Such data availability opens the door to better comparative analysis and public awareness. The Fort Hood 3D Database provides a digital database that improves the business process of curation so that research, Native American consultation efforts, and public education objectives are facilitated. **Session 27.**

LAURA PHILLIPS (Burke Museum of Natural History and Culture)

Hats Off to Wapato Creek

Fortuitous events at the Port of Tacoma in 2006 led to a unique opportunity to re-analyze wet site materials from a site on Wapato Creek excavated more than 35 years ago. In the Fall of 1970, David Munsell recovered a cedar hat and fish weir from 45-PI-47 in Puget Sound. These objects were treated with polyethylene glycol (PEG) for preservation, then curated at the Burke Museum in Seattle in 1983. The stylistically unusual and distinct cedar hat and a portion of a fish weir were selected for radiocarbon dating, ethnobotanical analysis to identify wood species, and conservation analysis to identify a red material found on the hat. **Session 11.**

HEIDI PIERSON (Fort Vancouver National Historic Site)

Public Archaeology and Reconstruction at the Fort Vancouver Powder Magazine

This paper examines the development of public archaeology interpretive programs using the Powder Magazine reconstruction as a case study. The Powder Magazine was first excavated in 1947 by Louis Caywood, and again in 1972 and 2004. This building offers important insights into how archaeological method and theory intersect with theories of reconstruction and interpretation. Interpretive staff integrates input from park archaeologists into numerous interpretive programs, and university students are involved in the process to bring other research questions to bear on archaeological projects conducted at the fort through participation in field schools and research throughout the academic year. These programs are designed to engage visitors, help increase public awareness and, increase site stewardship. **Session 1.**

GEORGE POETSCHAT (Oregon Archaeological Society)

Graffiti and Rock Art: When does Graffiti have Value?

Graffiti can be very destructive to Indian Rock Art and can be extremely expensive and difficult to remove. However some graffiti, such as historic names and dates found at Names Hill and LaBarge Bluffs in Western Wyoming, are themselves important to the study of both rock art and Oregon Trail History. In terms of historic research, such names confirm specific dates of people who traveled the Oregon Trail and settlers who occupied particular regions during the early historic period. These historic names and dates at Names Hill and LaBarge Bluffs have also

been used to specifically date Indian Rock Art; several images to within a two year span! One other type of "graffiti" merits mention. These are the scratches on pictograph images at sites in Montana and Idaho, which are not considered graffiti but are created specifically to serve special uses by the early Native Americans. **Session 15.**

JOHN POULEY (Confederated Tribes of the Colville Reservation)
Chief Joseph Dam Cultural Resources Project and Kettle Falls: A Condition Assessment of Culture Chronology Type Sites

Large data recovery projects during the late 1960s to early 1980s conducted at the Chief Joseph Dam Reservoir and Kettle Falls (Grand Coulee Dam Reservoir) resulted in the development of two regional culture chronologies. Today, the type sites representing the two chronologies are adversely impacted by fluctuating reservoir elevations and looting. The Colville Confederated Tribes' History/Archaeology Program with the assistance of the Bonneville Power Administration, US Bureau of Reclamation and the US Army Corps of Engineers identify and address adverse impacts at these type sites through background research, monitoring, salvage, testing, stabilization, ARPA patrolling and installation of public awareness signs at reservoir access points. **Session 14.**

MICHELE L. PUNKE (Archaeological Investigations Northwest)
Geoarchaeological Field Investigations at 35MU4, Sunken Village, Sauvie Island, Oregon

Geoarchaeological investigations were conducted at the Sauvie Island archaeological site in order to construct a preliminary picture of the depositional setting evolution of the site through time. Sediment stratigraphy and diatom biostratigraphy vary across the site both vertically and horizontally, and the exact nature of these stratigraphic changes was investigated through the analysis of sediments from test units, pit features, profile descriptions, and extracted sediment cores. Stratigraphic profiles constructed from sediment cores were tied to the stratigraphic units observed and analyzed in excavated pit features and test unit profiles from within the levee cutbank and in the beach sediments below. Distinct changes in strata morphology and constituent sediments allowed for the creation of a representative east-west cross section of the site. This cross section was used to aid in the interpretation of original depositional conditions and to determine the nature and extent of erosion and destruction of cultural strata. **Session 4A.**

SARAH PURDY (Oregon State University)
A Comparison of Spatial vs. Spectral Resolution in Analyzing the Patterns of Dredge Tailings in Elk City, ID

There are over 48,000 inactive mine sites in the United States. These sites often are in remote and inaccessible areas. Many of the areas along rivers were mined using dredges which resulted in tailings piles scattered across the landscape. These tailings piles are patterned differently depending on the type of dredge or washing plant used. In my study area, Elk City, Idaho, three types of dredges were used to mine for gold; floating dredges, dragline dredges, and power shovels. The differences in dredging methods reflect the miners' adaptations to different geologic settings and environments. These adaptations are evident in the patterns of tailings piles left by certain dredges. Through an analysis of the patterns of dredge tailings piles researchers can discover who worked in those areas, the time period the river was dredged, economic factors that may have influenced the miners' choices, and other valuable information about the miners. Utilizing remote sensing data to find these sites is a quick, economical, and efficient way of

evaluating archaeological sites for potential environmental impact and cultural significance. Therefore, the primary objective of this paper was to determine if higher spatial or spectral resolution is more useful when attempting to find dredge tailings on the landscape, using ASTER imagery and 10m DOQ's. The secondary objective was to determine if either the higher spatial or spectral imagery can distinguish between different dredge tailing patterns. **Session 10.**

SARAH PURDY (Oregon SHPO)

Where Are Our Archaeological Collections? A Review of the Oregon SHPO Archaeological Permit Process

In 2006, the Oregon State Historic Preservation Office began a project to review the archaeological permitting process with regards to collections and final reports. As the intern for this project, I was responsible for reviewing past archaeological permits to verify the final curation facility for all archaeological collections obtained under state issued archaeological permits (ORS 390.235), and to verify that a final report documenting the testing and results had been completed and submitted to SHPO. The purpose of this review process was to update the SHPO permit database with accurate information on collections and final reports. Therefore, future researchers will have access to this database providing them with the final report, collection location, and the collection's accession number. This paper will provide an overview of the methods I used to verify the location of archaeological collections in the state and match final reports with the appropriate permit. I will discuss the problems and challenges I encountered during this project. The paper will present all the data I have compiled over the past year, including: the total curation facilities listed as the final curatorial facility for archaeological permits, how many collections are in their proper curatorial facility, how many collections are not yet ready for curation, how many collections are not in their final curatorial facility, etc. I will also provide detailed information on final reports including: the number of reports submitted, the number of reports SHPO will never receive, the number of reports in default, and the number of reports in progress. Overall, the permit review process has been a success and the information gained from this project can be used to benefit future archaeological researchers, the Native American tribes in the Northwest, numerous curation facilities in the state, and many others. **Session 27.**

