NWCON 33

40th NORTHWEST ANTHROPOLOGICAL CONFERENCE 1987

NORTHWEST ANTHROPOLOGICAL CONFERENCE

Meeting	Year	City	Sponsor
1st	1948	Portland	Reed
2nd	1949	Portland	Reed
3rd	1950	Seattle	UW
4th	1951	Portland	Reed
5th	1952	Seattle	UW
6th	1953	Pullman	WSU
7th	1954	Vancouver	UBC
8th	1955	Seattle	UW
9th	1956	Eugene	UO
10th	1957	Portland	Reed
11th	1958	Pullman	WSU
12th	1959	Portland	PSU
13th	1960	Seattle	UW
14th	1961	Vancouver	UBC
15th	1962	Eugene	UO
16th	1963	Portland	Reed
17th	1964	Pullman	WSU
18th	1965	Bellingham	WWU
19th	1966	Banff	UA
20th	1967	Seattle	UW
21st	1968	Portland	PSU
22nd	1969	Victoria	PM/UV
23rd	1970	Corvallis	OSU
24th	1971	Moscow	UI
25th	1972	Portland	PSU
26th	1973	La Grande	EOC
27th	1974	Corvallis	OSU
28th	1975	Seattle	SCCC
29th	1976	Ellensburg	CWU
30th	1977	Victoria	BCPM
31st	1978	Pullman	WSU/UI
32nd	1979	Eugene	UO
33rd	1980	Bellingham	WWU
34th	1981	Portland	PSU
35th	1982	Burnaby	SF
36th	1983	Boise	BSU
37th	1984	Spokane	EWU
38th	1985	Ellensburg	CWU
39th	1986	Moscow	UI
40th	1987	Gleneden Beach	OSU

40TH ANNUAL NORTHWEST ANTHROPOLOGICAL CONFERENCE

March 22-24, 1987

Salishan Lodge

Gleneden Beach, Oregon

Hosted by

Department of Anthropology

Oregon State University

Richard E. Ross
Program Chair

David R. Brauner
Arrangement Chair

Registration	Registration is required for attendance at all sessions. The registation desk will be open Sunday from 9:00 a.m. to 6:00 p.m. and from 8:00 a.m. until 1:00 p.m. on Monday.
Speaker	John Nance, author of The Gentle Tasaday, will speak about the current controversy over the authenticity of the Tasaday on Sunday evening at 7:30 p.m.
Book Exhibit	The Lincoln Room will be open during the conference for publishers' displays.
Smoking	Prohibited in meeting rooms
Dance	A small band and dancing is scheduled in the Longhouse on Monday evening starting at 8:00 p.m. A no-host bar will be available at the same time. Table seating is also arranged.
Messages	A message board will be set up on the main hall near the registration desk.
Emergencies	Emergencies and problems connected with the conference will be handled at the registration desk.

Each paper will start as scheduled.
Chairs are expected to stop speakers who exceed their scheduled time.
Papers will not be advanced if a speaker fails to appear.
Keeping on schedule is a courtesy to other participants and the audience.

SUNDAY MORNING, MARCH 22

9:00-6:00	Registration	MEETING ROOM
10:00-12:00	Northwest Conference on Cultural Preservation (planning meeting)	PINE ROOM
9:00-5:00	Book Room Open	LINCOLN ROOM

SUNDAY AFTERNOON, MARCH 22

SESSION 1 — PINE ROOM

ARCHEOLOGY OF THE GULF OF GEORGIA
Organizer and Chair: Roy Carlson

1:00-1:20	Pender Project Goals and Results. Roy Carlson (Simon Fraser University).
1:20-1:40	Canid Remains from the Canal Sites. Avrom M. Digance (Simon Fraser University).
1:40-2:00	Smooth Stones and Sharp Points. David Johnstone (Simon Fraser University).
2:00-2:20	An Analysis of Methods for Collecting Subsistence Information from a Coastal Midden Site. Diane Hanson (Simon Fraser University).
2:20-2:40	Break
2:40-3:00	Cross-correlation of Strata by Vertebrate Content. Richard Garvin (University of Calgary).
3:00-3:20	Pender Population Profile. Sylvia Weeks (Simon Fraser University).
3:20-3:40	Isotropic Analysis of Pender Skeletal Samples. D.E. Nelson (Simon Fraser University).

SESSION 2 — COUNCIL HOUSE A

TOPICS IN CULTURAL ANTHROPOLOGY
Chair: Dorice Tentchoff

1:00-1:20	Oregon's Liminal "Canayien-français." Dorice Tentchoff (Oregon State University).
1:20-1:40	Ideology in a Political Drama: False Consciousness and Affirmation in a Small Turkish Town. James Orr (University of Oregon).
1:40-2:00	The Human Rights Situation and Legal Violations on the West Bank. Linda Pitcher (Lewis and Clark College).
2:00-2:20	The Episcopal Church: Women Clergy and the Diocese of Oregon. Linda Kahlbaum (Oregon State University).
2:20-2:40	Break

2:40-3:00 Looking Out/Looking In: Cultural Identity and University Foreign Students.
Jean B. Campbell (University of Oregon).

3:00-3:20 Do Opposites Attract? Mate Selection in North America.
Peter Browning (Western Washington University).

3:20-3:40 Art Styles as Reflections of Sociopolitical Complexity.
Elizabeth Merrill (Oregon State University).

3:40-4:00 Brokering 'Traditional' and 'Modern' Exchange Systems: How to Make Do on Next to Nothing in the Andes.
Tom F. Love (Linfield College).

4:00-4:20 Inmates of Body House: Prostitution in Moscow, Idaho, 1885-1910.
Priscilla Wegars (University of Idaho).