MARSHA QUINLAN and ROB QUINLAN (Washington State University)

Medicinal Plant Knowledge and Modernization in a Caribbean Village

Every rural Dominican knows several "bush" medicines, though individuals' knowledge varies. We present the effects of education, employment, consumerism, parenthood, age, and gender on the number medicinal plants individuals can recall. Age positively associates with number of species listed, which may reflect relative disinterest among the young, but may simply indicate continual lifetime learning. Contrary to predictions, modernization via commercial occupation and consumerism is positively associated with herbal knowledge. Gender, age, occupation and education are significant predictors in multivariate analysis. Significant interactions among the variables suggest that modernization has complex effects on Dominican ethnomedicine. **Session 11.**

COLIN P. QUINN (Washington State University)

Material Culture, Reproductive Fitness, and Costly Signaling Theory: Building a Model of Signaling Power in the Past

Costly signaling theory has been primarily used to explain wasteful and uneconomical behaviors. To this point, however, applications of costly signaling theory to explain expensive material culture items has been lacking in the archaeological literature. In this paper, I explore the potential for using costly signaling theory to examine the role of costly and expensive material culture items as signals used to negotiate complex interpersonal relationships. Towards this end, I conceptualize signaling power along a continuum and build a model of material culture signaling power in the past. This model provides a series of testable hypotheses which can evaluate the potential impact of material culture as signals of underlying reproductive fitness. **Session 12A.**

KENNETH C. REID (Idaho State Historic Preservation Office) and KENNETH L. KVAMME (University of Arkansas)

Searching for Sergeant Ordway: Geophysics at the Cougar Bar Lodge Depression, Hells Canyon, Idaho

We give a progress report on a project sponsored by the Idaho Governor's Lewis and Clark Trail Committee to identify, record, and confirm the location of a Nez Perce fishing lodge visited by Sergeant Ordway and two companions during a provisioning quest intended to help the Corps of Discovery cross the Bitterroots in the spring of 1806. On the bicentennial anniversary of their visit to Cougar Bar in lower Hells Canyon, Idaho, a linear structural depression was mapped and gridded, then surveyed using several geophysical prospecting techniques. We evaluate the results in light of Ordway's fieldnotes and our regional understanding of early 19th century riverine architecture, and close with a discussion of this summer's plans to ground-truth selected images in consultation with the Nez Perce THPO. **Session 24.**

CRYSTAL RICHARDS (Western Washington University)

Examining Possible Euroamerican Shellfish Consumption at Woodstock Farm in Bellingham Washington (45-WH-55)

Survey and excavation in Bellingham Washington at Woodstock Farm revealed a prehistoric shell midden (45-WH-55) that dates to at least 2500 years ago. The upper layers of the site contained historic artifacts that could be attributed to early 20th Century occupation by the Gates family. The goal of this poster is to address whether the shell in the upper layers is due to Euroamerican consumption or redeposited from underlying prehistoric layers. Three lines of evidence are: the presence of introduced species of shellfish, differences in taxonomic representation between layers, and other evidence in the form of any mixing of prehistoric artifacts in the same layers as artifacts of Euroamerican manufacture. **Session 11.**

JULIE-ANNA RODMAN (Salmon Challis National Forest)

Brand Rock Historic Petroglyphs

Brand Rock is located in a canyon that provides passage from the Snake River Plain to the Camas Prairie in Idaho. The canyon has prehistorically and historically provided a lower elevation passage over the Bennett Hills. The large basalt boulder with 127 cattle brands carved into the surface was discovered during a project recording the prehistoric petroglyphs at the site.

A number of brands have been identified and are associated with cattle operations throughout southern Idaho. The brand registrations date from the 1920s and include several still in use today. This petroglyph rock represents a time capsule of ranching history and is a unique example of historic rock art worthy of preservation. **Session 15.**

LAURA ROOKE (AMEC)

Historic Archaeology in the Seattle Tidelands

In the course of routine monitoring activities for the Atlantic/Central Bus Base Expansion Project in South Seattle, AMEC Earth and Environmental uncovered a series of pilings, surrounded by historic era refuse. These pilings represent the archaeological remains of the 6th Avenue South viaduct that traversed South Seattle prior to regrade activities that filled in the tidelands, providing a higher, drier land surface for construction of businesses in the area. Historic documentation shows vehicles used the viaduct to access established business in the area. The residents of the City of Seattle, lacking a formal waste disposal area, also used the viaduct to dispose of commercial waste. The refuse piles that were located below the viaduct, as seen in historic photographs, represent the archaeological remains of individual concentrations of historic artifacts and provide a unique look into Seattle's economic past. This unique opportunity to study a window of Seattle's history through archaeology was enhanced greatly by historic documentation. The site consists of 265 glass, ceramic, faunal, metal, and wood artifacts found at the base of the viaduct pilings. Based on our analysis, historic photographs, and documentation of the area, the historic refuse accumulated from 1890 to 1923, as a result of waste disposal by local businesses. Analysis of the ceramic quality and types of faunal remains from the refuse piles suggest an association with people of different socioeconomic classes. **Session 11.**

VANESSA ROSS (Washington State University)

Indigenous Insights: Practical Approaches to Resource Management on the Columbia Plateau

Native and non-native groups in the Columbia Plateau choose and execute differing natural resource agendas because of distinct ecological, economic, political, and historic circumstances. A historical approach incorporating theories from cultural ecology and natural resource management was used to examine two centuries of tribal watershed management on the Columbia River Plateau. **Session 8.**

MICHELLE SAN ANTONIO (University of Montana)

Let's Piece the Past Together: Developing a Middle-School Book on African Diaspora Archaeology.

A new cultural heritage book designed for middle-school students entitled "Let's Piece the Past Together: An Archaeological Perspective of African-American History" uses archaeological data to discuss African-American history and slavery. Students are guided by constructivism and inquiry learning theories to construct the past based on multiple sources of primary and secondary resources such as archaeological site descriptions and artifact photos, historical documents and photos, and WPA slave narratives excerpts. The book features aspects of daily life as seen in the archaeological record and includes food, shelter, continuity of African culture, and the presence of children. Transforming archaeological research into educational and appealing literature for the general public is fundamental to this project. Project Archaeology, a

national not-for-profit program that promotes archaeology education in the classrooms, will publish the book for nationwide distribution. This program is sponsored by the US Bureau of Land Management and Montana State University. **Session 7.**

CATHERINE SANDERS (University of Montana)

Tibetans in Humla: Heritage and Livelihoods in Food Security Strategies

Nepali Smallholders in the Humla District and other Nepali districts have long been grappling with issues of food security and subsistence. Recent studies document both an increasing lack of food security and resultant detriment to nutrition in the region, with various analyses pointing to the predominance of the caste system, political upheaval, caste-reifying international aid strategies, and access issues related to the high altitude environs as causal factors in local actors' inability to secure food, health and services. As both the Nepali government and the Mao insurgency fragmented, the villagers shouldered the demands of their place between the two. Complicated by the prolonged conflict, which may or may not have come to an end this November, livelihood strategies are now under more pressure than ever. The diverse households in this region have had to shift their political, biological, and cultural borderlands in response to the various constraints on them. This paper will look to dimensions of history and value, resource flows, and differential access to identities and livelihoods in the context of national and global dynamics. How have household networks adjusted to conflict when they were already so tenuous? Can food insecurity be addressed with policy sensitive to issues of heritage? This article seeks answers to these questions by examining the relationship between heritage and livelihood in Humla District, Nepal. **Session 17.**

MATTHEW SCHEHL (University of Montana)

A Comparative Study of Nationalism, Heritage, and Archeology in Iraq and Nazi Germany

Archaeology has played a critical role in the development of nationalism and nation-states throughout the world. While it may be tempting in cases of extreme nationalism to dismiss this role as 'a good tool put to bad use', to do so ignores the broader question of the relationship between archaeology, heritage and nationalism. This paper explores this relationship as integral to its social context, as illustrated by the 'extreme' cases of the German National Socialist and Iraqi Ba'athist regimes. **Session 7.**

ERIKA SCHEURING (University of Montana)

The Lewis and Clark Trail: Is This It?

The Clearwater National Forest exhibits one of the most pristine contiguous sections of the Lewis and Clark Trail. Fortunately there are numerous influencing factors that contribute to the survival of the Trail. Sustained use of the Lolo Trail system for centuries before and after the Expedition has contributed to the issues of relocating the actual trail tread along which these men traveled over 200 years ago for merely a few days. The Trail is a dynamic system, ever changing since its conception. Today many people wish to follow the exact route, paddling rivers and hiking over mountains, but not every footstep of Lewis and Clark can be retraced. Is finding the actual Lewis and Clark Trail possible? **Session 6.**

JAMES SCHUMACHER (Western Shore Heritage Services, Inc.)
Recent Archaeological Work in the Vicinity of the East Wenatchee Clovis Cache (45DO482)

Archaeological survey occurred in the summer of 2006 in the immediate vicinity of the East Wenatchee Clovis cache (45DO482), also known as the Richey Clovis cache, which was identified in May 1987. Contested circumstances surrounding excavation at the cache between 1988-90 impacted the archaeological, social, and regulatory landscape of Washington State and beyond. Twenty years after the discovery of the Clovis cache, it continues to influence the practice of archaeology in the state. In 2006, survey work was conducted in advance of planned commercial industrial development of this vicinity. Results of the survey, the first systematic archaeological work carried out near the cache since 1990, were heavily colored by logistical constraints, but suggest that potential exists for similar or related deposits in the surrounding area. **Session 16.**

JAMES SCHUMACHER (Proyecto Arqueología Rivas/Panteón de la Rein)
Pre-Columbian Mortuary Pillars at the Panteón de la Reina, Costa Rica

Stone pillars are distinctive features of Chiriquí-period (ca. AD 900-1300) cemeteries in southern Central America, but, until recently, their form and function received little attention. Numerous pillars were found associated with large-scale architecture in the residential environs of the Rivas residential site (SJ148RV) and cemetery (SJ109RV) in southern Costa Rica. Study of these pillars corroborates earlier accounts noting their direct association with graves and presence as a particular feature of mortuary architecture. Pillars appeared to have functioned to segregate clusters of individual graves, as well as distinguish intermediate or shared areas of public space; morphological traits common to pillars, as well as evidence from pillars found in situ, suggests that these artifacts were produced in accord with standardized design canons. Pillars appear to have been used as elements in the performance of rituals that involved fire, as well as used in conjunction with other, perishable materials as an integral part of elaborate funerary rituals. **Session 24.**

AMY K. SENN and PATRICK MCCUTCHEON (Central Washington University)
Variability of the Archaeological Record With Respect to Resource Zones in the Saddle Mountains, Grant County, Washington

Archaeological research in the uplands of Central Washington often focuses on relationships between archaeological materials and environmental and landscape factors, in attempts to develop predictive models for upland archaeological sites. However, it is rare that this research is explicitly focused on the locations of the resources believed to be extracted, and the upland record rarely receives systematic treatment. The Saddle Mountains of Grant County, Washington provide a unique opportunity for scientific treatment of archaeological patterning, as over 3,500 acres in 9 sections have been surveyed at a 10% sampling percentage. We present the results of analyzing relationships between the archaeological record and landscape variables linked to extractable resources, based on archaeological surface data from three square mile sections in the Saddle Mountains. **Session 5.**

DONALD SHANNON (Confederated Tribes of the Colville Reservation)
Traditional Cultural Property Compliance in the Confederated Tribes of the Colville Reservation

The Confederated Tribes of the Colville Reservation History/Archaeology Program's methodology for conducting Traditional Cultural Property research will be outlined and placed in the legal context of cultural resource management. The TCP program methodology developed by the CCT and accepted as an appropriate compliance mechanism by federal agencies balances the needs of tribal interests and sovereignty with the compliance needs of applicants. The CCT's approach to TCP compliance work is similar to compliance-based work on other historic properties as described in the Section 106 implementing regulations. TCP studies are viewed as a five-part process: Overview, Documentation, Inventory, Evaluation and Treatments. Examples of TCPs will be discussed and placed in context. **Session 7.**

DONALD SHANNON (Confederated Tribes of the Colville Reservation)
Chief Joseph Dam as a Fishery: Traditional Cultural Property Scoping.