4:20-4:40 From Fort Simpson to Mazatlan: Tracing Pacific Islanders through the Archival Record.
Elvi Whittaker (University of British Columbia).

SESSION 3 COUNCIL HOUSE B

TOPICS IN ARCHEOLOGY
Chair: William Smith

1:00-1:20 A Cache for Infant-Related Materials: A New Site Type.
Marilyn Chechik (British Columbia Provincial Museum).

1:20-1:40 Is Clay-Plastered Basketry an Appropriate Starting Place for the Development of Pottery?
B. Robert Butler (Idaho Museum of Natural History).

1:40-2:00 Tundra on the Scablands? A Look at the Fauna from Marmes Rockshelter Floodplain.
Grady H. Caulk (Washington State University).

2:00-2:20 A Model for Kill Site Behavior of Scavengers.
Richard Garvin (University of Calgary).

2:20-2:40 Break

2:40-3:00 Distinguishing Natural from Cultural Salmonid Remains in the Pacific Northwest.
Virginia Butler (University of Washington).

3:00-3:20 Europe's Earliest Artists: Paleolithic Painters of the Dordogne.
James D. Keyser (USDA Forest Service).

3:20-3:40 Pacific Northwest Rock Art: An Overview.
Gregg Bettis.

3:40-4:00 Bone Tool Technology as a Taphonomic Factor in Shaping Mammalian Faunal Assemblages.
Kenneth M. Ames, Rick G. Atwell, and Mary T. Regan (Portland State University).

4:00-4:20 GIS Applications in Archaeology: Notes from a Sorcerer's Apprentice.
William Smith (Central Washington University).

SESSION 4 COUNCIL HOUSE C

AOA
Chair: Carl Davis

1:00-1:20 Upper Willamette Valley Prehistory: Environment, Population and Cultural Adaptation for the Last 8000 Years.
Richard D. Cheatham (University of Oregon).

1:20-1:40 Archeology on the Sweet Home Ranger District, Willamette National Forest: An Overview.
Mandy Cole (Willamette National Forest).

1:40-2:00 Aboriginal Plant Use at the Long Tom and Chalker Sites, Willamette Valley, Oregon.
Guy Prouty (University of Oregon).

2:00-2:20 Flaked Stone Technology at the East Bug-A-Boo Site, Linn County, Oregon.
Anan Raymond (U.S. Fish and Wildlife Service).

2:20-2:40 Prehistoric Settlement Patterns in the Long Tom Sub-basin, Upper Willamette Valley, Oregon: A Proposed Model.
Richard D. Cheatham (University of Oregon).

2:40-3:00 Break

3:00-3:20 Lithic Source Implication of Netskinkers.
James Seeley White (Portland State University).

3:20-3:40 A Paradigmatic Classification System for Lithic Material Types.
Stephan E. Matz and Linda Clark (Oregon State University).

3:40-4:00 Break

4:00-4:20 Early Information on Mid-Columbia Basketry: Gleaning from the Literature.
Mary D. Schlick (Kamiakin Research Institute).

4:20-4:40 Archaeological Investigations at the Saltsgaver Site, Southwestern Oregon.
Guy Prouty (University of Oregon).

SPECIAL MEETING

4:00 PINE ROOM

ASSOCIATION FOR WASHINGTON ARCHAEOLOGY

MONDAY MORNING, MARCH 23

SESSION 5 PINE ROOM

HISTORIC SITES IN THE NORTHWEST
Chair: David Brauner

8:30-8:50 A Perspective of a Frontier Community in Oregon 1830-1861.
Lou Ann Speulda (Oregon State University).

8:50-9:10 Over My Shoulder Backward: The French-Canadian Archaeological Project in the Willamette Valley, Oregon.
David Brauner (Oregon State University).

9:10-9:30 The National Park Service Volunteer Archaeological Excavations at the Fort Vancouver New Office: 1986 Field Season.
Charles Hibbs (Portland State University).

9:30-9:50 Non-Ferrous Objects from 35TIl: Metallurgical and Metallographic Comparisons.
Harvey Steele (Oregon Archaeological Society).

9:50-10:10 Break

10:10-10:30 Examples of Chinese Hang-t'u (Tamped Earth) Dams in Northeast Oregon.
L.R. Steeves and Phyllis Lancefield-Steeves (University of Oregon).

10:30-10:50 Cherry Point: The Ethnohistory of a North Puget Sound Fishing Station.
Daniel Boxberger (Western Washington University).

10:50-11:10 Historic Commercial Fishing Facilities: Cherry Point, Washington.
G.F. Grabert (Western Washington University).

11:10-11:30 Madison River Toll Bridge Site: Systematic Intensive Surface Collection in Recognition of Site Structure.
Kenneth Karsmizki (Montana State University).

SESSION 6 COUNCIL ROOM A

HIGHLAND ARCHAEOLOGY/ETHNOGRAPHY IN THE PACIFIC WEST
Organizers and Chairs: Jim Thomson and Bob Mierendorf

8:30-8:50 On Considering the Strategy for the Discovery and Protection of Archaeological and Ethnographic Sites in the Sub Alpine, Alpine and Montane Regions of Crater Lake, Mount Rainier, Olympic, and North Cascades National Parks.
Jim Thomson (National Park Service).

8:50-9:10 On Native American Use of Upland and Montane Regions in the Pacific Northwest.
G.F. Grabert (Western Washington University).

9:10-9:30 Cascade Settlement Patterns.
Sandra Snyder (University of Oregon).

9:30-9:50 Alpine Obsidian Procurement in the Great Rocks Wilderness: Preliminary Research.
Richard McClure, Jr. (Gifford Pinchot National Forest).