Prior to the construction of dams and the creation of reservoirs, the Columbia River was a continuous salmon fishery, with each tributary constituting a fishing location for family and tribal groups. The construction of the Grand Coulee Dam in 1941 prevented the migration of salmon to all spawning grounds upstream, restricting fishing to points downstream. The Chief Joseph Dam was built in 1955, approximately fifty-five river miles downstream from the Grand Coulee Dam. With no fish ladder, it is the ultimate impediment to salmon on the Upper Columbia River system and the only salmon fishery on the reservation for members of the Confederated Tribes of the Colville Reservation (Colville Confederated Tribes [CCT]). The History/Archaeology (H/A) program, in its role of assisting the United States Army Corps of Engineers with cultural resource compliance, conducted limited interviews to assess potential for information as part of the scoping phase of documentation of the Chief Joseph Dam as a tribal fishery. This preliminary report addresses the impacts the Chief Joseph Dam has on the contemporary tribal community, particularly salmon fishing, one of the most important spiritual and economic activities of the original inhabitants of the Columbia. **Session 14.**

KATE SHANTRY (Northwest Archaeological Associates)
Fire Modified Rock Characteristics of Features at the Renton High School Indian Site (45KI501)

Thermal features like hearths and fire pits at archaeological sites shed light on the development of subsistence intensification, and are evidence of resource processing, procurement and preservation methods. Results of feature analyses at 45KI501 demonstrate the predominance of thermal features and salmonid remains at a seasonal fishing camp. The degree that feature function varies within classes can be discerned using supplementary analyses of feature contents. Fire modified rock (FMR) is a core raw material and composed a large percentage of feature contents and contributed to feature boundaries and internal spatial arrangement. Some research has been conducted in order to find meaningful attributes of FMR that address variation in technology and the cultural history of a site, although meaningful attributes of FMR have not been widely applied to study cooking technologies. This paper looks at the FMR variability of five features from two structural classes, combined FMR data for features, and midden at 45KI501. **Session 28.**

PASANG Y. SHERPA (Lewis-Clark State College)***Balance for Progress: Women in Development, Nepal***

Women are significant members of the society. They play a pivotal role in maintaining social relationships and fulfilling domestic needs. As mothers and wives, they mobilize their family and influence social change. However, their contribution to their family and the society is undervalued and in many cases, does not even appear in the National Income Statistics.

The paper focuses on women in development; in particular, the women of Nepal. The status of women in Nepal is highly influenced by the social system. The tradition and culture of the Nepalese society put women as a subordinate to men and are often seen as *Sacred Sisters and Dangerous Wives*. In addition to this, the constitution of Nepal too does not treat women as equal to men. Women are discouraged from appearing in the public sphere and those who are, are not treated fairly. Women usually take less prestigious and laborious jobs whereas men are encouraged to take the decision making or higher level jobs. Hence, women get less access to information and knowledge. The paper looks into education, awareness programs and different capacity building trainings to bring positive changes among the rural women of Nepal. **Session 17.**

STEPHANIE SIMMONS (Central Washington University)***Historical Archaeology of the Overseas Chinese of City Block 24, Ellensburg, Washington***

The city of Ellensburg like many other western towns had an important but poorly documented Overseas Chinese population circa 1900. During the summer of 1989, Central Washington University's Anthropology department excavated a portion of city block 24, which according to Sanborn Fire Insurance Maps was the location of several Chinese businesses and residences around the turn of the century. However, the artifacts from this excavation were never studied, and over the last year an analysis was undertaken to document which if any artifacts could be associated with the Overseas Chinese. This analysis included conducting historical research into local records, as well as analyzing a sample of ceramics and bottle glass for function and date. During the course of the study it was determined that the site was heavily disturbed, making it impossible to associate deposits with one particular time period or group. Even so, within the assemblage there are artifacts which are concurrent with the Chinese period of occupation and are considered diagnostic of a Chinese presence. These include Chinese import ceramic tablewares and food containers, opium paraphernalia, as well as medical vials. These artifacts along with historical records indicate that there was a strong Chinese presence within this city block from 1889 to around 1909. **Session 11.**

JULIA SMITH (Eastern Washington University)***Producing for Changing Coffee Markets: A View from Costa Rica***

Over the last 20 years, coffee production has changed in response to the radical changes in coffee markets. As the price for coffee in the traditional commodity market sank to record lows, highly priced specialty markets absorb increasing, though still small, amounts of coffee. While Costa Rican coffee farmers had been quite successful historically, they have struggled to find places for their coffee in this new market of shifting tastes. Long established systems of production, technical assistance, processing, and marketing have served them well for many years. However, these systems do not provide the flexibility and differentiation that the new markets demand. This has left the once quite successful Costa Rican coffee farmers struggling, while the

formerly disadvantaged producers in neighboring countries are thriving in the new markets.

Session 17.

ANGELA SOWERS (University of Idaho)

Case Study: Solitary Pagan in North Idaho

Modernity, secularization and pluralism have contributed to a diverse religious and spiritual context in the United States. Amongst a variety of spiritual options, Neopaganism exemplifies the fluidity and diversification of religion in the United States today. Engaging in a process of reflexive spirituality, Neopagans utilize modern technology to access information about cultures throughout both the world and history to shape their individual spiritual path. While research has revealed key insights on contemporary Neopaganism, solitary Neopagan practitioners, those who do not engage in group rituals and are often self-taught, are frequently absent from social research, partially due to their lack of visibility. Drawing from a case study of a solitary practitioner who is part of a student group at a university, this paper will explore the life of a solitary Neopagan. Placing individual solitary Neopagan practice in a context of reflexive spirituality as one contemporary response to pluralism, the paper discusses this person's individual path to becoming a Neopagan, his individual beliefs and practices, his spiritual reflexivity, and why he has chosen to practice individually, rather than as part of a group. This project provides valuable information about this often invisible sector of the Neopagan community. Adding knowledge about solitary practitioners to what is already known about the Neopagan community as a whole will help create a more complete picture of this diverse group and the possibilities for its development in the future. **Session 25.**

LAWR V. SALO (U.S. Army Corps of Engineers)

Projecting the Past: Using Archival Data to Reconstruct Housepit Floors and Features with GIS at the Chief Joseph Dam Project

In the 1970's and 1980's, a large scale archaeological data recovery program took place at the Chief Joseph Dam project, documenting many kinds of features, housepits, and living floors and preparing a comprehensive feature and housepit typology. Unfortunately, photographs and illustrations of the types that could aid recognition of them in the field never was assembled or published, largely because excavation methods and sediment conditions prevented large-scale field photography of exposed floors and feature surfaces as has been done at other data recovery projects in the Plateau. A partial cure for this deficiency is now possible. This paper presents initial results of analysis of archival imagery using Adobe Photoshop and ESRI ArcGIS to recreate to-scale, georegistered floor drawings and photographs. The objective was to illustrate as many feature types in their context with housepit floors as possible, and likewise to document the full range of housepit floors in the assemblage. The work was undertaken during revision of the Chief Joseph Dam Historic Property Management Plan in cooperation with the Colville Confederated Tribes, the Bonneville Power Administration, and the Washington State Department of Archaeology and Historic Preservation. **Session 14.**

SARAH STERLING (Portland State University), DONALD TATUM (Museum of New Mexico), and DENNIS LEWARCH (Suquamish Tribe)
Shoreline changes along the coast Port Angeles Harbor: Archaeological and geomorphologic data from Tse-whit-zen (45CA523)