9:50-10:10 Break

10:10-10:30 Archaeological Reconnaissance in the Near Timberline of the North Cascades National Park.
Robert Mierendorf (North Cascades National Park).

10:30-10:50 Ethnohistorical Noted Aboriginal Uses of the Western North Cascades.
Alfred Reid (Western Washington University).

10:50-11:10 The Naches Lithic Scatter Sites.
Gerald Hedlund (Green River Community College).

11:10-11:30 Cultural Resource Surveys in the Southern Washington Cascade Mountains 1980 through 1986.
Guy Marden (Mt. St. Helens National Volcanic Monument).

SESSION 7 COUNCIL ROOM B

CULTURAL ANTHROPOLOGY
Chairs: M. Mitchell and B. Efrat

8:30-8:50 The Other Side of the Mountains.
Kurt Russo (Kluckhohn Values Center)

8:50-9:10 The Life History Approach to Cultural Heritage Projects on the Northwest Coast.
Marjorie Mitchell (Camosun College).

9:10-9:30 Linguistics in a Museum Setting.
Barbara Efrat (Government of British Columbia, Victoria).

9:30-9:50 Heritage, Power, and Politics: Cultural Preservation on the Northwest Coast.
Julie Broyles (University of Washington).

9:50-10:10 Break

10:10-10:30 Toward An Anthropology of Experience: Life History.
Sal Biondello (University of Oregon).

10:30-10:50 Not Just Fisherman's Wives.
Kathleen Young (Western Washington University).

10:50-11:10 Inner Contradictions in Doukhobor Beliefs vis a vis Fractiousness and Factionalization.
Nina Olson (University of Western Washington).

11:10-11:30 Early Sandwich Islanders on the Pacific Coast as Seen in the Official Records.
Elvi Whittaker (University of British Columbia).

11:30-11:50 Northwest Coast Canoe Types Classification and Distribution.
Leslie Lincoln (University of British Columbia).

11:00-12:00 The Anthropology BA: What Do We Want Them To Learn?
Carolyn Henning Brown (Whitman College).

SESSION 8 COUNCIL ROOM C

COASTAL ARCHAEOLOGY
Chair: Reg Pullen

8:30-8:50 Migration Theories and the Search for Pleistocene Man on the Northwest Coast of America.
Molly Raymond Mignon (Simon Fraser University).

8:50-9:10 Prehistoric Subsistence on the Northern Coast of British Columbia.
Ken Ames (Portland State University).

9:10-9:30 San Juan Island Archaeological Project: Sampling a Shell Midden.
Julie K. Stein (University of Washington).

9:30-9:50 Stratigraphy and Lithic Technology of 455J24 at English Camp.
Kim Kornbacher (University of British Columbia).

9:50-10:10 Break

10:10-10:30 Archaeology of the Central Oregon Coast, the Whale Cove Site.
Ann Collier Bennett (Oregon State University).

10:30-10:50 On the Relationships Between Spatial and Compositional Attributes of Archaeological Sites on the Oregon Coast.
Virginia Marie Betz (Oregon State University).

10:50-11:10 Root Utilization Among the Coos and Coquille Tribes of Southwest Oregon.
Reg Pullen (Bureau of Land Management).

11:10-11:30 A Pre-Contact Dumish Population Projection.
Kenneth D. Tollefson (Seattle Pacific University).

MONDAY AFTERNOON, MARCH 23

SESSION 9 COUNCIL ROOM C

AOA
Chair: Carl Davis

1:00-1:20 The Peninsula I Site, 35-JE-53.
Scott Stuemke (University of Oregon).

1:20-1:40 Congruence of Ethnohistoric and Archaeological Settlement Models in the Klamath River Canyon.
Elliot Gehr (Que Pasa Research Alliance).

1:40-2:00 The Berber Reservoir: An Upland Modoc Seasonal Occupation.
Carla D. Burnside (University of Oregon).

2:00-2:20 Break

2:20-2:40 Archaeological Investigations Along the Fall River Drainage, Central Oregon.
Janine McFarland (Oregon State University).

2:40-3:00 Archaeological Investigation at Felida Moorage, 45-CL-12, A Lower Columbia River Prehistoric Ceramic Site.
Charles Hibbs (Portland State University).

3:00-3:20 The Prehistoric Ceramics of Lake River.
Alison Stenger (Portland State University).

3:20-3:40 A Classification of Stone Features.
Phillip Cody Green (Oregon State University).

3:40-4:00 Some Comments on Late Paleo-Indian Manifestations in the Northern Great Basin.
Bruce M. Crespin (Bureau of Land Management).

4:00-4:20 Microarchaeological Analysis of the Chinese Workers' Area at the Warrendale Cannery Site, Oregon.
Jo Reese (The Cultural Heritage Foundation).

4:20-4:40 A Pattern for the Prehistoric Site Locations in East Central Oregon.
Norm Steggell (Malheur National Forest).

SESSION 10 COUNCIL ROOM B

INDIAN CULTURE IN THE 80s
Chair: Joyce Greiner

1:30-1:50 Look to the Past: See the Future.
June Wilburn (Umatilla National Forest).

1:50-2:10 Was the IRA Good for Indians? Anthros and the Indian New Deal.
Steve Talbot (University of Oregon).

2:10-3:00 Discussion

SESSION 11 PINE ROOM

HISTORIC SITES IN THE NORTHWEST
(continued)
Chair: David Brauner

1:00-1:20 The Franklin Project: Phase II.
Gerald Hedlund (Green River Community College).

1:20-1:40 The Analysis of Artifacts from Franklin, Washington.
Mark Vernon and Gerald Hedlund (Green River Community College).

1:40-2:00 Research Report on Wind River Administrative Site CCC History.
Quentin Mark Arnold (Gifford Pinchot National Forest).

2:00-2:20 The Summit Trail: A Look at an Historic Linear Feature on the Ochoco National Forest, East-Central Oregon.
Amy Gowan (Ochoco National Forest).

SESSION 12 COUNCIL ROOM A

HIGHLAND ARCHAEOLOGY/ETHNOGRAPHY IN THE PACIFIC WEST
(continued)
Organizers and Chairs: Jim Thomson and Bob Mierendorf

1:00-1:20 Game Distribution as a Determinant of Archaeological Site Location in the Olympic Mountains.
Randall Schalk (University of Washington).

1:20-1:40 A Comparison of High Elevation Sites in Olympic and Mt. Rainier National Parks, Washington.
Eric Bergland.

1:40-2:00 Dimension of Archaeological Sites in the Salmon River Mountains, Idaho.
Frank Leonhardy (University of Idaho).

2:00-2:20 Patrol Point: An Upland Site in North Central Idaho.
Mary Anne Davis (Idaho State Historical Society).

2:20-2:40 A View from the Parks: Archaeological Investigations of Two Sites in the Oregon High Cascades.
Thomas E. Churchill and Paul Christy Jenkins (Coastal Magnetic Search & Survey).

2:40-3:00 Hunters in the Highlands: Archaeological Implications of Mountain Dene Subsistence and Settlement in the Mackenzie Mountains, Northwest Territories.
David Pokotylo (University of British Columbia).

3:00 Discussant: Messerschmidt, Ames, Aikens, Reed

SPECIAL SESSIONS

1:00 Association for Washington Archaeology and Washington Archaeological Research Center (joint session)
(check Registration for location)

8:00 Dance/No Host Bar LONGHOUSE

TUESDAY MORNING, MARCH 24

SESSION 13 PINE ROOM

SYMPOSIUM ON BANDON SITE
Organizer and Chair: Roberta L. Hall

8:30-8:50 An Overview of Indian/Archaeology Relationships Concerning Burials From a Coastal Perspective.
Richard Ross (Oregon State University).

8:50-9:10 A Bandon Perspective on 35CS43c.
Betty Vogel and Roberta Hall (Oregon State University).

9:10-9:30 Analysis of Non-Human Remains at Site 35CS43c.
Lee W. Lindsay, Jr. (Oregon State University).

9:30-9:50 Analysis of Manufactured Items from Site 35CS43c: Bandon, Oregon
Anthony R. Keith (Oregon State University).

9:50-10:10 Incised Sea Mammal Tooth Pendant from the Bandon Site.
Mariana Mace (Oregon State University).

10:10-10:30 Skeletal Population at 35CS43c.
Roberta L. Hall (Oregon State University).

10:30-11:00 Discussion

11:00-11:20 Break

SESSION 14 PINE ROOM

TOPICS IN PHYSICAL ANTHROPOLOGY
Chair: Kenneth Beals

11:20-11:40 Diagnosis of Scoliosis by Single Sacral Element Examination.
Barbara C. Andersen (Island County, Washington).

11:40-12:00 The Peter Pan Syndrome as an Explanation for Concealed Estrus in Hominids.
M.E. Stephens (University of Calgary).

12:00-12:20 Geneatopes and Primary Incest.
John Atkins (University of Washington).

12:20-12:40 Genetics and Fertility of the Temuan of West Malaysia.
Dee Baer (Oregon State University).

12:40-1:00 Human Remains from the Central Oregon Coast.
Guy Tasa (University of Oregon).

SESSION 15 COUNCIL ROOM A

NEW DIRECTIONS IN SOUTHWEST OREGON ARCHEOLOGY
Organizers and Chairs: Elizabeth Budy and Robert Elston

8:00-8:10 Introduction

8:10-8:30 Episodes of Alluviation in the Upper Rogue River Drainage, Southwestern Oregon.
Keith L. Katzer (University of Arizona).

8:30-8:50 The Boiling Earth: Modeling Post-Depositional Processes at Site 35JA107.
Elizabeth E. Budy (Intermountain Research).

8:50-9:10 Obsidian Hydration Studies at 35JA107: A Study of Alternate Methods and Interpretations.
Charles D. Zeier (Intermountain Research).

9:10-9:30 Chemical Analysis of Organic Residues on Stone Tools.
Winston Tennant (Intermountain Research).

9:30-9:50 Break

9:50-10:10 Lithic Variability at Elk Creek.
Robert Elston (Intermountain Research).

10:10-10:30 Edge Wear Analysis: Tool Function and Material Value.
Robert Clerico (Intermountain Research).

10:30-10:50 Projectile Point Classification and Type Diversity in Southwestern Oregon.
Michael P. Drews (Intermountain Research).

10:50-11:10 Southwest Oregon Archeofaunas: New Perspectives on the Economic and Distributional Analysis of Broken Bones.
Dave N. Schmitt (Intermountain Research).

11:10-11:30 1986 Excavations in Elk Creek Valley: Preliminary Report.
Richard M. Pettigrew (INFOTEK).

11:30-12:30 Summary and Discussion

SESSION 16 COUNCIL ROOM B

TOPICS IN ARCHAEOLOGY
Chair: Don Dumond

9:00-9:20 Plateau Pacifism: End of the Myth.
James C. Chatters (C.W.A.S. now Battelle Northwest).

9:20-9:40 Whale Traps on the North Atlantic.
Don E. Dumond (University of Oregon).

9:40-10:00 Preliminary Interpretation of Material Remains of Stratigraphy at Two Prehistoric Sites in Southwest Alaska.
S. Neal Crozier (Bureau of Indian Affairs).