The Tse-whit-zen Site (45CA523) is situated on a series of beaches that formed at the base of Ediz Hook, a five and a half kilometer long sandspit on the northern coast of the Olympic Peninsula, which now shelters Port Angeles Harbor. Radiocarbon dates taken from uplifted beach berms and submerged cultural deposits reflect the local effects of sea level change and allow reconstruction of the Port Angeles Harbor shoreline topography over the past 2,700 years. Regional sea level appears to have stabilized at elevations near its current position after 5,000 years ago, yet the Port Angeles Harbor shoreline regressed (expanded seaward) between approximately 2,700 years ago and the present, as indicated by three beach berms demarcating previously active shorelines. This observation can be partially explained by the growth of Ediz Hook as it extended to the east over time and created conditions for increased offshore shoaling, making more sediment available for beach building. However, submerged cultural deposits ca. 1,500 years ago and structural complexity in the northernmost beach berm ca. 900-1,000 years ago suggest that shoreline growth was punctuated by episodes of subsidence, possibly resulting from tectonic deformation. **Session 13.**

BRANDON SYBROWSKY (Central Washington University)
Wrangling out a Hidden Past: Horse Drives in Central Idaho

The horse played an important part in the settlement of the American West and remains an important icon - almost a "mythical figure" of our historic past and is the subject of considerable management efforts today. As such, important information concerning horses in early Euro-American settlement should be further documented historically and archaeologically. Included in this should be information concerning historic horse trap facilities in North America.

This poster will present results of on going thesis research designed to describe several historic horse drive trap facilities around the Challis area of central Idaho. I summarize information on structural criteria of these horse drive trap facilities, for use by archaeologists assessing the function and target species of possible drive trap features and to distinguish historic horse trap facilities from aboriginal drive trap facilities. The drive traps represent a perishable, specialized resource capture strategy once employed to manage an exploding feral horse population. Not only are the drive trap facilities rapidly disappearing due to natural decay but also the culture and lifeways of the original participants of horse wrangling are disappearing as well. **Session 11.**

SEAN D. TALLMAN and YONARA CARRILHO (Northwest Archaeological Associates, Inc.)
Cemetery Investigations in Cultural Resource Management: Lessons Learned from the Old Snohomish Cemetery

Using Northwest Archaeological Associates, Inc.'s (NWAA) experience at the Old Snohomish Cemetery (1876-1923), which resulted in the documentation of 96 previously unknown interments, this paper discusses the forensic, archaeological, and sociocultural issues inherent in cemetery investigations. The thorough documentation, recovery, and analysis of human remains and associated artifacts is essential during cemetery removals, relocations, and/or decertification, requiring the application of flexible archaeological and osteological methods. Issues related to

archival research, locating interments, hazards, establishing identifications, dedication removal, and monetary considerations make cemetery investigations a challenging undertaking within a cultural resource management (CRM) framework. Extensive planning and a multidisciplinary approach are crucial for understanding late 19th century mortuary customs. Cemetery investigations provide a unique opportunity to examine cultural and biological attributes not often recorded in historical documents. **Session 10.**

SARAH TARKA (University of Montana)

A Study of the Cultural Significance of Bison to Yellowstone National Park's American Indian Tribes

This study adds to a substantial literature devoted to the management and mismanagement of Yellowstone National Park's bison herd. The Yellowstone National Park bison project approaches the issue of bison management through an examination of the cultural significance of the park's bison to two American Indian tribes associated with Yellowstone National Park and through the documentation of the 1999 Buffalo Walk, in which American Indians protested the slaughter of thousands of park bison. Data in this study is gathered from ethnographic interviews, archival sources and written accounts of the cultural significance of bison to American Indian tribes. The results of this project will be used to make recommendations to Yellowstone National Park managers for responsible and culturally sensitive planning, management, and interpretation of park bison. Typically managed and conceptualized along with other wildlife as one of the park's many natural resources, this study sheds new light on Yellowstone bison as a vital cultural resource. **Session 7.**

AMANDA TAYLOR (University of Washington)

The Impact of Erosion on Shell Middens in the San Juan Islands

Sea level in the San Juan Islands has risen only slightly since 5,000 BP, but erosion has had a major impact on sites located near the shore. Natural coastal erosion is exacerbated by motor boat traffic, landscaping, and a decline in kelp forests and eelgrass beds. Site maps created by the San Juan Islands Archaeological Project in 2005-2006 are compared to those produced during previous surveys of the San Juans, particularly Wessen's (1986) report, to investigate the rate and nature of site erosion. Implications for archaeological research are discussed. Along with escalating economic growth and tourism in the San Juan Islands, global warming is also predicted to contribute to higher levels of erosion in the future due to wetter winters and sea-level rise. Guidelines are suggested for monitoring and minimizing further site destruction. **Session 13.**

MIKE TAYLOR (Instantiations Inc./Oregon Archaeological Society)

Effigies and Travesties

The Fishers Landing Petroglyph Complex is a series of important petroglyph sites largely located within the city limits of Vancouver, Washington. The site was reported on in a presentation at the NWAC 2006. Late in 2006, one of the sites in the Complex, Effigy Beach, was significantly damaged by the owners of the property where it is located. The report will describe the damage and the subsequent action taken by volunteers, the City of Vancouver and the State of Washington. The existing process for dealing with damage to archaeological resources by property owners will be discussed and critiqued. **Session 15.**

TABITHA TROSPER, LISA ELY, and STEVEN HACKENBERGER (Central Washington University)
Geoarchaeology of LaAlberca Caldera, Michoacan.

La Alberca is a volcanic caldera in the active Michoacan-Guanajuato volcanic field of central Mexico. Here the oldest known burial (~5000 yrs BP) in the state of Michoacan was discovered immediately beneath prehispanic cliff paintings on the caldera wall. The stratigraphy of fluvial and lacustrine sediments exposed in trenches in the caldera floor indicates variations in the geomorphic environment of the caldera, which could have implications for the type of human use of the site. Two 3 meter deep trenches in the caldera floor contain zones dominated by coarse, dark tephra and cobbles at the base, overlain by a thick sequence dominated by finer-grained lacustrine sediments from 2360-530 years BP. A zone of fine-grained, laminated sediments in the central section of the stratigraphy corresponds in time with periods of wetter followed by drier climatic conditions in the surrounding region of central Mexico. **Session 11.**

STEPHANIE E. TRUDEL, DENNIS E. LEWARCH, and LEONARD A. FORSMAN (Suquamish Tribe)
Old Man House (45KP2) Revisited

The Suquamish winter village of Old Man House (45KP2), or “clear salt water”, is in the heartland of the Suquamish People, and was an important source of archaeological data during the 1940s and 1950s, when initial formulations of pre-contact archaeology in Puget Sound were outlined. The Suquamish Tribe received title to the site in June 2005 from the Washington State Parks and Recreation Commission, and it is now called Old Man House Park. The Tribe is developing a management plan for Old Man House (45KP2) and is compiling historic and archaeological records for the site. The poster summarizes archaeological data obtained between the 1920s and 1970s and synthesizes historic period land use information. Analyses document changes in site condition over the past 150 years due to shoreline erosion, provide estimates of probable maximum extent of archaeological deposits, and reinterpret the role of Old Man House (45KP2) in the regional archaeological record. **Session 11.**