10:00-10:20 Alaska Cultural Resource Management: Federal Policy vs. Native Ideals.
Dennis Griffin.

10:20-10:40 Tumbling Through the Crack: The Nez Perce ARPA Nightmare.
James Lawyer (University of Idaho).

10:40-11:00 Break

11:00-11:20 Wildfire Effects on Cultural Resource Sites and Their Management.
David Powell (Wallowa-Whitman National Forest).

11:20-11:40 Archeological Investigations at the Stemilt Creek Village, Chelan County, Washington.
Jerry Galm and Keo Boreson (Eastern Washington University).

11:40-12:00 Early and MidHolocene Occupation along the Similkimeen River.
L.V. Salo (U.S. Army Corps of Engineers).

SESSION 17 COUNCIL ROOM C

APPLIED ANTHROPOLOGY
Chair: D. Messerschmidt

9:00-9:20 Local Involvement in Natural Resource Development: Opportunities for Anthropology with Asian Case Examples.
Donald Messerschmidt (Washington State University).

9:20-9:40 Peasant Lives in Progress.
William Bestor (Linfield College).

9:40-10:00 Ethical Dilemmas in Anthropology.
Richard Dunn (University of Montana).

10:00-10:20 Anthropology and the Future: The Value of Anthropological Training and Its Relationship to Employment in Other Fields.
Jean Postlethwaite (Central Washington University).

10:20-10:40 Break

10:40-11:00 Solving Common Property Problems.
Courtland L. Smith (Oregon State University).

11:00-11:20 Textiles for Tourists: A Socio-economic Analysis of Marketing of Native Weaving in Cusco, Peru.
Terry West.

11:20-11:40 Management Training in the South Pacific.
John A. Young (Oregon State University).

PAPER ABSTRACTS

Prehistoric Subsistence on the Northern Coast of British Columbia.

Kenneth M. Ames, Portland State University

Analysis of faunal and artifactual remains from several sites in the Prince Rupert Harbour region of Northern British Columbia indicate the existence of a focal subsistence economy. Remains of 96 species of mammals, fish and birds were recovered in the excavations. Of these deer, four species of sea mammals, salmon and herring appear to have been the primary food resources. The presence particularly of salmon and eulachon suggest the development of regional scale logistical mobility strategies by the Middle Period (2500-1500 B.P.).

Bone Tool Technology as a Taphonomic Factor in Shaping Mammalian Faunal Assemblages.

Kenneth M. Ames, Rick G. Atwell, and Mary T. Regan, Portland State University

Binford has proposed that hunter-gatherer hunting and butchering of animals produces four basic patterns of faunal remains: reverse utility, unbiased utility, bulk utility and gourmet utility. Lyman's work shows that at least one of these, the reverse utility pattern, is the predictable result of normal attrition by weathering. The mamalian bone assemblages from the excavated house floors at the Hatwai archaeological site display a distinctive pattern resulting from selection of bone which were both high in marrow content and dense enough to be good tool bone. This produced a faunal assemblage with very high frequencies of lower limb bones

Diagnosis of Scoliosis by Single Sacral Element Examination.

Barbara C. Andersen, Island County, Washington

Eighty-five human sacra from the Hamann-Todd osteological collection were sampled to determine if scoliosis of the vertebral column could be diagnosed by visual examination of the sacral element alone, and to provide additional forensic information. Fifty symmetrical sacra were found never to have an associated lateral curvature of the spine, even though lipping, fusion or kyphosis may have been present. Thirty-five asymmetrical sacra were always associated with scoliosis of the spine. When the sacrum is definitely asymmetrical, a diagnosis of scoliosis of the vertebral column can be made with a high degree of confidence.

Research Report on Wind River Administrative Site CCC History.

Quentin Mark Arnold, Gifford Pinchot National Forest, Wind River Ranger District

The Civilian Conservation Corps played a prominent role from 1933 through 1942 on the Wind River Administrative Site of the Gifford Pinchot National Forest. On this site was built one of the first CCC camps in Washington State, Camp Hemlock No. 4-40. The enrollees who worked here built trails, replanted burned over areas, and constructed buildings. At Wind River a rich legacy remains of the efforts these young men put forth. Drawing from Forest Service photo records and historic documents, this research report will show existing CCC buildings, previous facilities, and insights into CCC administration at Camp Hemlock.

Geneatopes and Primary Incest.

John R. Atkins, University of Washington

A branch of topology known as Polytope Theory appears to have useful anthropological applications, in which various elementary social structures are interpreted as n-simplexes that exist within wider relational nets called simplicial complexes. For example, if we construe kinship structures as "geneatopes" we immediately discover that the (almost) universal nuclear exogamy rule--or primary incest taboo, so called--can be given an entirely geometric definition that proves to be startlingly simple and intuitive. This, in turn, throws fresh light on human nuclear exogamy via certain important stability principles from General System Theory.

Genetics and Fertility of the Temuan of W. Malaysia.

Dee Baer, Oregon State University

The aboriginal Temuan are jungle fringe horticulturalist-hunter-foragers living in villages of 50-200 people. Medically underserviced, they are vulnerable both to endemic diseases and to reproductive complications. Surveying their genetics and exposure to malaria (both falciparum and vivax) revealed a genetic resistance to malaria via elliptocytosis (oval red cells) and perhaps other polymorphic genes. Fertility analysis now shows completed family size is low and suggests, based on incomplete data, that while elliptocytosis favors survival in a malarial environment it may also affect the maternal fertility component of genetic fitness.

Archaeology of the Central Oregon Coast, the Whale Cove Site.