VANESSA TUCKER, EDRIE KELLY, and PATRICK MCCUTCHEON (Central Washington University)
Taking Assemblage Variability Seriously: Representativeness of Technological and Functional Variability in Upland Lithic Scatters in the Saddle Mountains, Grant County, Washington

In 1974, William Lipe suggested that in cultural resource management contexts the concept of ‘significance’ was difficult to assess and that instead one might consider the concept of representativeness. Depending on the research questions asked and the classifications employed, assessing a particular assemblage’s representativeness would demonstrate its ability to fill data gaps in our knowledge about prehistory. Upland lithic scatters in Central Washington are often seen as insignificant or lacking information potential. Yet, systematic treatment of these assemblages is absent from the literature and thus what role these types of deposits may play in understanding regional prehistoric land use is currently unknown. We present the results of analyzing four assemblages from the Saddle Mountains in Grant County, Washington. Our results show that for some dimensions representativeness can be achieved easily, while for other dimensions larger sample sizes are required. **Session 11.**

ISRAT TURNER-RAHMAN and NANCY MCKEE (Washington State University)
Feminist Interpretation of the Qur'an

Anthropologists traditionally have taken a non-literate approach towards Islam, and thus have not accessed the formative texts that inform the people they study. Talal Asad attempts to correct this imbalance by stating that Islam is a discursive tradition that integrates and correlates itself to the founding texts of the Qur'an and Hadith. He extrapolates that the anthropological study of Islam therefore should start from this assumption. I argue, as does Asad, that anthropologists have ignored the role of indigenous discourse in the Islamic tradition. According to Muslims the currency of engagement for legitimate Islamic scholarship is Islam's sacred text, the Qur'an. Even though Muslim women unequivocally suffer the consequences of repressive misreading of the Qur'an, few have questioned their legitimacy or attempted their own exegesis. However, there has recently been a flourishing engagement with the Qur'an by female scholars of the Muslim Diaspora, who are reinvestigating the normative religious texts and attempting to become specialists in the sacred book. In this paper I will outline and discuss the Qur'anic discourse of educated, third world/women of color, situated predominantly in the West and will articulate why and how these scholars say they have engaged with Islamic spiritual texts within an Islamic feminist/gender Jihad paradigm. **Session 9.**

KEVIN VAUGHN, TODD VOLKENAND, and PATRICK MCCUTCHEON (Central Washington University)
Technological & Functional Variability in the Sunrise Ridge Borrow Pit (45PI408) Lithics

The Sunrise Ridge Borrow Pit site, 45PI408, is a dense deposit of artifacts interbedded among a number of well known tephra layers from Holocene eruptive events in the southern Cascade Mountains of Washington State. Recent efforts to classify the artifacts from the site have revealed a tremendous amount of variability in technological and functional dimensions. We review the organization of technology and determine the representativeness of technological and functional characteristics of the lithic assemblage to determine if there are changes over time and across space. The results are placed in the context of current research questions and the emerging lithic contexts that are now well known from other excavated and analyzed lithic assemblages. **Session 22.**

JASON M. WALLIN (Central Washington University)
*Play, Laughter, and Humor in Captive Chimpanzees (*Pan troglodytes*)*

Play is a nearly ubiquitous mammalian behavior, and play behaviors are argued to occur across many animal taxa, including birds, non-avian reptiles, fish, and invertebrate species. Laughter is certainly a common occurrence in human interactions, and there is growing evidence from studies with chimpanzees, rats, and dogs that it may be common in other mammals. Humor in non-human animals is less well studied, though some theoretical work and anecdotal observations do exist. The chimpanzee participants in this study, Washoe, Moja, Tatu, Loulis, and Dar, all use the signs of American Sign Language to communicate with one another and with their human caregivers. They can provide us, then, with a unique window into play, laughter, and humor. Additionally, as chimpanzees, they are humans' closest living relatives and share with us many behavioral and biological traits. Their play, laughter, and humor may help us better understand the evolutionary origins of these behaviors, behaviors which seem so important to us human animals. In this study, we examined a longitudinal dataset spanning over 1,300 days. The dataset consisted of an archive of handwritten, narrative shift reports prepared by the

chimpanzees' caregivers, who had intimate and often long-term relationships with the chimpanzees, and who were well versed history, interests, and personalities of this chimpanzee family. From this archive we are assembling a rich description of play, laughter, and potential humor in these chimpanzees, including partner preferences in play and laughter; characteristic themes of play, laughter, and humor; and the use of signing across the three categories. This study is also generating new hypotheses for future research into play, laughter, and humor in this unique family of signing chimpanzees. **Session 11.**

DIANE WALLMAN (Washington State University)

A Statistical Reexamination of the Shellfish Remains at Marmes Rockshelter

Marmes Rockshelter (45-FR-50) remains one of North America's oldest and most significant archaeological sites. Within the Columbia Plateau, this site has provided important information regarding human occupation of the Northwest. For years, the materials from the 1960s excavations of the site remained untouched and unanalyzed in boxes at Washington State University. With the recent analysis of these materials and subsequent publication of the Marmes Rockshelter report, however, this breadth of information is available to both public and academic audiences. Change in subsistence strategies is documented throughout the occupation of Marmes, with particular attention to shifts in diet breadth and species utilization. Shellfish in particular remain an important element of the faunal remains from Marmes Rockshelter. Variation in the relative utilization of different species of shellfish over time at a site can provide considerable information regarding both ecological changes and changes in subsistence patterns. With this in mind, this analysis focuses on statistically re-examining the shellfish data from the Marmes site, identified and compiled by Pamela J. Ford. While archaeology in the Northwest continues to grow and expand, there remains much value in revisiting data collected in the past, particularly when it involves more rigorous testing to either support or refute previous conclusions. Thorough statistical analyses greatly strengthen the reliability of archaeological analyses and subsequent interpretations. At Marmes, shifts within the composition of shellfish remains over time have often been associated with environmental change, although this has not been statistically tested. Using multivariate statistics, this study indicates that there is significant change in the abundance and composition of the various shellfish species utilized at Marmes over time, with possible environmental and behavioral implications. **Session 16.**

SUSAN LYNN WHITE (Oregon State Historic Preservation Office)

The Disappearance of the Blue Lake Survey Region in Portland, Oregon: An Archaeological Tragedy