Ann Collier Bennett, Oregon State University

Excavations at Whale Cove (35LNC60) on the central Oregon coast were conducted during the summer of 1985. One of the major considerations in the field excavation strategy was to maximize chronological control via cultural stratigraphy. Two major culturally-produced shell strata were identified: Lower Shell and Upper Shell. Differences in faunal composition between the Lower and Upper shell components suggest that patterns of seasonal exploitation change over time. Furthermore, these data indicate that contemporary distributions of marine mammal species along this part of the Oregon coast are an inaccurate representation of past distributions. These diachronic changes are discussed in reference to models of changing subsistence strategies for the prehistoric coastal inhabitants of Oregon.

A Comparison of High Elevation Lithic Scatters in Olympic and Mt. Rainier National Parks, Washington.

Eric O. Bergland

High elevation chipped stone lithic scatters were documented by the author in Olympic National Park in 1982 and 1983, ranging in elevation from 3200-6100 feet above sea level. During the 1986 field season, the author and others documented two lithic scatters at similar elevations in Mt. Rainier National Park (at 5640 feet and 6720 feet). The sites and isolates in Olympic were discovered during the course of purposive survey, while those in Mt. Rainier were discovered and reported to the NPS Regional Archeologist by Park and concessioner employees. The sites are compared in terms of overall assemblage characteristics and environmental location, and the inherent difficulties of site preservation in the face of intensive recreational hiking are discussed.

Peasant Lives in Progress.

William Bestor, Linfield College

The longitudinal study of individual Portuguese peasants over a 21-year period shows continuities in fundamental personality structure, value orientations, and systems of personal expression. In addition, the 32 peasants in this study reflect the transformations of revolution, economic recession, and new urban-derived opportunities. The most recent field investigation of this community is the seventh in a series of systematic psychoethnographic surveys of a single primary sample unit in the village of Aldeia, Portugal. The methodological heuristics of longitudinal ethnography will be described.

Pacific Northwest Rock Art: An Overview.

Greg Bettis, Portland, Oregon

The Indian rock art of the mid-Columbia River area holds many mysteries locked within its beautifully-executed paintings and carvings. Little attention has been given to the study, documentation and preservation of this lost art form. It has been only recently that a greater appreciation for the understanding of the Indian rock art has emerged. I have spent the last eight years making a detailed record of these ancient petroglyphs and pictographs. The research I have completed includes drawings that accurately record the rock art as one would see it on the rock surface. This documentation is being done using photographic techniques, mapping and colored renderings. The slide presentation I have prepared will consist of an overview of rock art sites from The Dalles, the Deschutes, Southern Oregon and the Willamette Valley areas.

On the Relationship between Spatial and Compositional Attributes of Archeological Sites on the Oregon Coast.

Virginia Marie Betz, Oregon State University

Quantitative relationships between spatial and compositional site components for 21 archeological sites on the Oregon coast are analyzed. Four site attributes are considered: area excavated, volume excavated, artifact abundance, and artifact class representation. Results suggest that functional relationships between and among these variables can be modelled statistically. The assessment of these site attributes on a regional level can provide a valuable kind of information applicable to practical concerns, such as predicting site yield for cultural resource management purposes, as well as to theoretical concerns, such as establishing reliable behavioral correlates for artifactual patterning.

Toward an Anthropology of Experience: Life History.

Sal R. Biondello, University of Oregon

Until recently, anthropologists have predominantly studied belief systems or cultural transmits. This type of study has resulted in an understanding of culture as in patterns, systems, values, etc. Lately, there has been increasing interest in an understanding of culture which includes experience (Turner, Bruner, Myerhoff, etc.). This type of study attempts to include the life of feelings (Langer, Geertz) to which these cultural transmits lead. These attempts have yet to include life history of the type employed by Oscar Lewis. This paper addresses what life history of this nature has to offer in this endeavor.

Cherry Point: The Ethnohistory of a North Puget Sound Fishing Station.

Daniel L. Boxberger, Western Washington University

At the time of the establishment of Indian reservations in Western Washington, circa 1855 to 1860, Cherry Point was an important fishing station for the Lummi, providing an ideal location for intercepting migratory runs of Fraser River salmon. Although Native use of Cherry Point ceased in the mid-1800s, salmon fishing at the site has continued to the present. This paper examines four distinct eras of salmon fishing at Cherry Point: the pre-commercial Indian reef net fishing; the commercial trap fishery, 1897 to 1934; the non-Indian reef net fishery, 1935 to 1964; and the mobile fishery, 1965 to the present.

Over My Shoulder Backward: The French-Canadian Archaeological Project in the Willamette Valley, Oregon.

David Brauner, Oregon State University

Beginning in 1829 French-Canadian employees of the Hudsons Bay Company at Fort Vancouver were allowed to settle in the Willamette Valley when their labor contracts expired. Through a combination of bigotry, nationalistic fervor, and illiteracy information on these early French-Canadians is almost nonexistent compared to the later American settlement of the Willamette Valley. The French-Canadian Archaeological Project, now in its second year, will attempt to rectify these historical and anthropological omissions. To date, the project has been supported by Oregon State University and the Oregon State Historic Preservation Office. A summary of the projects findings and future directions will be presented.

The Anthropology BA: What Do We Want Them to Learn?

Carolyn Henning Brown

NO ABSTRACT

Do Opposites Attract? Mate Selection in North America.

Peter Browning, Western Washington University

Despite dramatic changes in mate selection in post-industrial North America, very little work has been done concerning the actual process. The combined effects of changes in technology, family, and population density have, in effect, created a new mate selection process. Today mate selection is influenced less by traditional family and kinship ties and primarily accomplished through individual choice. How we make these choices in today's society is considered in light of current theories. This research is an attempt to find a model that can be applied within our own diverse society and cross-culturally.

Heritage, Power, and Politics: Cultural Preservation on the Contemporary Northwest Coast.

Julie Broyles, University of Washington

"Heritage" is a cultural construct, composed of threads from the past, rewoven to address concerns of the present. It is a people's "working definition" of culture and identity, which, over time, is ". . . molded and reformulated according to the demands of ethnic politics" (Linnekin 1983). This paper is an exploration of "heritage" as it is formulated, defined, expressed today in native communities on the Northwest Coast. Contemporary native cultural preservation efforts provide the focus for this analysis, which draws from

Barth's concept of ethnic boundary maintenance to illuminate the interconnections between heritage, power, and politics.

The Boiling Earth: Modeling Post-Depositional Processes at Site 35JA107.

Elizabeth E. Budy, Intermountain Research

Most early (i.e., pre-2000 B.P.) prehistoric sites on the upper Rogue River are open, surface sites, found on older terraces; few are clearly stratified. Recognition of site structure in the horizontal and vertical distributions of artifacts is related to factors of preservation and post depositional impacts. The significance of post depositional processes, in understanding artifact distributions, is illustrated with a "Boiling Earth Model" from site 35JA107. The model considers bioturbation, its consequences on archaeological deposits, and methods used to derive inferences.

The Gerber Reservoir Site: An Upland Modoc Seasonal Occupation.

Carla D. Burnside, University of Oregon

The Gerber Reservoir site in Southern Oregon is located in the northeastern portion of Modoc territory (V. Ray 1963). Situated at 4880 feet in elevation, the site (.25 miles long and .125 miles wide) is on a low ridge overlooking what was formerly an extensive wet meadow. Work at the site during July/August 1986 recorded 28 stone rings (probably house outlines) and 30 bedrock mortars, as well as a continuous scatter of lithic material. According to informant testimony, camas, epos, seed crops, waterfowl, deer, elk, and ground hogs were available in the immediate vicinity. These could have supported human occupation from spring through early fall. Ethnographic literature mentions Modoc subsistence activities in upland areas, but no mention of upland summer villages are described. Due to the major extent of the site and the presence of numerous substantial structures, it appears that the Gerber Reservoir site represents an extended warm season upland occupation in Modoc territory.

Is Clay-Plastered Basketry an Appropriate Starting Place for the Development of Pottery?

B. Robert Butler, Idaho Museum of Natural History, Idaho State University

The question "what was the first way in which pottery was made?" is often answered by pointing to finds of basketry-impressed shards in Egypt or China and suggesting that these may mark the beginnings of pottery making. From the point of view of primitive ceramics, such an answer makes very little sense. There are a number of rather fundamentally different ways of making pottery, and these have little in common with clay-plastered basketry. As shown here, clay-plastered basketry is probably a unique technology more closely related to wattle-and-dob construction than to pottery making in general.

Distinguishing Natural from Cultural Salmonid Remains in the Pacific Northwest.

Virginia L. Butler, University of Washington

The potential for natural salmonid remains to become mixed with archaeological deposits in the Pacific Northwest has received little attention. Yet salmonid life history characteristics, which includes annual mass death of millions of anadromous forms, suggests resulting faunal remains may become deposited in riverine archaeological settings. As much of the region's prehistory relies on interpretation of fish utilization, clarifying the nature of nonhuman

accumulating mechanisms of salmonids is of potential significance. Criteria used to distinguish natural and cultural fish deposits are presented through analysis of control assemblages from the Puget Sound Lowlands.

Looking Out/Looking In: Cultural Identity and University Foreign Students.

Jean B. Campbell, University of Oregon

University foreign students participating in a program that puts them into contact with Americans in schools and the community may have their cultural identity strengthened, weakened, or made more complex in the process. Although lumped together as "foreign students," they individually establish the significance of their affiliation with a nation, language, religion, or cultural group. They look outward in response to perceptions and stereotypes the Americans have of them; they look inward as they assess changes in their attitudes and behavior through immersion in the host society. The researcher's conclusions are based on interview and observation methods.

Pender Project Goals and Results.

Roy L. Carlson, Simon Fraser University

The Pender Project funded by Simon Fraser University and the B.C. Heritage Conservation branch had three stated goals: (1) to collect data pertinent to the understanding of the origins of Northwest Coast culture patterns; (2) to salvage data from two archaeological sites undergoing rapid erosion; and (3) to provide an education program on archaeology for site visitors. Three seasons (May-August, 1984-86) of excavation were undertaken. Relative to the first goal, a chronology spanning the last 5000 years was established, and a sample of about 3800 artifacts and 138 isolatable burials, and data on subsistence derived from both a large faunal sample and isotopic analysis were recovered. The overall general conclusion is that there was very little change in patterns of subsistence, art and belief, social structure, and technology over the last 4000 years of prehistory in this region. Fifty percent of one site was excavated and 80 percent of the other, which met the salvage goals. The S.F.U. field school participated in the digs and over 15,000 visitors toured the excavations.

Tundra on the Scablands? A Look at the Fauna from Marmes Rockshelter Floodplain.

Grady H. Caulk, Washington State University

Marmes Rockshelter on the Palouse River in southeast Washington, excavated in the 60's, yielded a record of man in the Northwest for the last 10,000 years. Preliminary examination of the animal remains from the 10,000 year old floodplain component included Arctic Fox, which usually has been associated with Tundra environments. A recent study of more of the remains from the floodplain component provided additional Arctic Fox remains in addition to the normal steppe assemblage. This study suggests that the environment in the Columbia Basin 10,000 years ago was similar to that of today except summers may have been cooler and slightly more moist.

Plateau Pacifism: The End of the Myth.