In 1979 the Blue Lake Survey Region was part of a larger cultural resource reconnaissance project in the Greater Portland area funded by the City of Portland and sponsored by Portland State University's Department of Anthropology. Even though the project area, which roughly measured three (3) square miles, was highly disturbed, 20 archaeological sites (19 prehistoric sites and one historic-period site) were located during the survey. These 20 archaeological sites held high potential for providing valuable information about the Portland Basin of the Lower Columbia River Culture Area. During the period of the survey the Blue Lake Survey Region was private land and possessed a mixed land-use base—agriculture being phased out and commercial/industrial development underway. In the ensuing 20+ years an archaeological tragedy came to pass with development projects that proceeded to destroy the majority of the 20 sites without regard to Oregon state laws protecting archaeological sites on private lands or consideration for the preservation of local cultural heritage. How could the destruction of these

archaeological sites take place in Portland? Why did it happen? What went wrong? Who or what is to blame? What can we do in the future to prevent land development projects from destroying known archaeological resources? The Blue Lake Survey Region project will be briefly examined, the above questions considered, discussion hopefully provoked, and possible solutions formulated that may prevent such an archaeological tragedy from happening again in the future. **Session 27.**

WILLIAM A. WHITE, III (Northwest Archaeological Associates, Inc.)

Try Dr. Davidson's Headache Powders: People and Medicine in Nineteenth-Century Tacoma, Washington

Immigrants arriving to the United States during the late nineteenth-century met unhealthy urban living conditions, a lack of comprehensive public sanitation infrastructure, and confusing and misguided medical information. In order to cope with rampant illness and disease, proprietary medicines were used by many, but by the end of the century professional doctors and pharmacists increasingly served as the authorities of health. During this formative era, the foundation of pharmacy in the United States was a combination of old home remedies, proprietary medicines, and scientific exploration. Mass spectrometry analysis of the contents of two medicinal bottles recovered from downtown Tacoma, Washington provide insights into medicine of the day as it was practiced by professionals. **Session 10.**

WILLIAM WILLARD (Washington State University)

The Impact of Energy Development on Indigenous Self-Governance

This is a study of the impact of globalization and the exploitation of natural resources on the development of indigenous self-governance in the Pacific Northwest. The presence of off-shore corporate investment interests has introduced into the regional socio-economic equation the sensitivity of those corporations to the conditions of indigenous participation in contracts and negotiations concerning production and marketing of natural resources. **Session 3.**

ASHLEY WILLIAMS (Western Washington University)

Warfare in the Pacific Northwest: Direct and Indirect Evidence an Increase in Warfare at 1000 AD

Starting around 1000 AD, there was a major increase in conflict and warfare all over North America. An aspect of this paper is to research whether this same pattern was found in the Pacific Northwest. This paper discovered that the Northwest Coast is no exception. During the period renamed "the intensive conflict period," 900-1300 AD, there was a change to an increase in warfare. This paper discusses the direct and indirect evidence of the increased conflict in the region. Some direct reasons are the changes to defensive locations for settlements, fortifications, and skeletal remains. The indirect reasons as evidence are a bit more debatable, however, some evidence such as changes in subsistence patterns could be used as an example of an indirect way to show an increase in warfare. Although many authors have acknowledged this increase in conflict during the "intensive conflict period," almost no authors give a reason, or possible reason for the increase in warfare. In this paper the introduction of the bow and arrow 400 years earlier would help to contribute greatly to the rise in violence during the "intensive conflict period." **Session 28.**

SCOTT S. WILLIAMS (Natural Resources Conservation Service)***Solving the Mystery of the "Beeswax Wreck" of Nehalem Beach, Oregon***

Native oral histories, historical documents, and archaeological evidence gathered over the last 200 years indicate that a European ship wrecked on the shores of Nehalem Beach around the turn of the 17th century. This vessel was carrying a large load of Asian beeswax and so has come to be known as the "Beeswax Wreck", and pieces of beeswax continue to be found on the beach today. Over the years there has been much speculation as to the nationality and origin of the vessel, and the year when the wreck occurred. Based on the results of a new, multi-disciplinary investigation, it can now be stated with confidence that the vessel was a Spanish galleon, likely blown off course by a storm and wrecked on Nehalem spit in either AD 1693 or 1705. This paper discusses the historical, archaeological, and geological evidence supporting this conclusion and discusses some of the issues surrounding the effects of such a wreck on Native coastal communities in the pre-Contact period. **Session 10.**

ZACH WILSON (Washington State University)***An Analysis of the Lind Coulee (45GR97) Faunal Assemblage: Implications for Paleoarchaic Subsistence Strategies on the Columbia Plateau***

Recent analysis of the Lind Coulee (45GR97) faunal assemblage provides insight into the broad spectrum adaptations of the Paleoarchaic inhabitants of the Columbia Plateau. The site occupants utilized a combination of large artiodactyls (Bison sp.) and medium-sized mammals and birds, most notably pygmy rabbit (*Brachylagus idahoensis*) and yellow-bellied marmot (*Marmota flaviventris*). Analysis of cranial and post-cranial bison remains at Lind Coulee indicate that the species should not be identified as modern *Bison bison bison*, as has previously been asserted. Measured elements display characteristics similar to two extinct variants (*Bison bison occidentalis* and *Bison bison antiquus*), though the small sample size may preclude identification to the subspecies level with certainty. Further analysis of the bison population provides insight into site function and activity at Lind Coulee: Bison were hunted and extensively processed at the site and were not selectively transported to Lind Coulee; several individuals were hunted at a given time, rather than in mass episodes; and though individuals of various ages were procured, fully mature individuals are the most abundant in the assemblage. While bison were of obvious importance to the site occupants, the medium-sized mammals and birds at Lind Coulee were also significant resources, and have been previously under-reported. The presence of such remains throughout the period of occupation at Lind Coulee indicates the utilization of a diverse, broad spectrum resource base in the Paleoarchaic on the Columbia Plateau. **Session 16.**

CHRISTOPHER YAMAMOTO (Western Washington University)***Site 45-CA-557: A Lower Elwha Lithic Scatter***

Site 45-CA-557 is a precontact lithic scatter located on a high terrace along the Lower Elwha River on the Olympic Peninsula of Western Washington State. The site was originally recorded December 2005 and a joint WWU/NPS project was done at the site May 2006 revealing a dense lithic scatter. Two 1x1 meter units were excavated; over 200 lithic artifacts were collected. Terraces along the Elwha have high probability for archaeological sites and many of the known sites in the Elwha River Valley are located on terraces. The site shares many elements similar to Olcott Complex sites such as: leaf-shaped projectile points, no recorded features, an absence of FMR, and the absence of or poor preservation of organic material. The site yielded a high

percentage of dacite artifacts, a common trait to lithic scatters on the Olympic Peninsula. Among the artifacts found at 45-CA-557, a high number of tertiary flakes were identified as well as cores and a low number of primary flakes. Analysis of debitage, formed artifacts, and soils were conducted to evaluate Olcott characteristics and other traits common to inland lithic scatters in the Pacific Northwest. **Session 11.**

DAVID ZEPEDA, STEVEN WEBER, and JOHN JONES (Washington State University)
An Exploratory Analysis of Human/Plant Interaction at Harappa: The Use of Phytoliths and Pollen to Determine Plant Utilization.

The archaeological site of Harappa is the namesake of an ancient civilization also known as the Indus Valley Civilization (for having been centered in the Indus river valley). Excavation of the central pit of a circular working platform at the site revealed a greenish clay layer that some thought was evidence of indigo production. This was an exploratory study that attempted to extract both phytoliths and pollen from soil samples taken from the pit in hopes of determining utilization of economic and other plant species at the much debated circular working platforms located at Mound F at Harappa. Determining what grasses or flora might have been utilized at Harappa would prove immensely beneficial in the creation of a primer for study of archaeobotanical assemblages in the investigation of infra-site and inter-site use of plant materials as they related to every day life and use of the working platforms. **Session 24.**

CASEY ZINGG, KEN KARSMIZKI, and KATHLEEN BLACK (The Discovery Center and Wasco County Museum)
Archaeological Investigations at the Rock Fort Site, The Dalles, Oregon

This paper describes the archaeological test results from one specific component of the Rock Fort Site, a possible Lewis and Clark campsite located adjacent to the Columbia River in The Dalles, Oregon. The ten acre site is divided into three primary areas that were chosen for investigation, one of which is most widely believed to be the specific camping spot utilized by the Corps of Discovery Expedition. Archaeological testing was conducted in the summer of 2006 by means of intensive systematic surface collection, 50 X 50 cm shovel probes at five meter intervals, and larger excavation units to investigate specific features within the site. No conclusive evidence of the expedition was found, however a largely undisturbed prehistoric habitation site was identified containing at least three semisubterranean pithouse features, and a diverse assemblage of associated artifacts. This paper focuses on our test results from this site, more specifically on the prehistoric material recovered. Also addressed will be proposed measures to protect the site in the future. **Session 20.**

Northwest Anthropological Conference History

Meeting	Year	City	Host	Abstracts Published
1st	1948	Portland	Reed	NARN 2(1) 1968
2nd	1949	Portland	Reed	NARN 2(1) 1968
3rd	1950	Seattle	UW	NARN 2(1) 1968
4th	1951	Portland	Reed	NARN 2(1) 1968
5th	1952	Seattle	UW	NARN 2(1) 1968
6th	1953	Pullman	WSU	NARN 2(1) 1968
7th	1954	Vancouver	UBC	NARN 2(1) 1968
8th	1955	Seattle	UW	NARN 2(1) 1968
9th	1956	Eugene	UO	NARN 2(1) 1968
10th	1957	Portland	Reed	NARN 2(1) 1968
11th	1958	Pullman	WSU	NARN 2(1) 1968
12th	1959	Portland	PSU	NARN 2(1) 1968
13th	1960	Seattle	UW	NARN 2(1) 1968
14th	1961	Vancouver	UBC	NARN 2(1) 1968
15th	1962	Eugene	UO	NARN 2(1) 1968
16th	1963	Portland	Reed	NARN 2(1) 1968
17th	1964	Pullman	WSU	NARN 2(1) 1968
18th	1965	Bellingham	WWU	NARN 2(1) 1968
19th	1966	Banff	UA	NARN 2(1) 1968
20th	1967	Seattle	UW	NARN 2(1) 1968
21st	1968	Portland	PSU	NARN 2(1) 1968
22nd	1969	Victoria	PM/UV	NARN 2(2) 1969
23rd	1970	Corvallis	OSU	NARN 4(1) 1970
24th	1971	Moscow	UI	NARN 7(1) 1973
25th	1972	Portland	PSU	NARN 7(2) 1973
26th	1973	La Grande	EOC	NARN 7(2) 1973
27th	1974	Corvallis	OSU	NARN 10(1) 1976
28th	1975	Seattle	SCCC	NARN 10(1) 1976
→ 29th	1976	Ellensburg	CWU	NARN 11(1) 1977
✓ 30th	1977	Victoria	PM/UV	NARN 12(1) 1978
✓ 31st	1978	Pullman	WSU/UI	NARN 12(2) 1978
✓ 32nd	1979	Eugene	UO	NARN 14(2) 1980
✓ 33rd	1980	Bellingham	WWU	NARN 15(1) 1981
✓ 34th	1981	Portland	PSU	NARN 15(2) 1981
✓ 35th	1982	Burnaby	SFU	NARN 16 (1) 1982
✓ 36th	1983	Boise	BSU	NARN 18(1) 1984
✓ 37th	1984	Spokane	EWU	NARN 18(2) 1984
38th	1985	Ellensburg	CWU	NARN 19(1) 1985
✓ 39th	1986	Moscow	UI	NARN 20(1) 1986

		Glenden		
40th	1987	Beach	OSU	NARN 22(2) 1988
41st	1988	Tacoma	PLU	NARN 23(1) 1989
42nd	1989	Spokane	EWU	NARN 23(2) 1989
43rd	1990	Eugene	USFS	NARN 24(1) 1990
44th	1991	Missoula	UM	NARN 25(1) 1991
45th	1992	Burnaby	SFU	NARN 26(2) 1992
46th	1993	Bellingham	WWU	NARN 27(2) 1993
47th	1994	Spokane	EWU	NARN 28(1) 1994
48th	1995	Portland	PSU	NARN 29(1) 1995
49th	1996	Moscow	UI	NARN 31(1/2) 1997
50th	1997	Ellensburg	CWU	NARN 32(1) 1998
51st	1998	Missoula	UM	NARN 32(2) 1998
52nd	1999	Newport	OSU	NARN 34(1) 2000
53rd	2000	Spokane	EWU	NARN 34(2) 2000
54th	2001	Moscow	UI	JONA 36(1) 2002
55th	2002	Boise	ISHS	JONA 36(2) 2002
56th	2003	Bellingham	WWU	JONA 37(2) 2003
57th	2004	Eugene	UO	JONA 38(2) 2004
58th	2005	Spokane	EWU	JONA 39(2) 2005
59th	2006	Seattle	PLU/Burke/SCCC/NWAA/BOAS	JONA 40(2) 2006
60th	2007	Pullman	WSU	

Vendors

Association for Washington Archaeology
 Burke Museum
 Idaho State Student Anthropology Club
 Journal of Northwest Anthropology
 Louis Collins
 National Park Service Fort Vancouver National Historic Site
 Oregon Archaeological Society
 University of Montana Department of Anthropology
 University of Washington Press
 US Forest Service Nez Perce National Historic Trail
 WSU Anthropology Graduate Student Organization
 WSU Press
 WSU Reports of Investigation
 WSU Student Anthropology Club