James C. Chatters, C.W.A.S. (now Battelle Northwest)

In the past decade, evidence contradicting Ray's portrayal of Plateau people as pacifists has come to light at an accelerating rate. First, W.C. Smith suggested that mesa-top habitations in the Columbia Basin represented

fortress-like strongolds. Susan Kent then compiled ethnographic accounts of intertribal conflict, labeling pacifism a myth. Finally, 13 of the 16 skeletons recovered along the Columbia and Okanogan Rivers since 1982 have shown evidence of violent death. Dates on these men, women and children range from ca. 425 and 1780 B.P. Ethnohistorical testimony shows that the violence continued into the historic period. Rather than evincing occasional deviation from a pacifist ideal, these findings require the conclusion that internecine warfare was a way of life and pacifism nothing more than a far off dream.

Prehistoric Settlement Pattern in the Long Tom Sub-Basin, Upper Willamette Valley, Oregon: A Proposed Model

Richard D. Cheatham, University of Oregon

Recently three independently conducted surface surveys were completed within a 12x14 square mile area in the Long Tom sub-basin providing a data base of over 150 sites for a site size/location analysis. Sites are divided into five size categories. These groups provide the basis for locational analyses using statistical methods comparing (1) sites in upland versus lowland habitats and (2) sites located on various geomorphic surfaces. Conclusions are reached concerning the possible size and location of winter village sites.

Upper Willamette Valley Prehistory: Environment, Population, and Cultural Adaptation for the Last 8000 years.

Richard D. Cheatham, University of Oregon

In the Willamette Valley the period from 6000 B.C. to about 2000 B.C. was a time of maximum warmth and dryness. After about 2000 B.C., the climate ameliorated to cooler and moister conditions similar to today. Integrating new data from the Fern Ridge Lake Archaeological Project near Eugene, Oregon, with previous archaeological knowledge about the Willamette Valley, the discussion centers upon correspondences observed between changing environmental conditions, increases in population, and changing cultural practices from 6000 B.C. to disruption of the Kalapuyan society.

A Cache for Infant-Related Materials: A New Site Type.

Marilyn Chechik, British Columbia Provincial Museum

The use of a rock shelter/cave by the Kwakwa ka'wakw (Kwakiutl) to hide cedar bark bedding, cradles, and other infant-related materials is referred to by both Boas and Dawson. This practice was most likely related to the prevention of sorcery. A rock shelter site was discovered on Seymour Inlet (British Columbia) containing a diversified assemblage of basketry and textiles as well as other artifacts including cradle fragments. The basketry containers were filled with cedar bark of various forms and stages of processing. The nature of the assemblage and other factors suggest that this site (late prehistoric/protohistoric) served the same purpose as that outlined by Boas and Dawson.

A View from The Parks: Archaeological Investigations of Two Sites in the Oregon High Cascades.

Thomas E. Churchill and Paul Christy Jenkins, Coastal Magnetic Search & Survey

Archaeological investigations of two prehistoric sites located on the Willamette National Forest were conducted during the fall of 1986 by Coastal Magnetic Search & Survey. Both sites are located near an area called The Parks in the High Cascades west of the Santiam Pass. The primary goals fo

the project were to delineate site boundaries (horizontal and vertical), evaluate the site's scientific value and research potential, and to make a preliminary interpretation of their significance. The results of the excavations are reviewed and an assessment of current regional perspectives as viewed from The Parks is presented.

Edge Wear Analysis: Tool Function and Material Value.

Robert L. Clerico, Intermountain Research

Edge wear studies on tools from two Elk Creek sites use a functional classification reflecting relative hardness of materials and type of work; functional inferences are derived from observations of several significant variables (e.g., edge angle, EU location, EU outline, artifact type, wear type). Use intensity and curation indices provide measures of tool utilization and maintenance for inter-site assemblage comparisons. These measures reflect toolstone quality and availability as predicted by Elston's cost-benefit analysis of lithic variability.

Archeology on the Sweet Home Ranger District, Willamette National Forest: An Overview.

Mandy Cole, Willamette National Forest NO ABSTRACT

Some Comments on Late Paleo-Indian Manifestations in the Northern Great Basin.

Bruce M. Crespin, Bureau of Land Management

This paper presents a discussion of Harney County-wide occurrences of projectile forms considered diagnostic of Late Paleo-Indian Period (11,000-7000 years B.P.) hunting activities. These selected artifacts were recorded in Eastern Oregon, with proveniences in varied landforms that are found in areas such as Catlow Valley, the Malheur Lake Basin, upland zones throughout Harney County, and adjacent regions. Approximately 40 such projectiles are compared to published lithic forms from the general region (e.g., Windust, Haskett, Great Basin Stemmed Series, etc.). The environmental and archaeological context of these finds is discussed, as is obsidian source analysis, and some tentative conclusions are drawn.

Preliminary Interpretation of Material Remains and Stratigraphy at Two Prehistoric Sites in Southwest Alaska.

S. Neal Crozier, Bureau of Indian Affairs

Two archeological sites in southwest Alaska were test excavated by Bureau of Indian Affairs archeologists during the summers of 1985 and 1986. The first site, on Kodiak Island, containing abundant faunal remains, returned radiocarbon age estimates between 6620 and 2700 B.P. The second site, a village complex 25 air miles NNW of Dillingham, was apparently occupied between 2380 and 150 BP and contained potsherds, numerous lithic diagnostic artifacts, and well preserved birch bark and clay lined receptacles. Both sites have been determined eligible for inclusion in the National Register of Historic Places. Material remains as well as preliminary stratigraphic interpretations are discussed.

Patrol Point: An Upland Site in North Central Idaho.

Mary Anne Davis, Idaho State Historical Society

Recent investigations in the Nez Perce Forest recorded sites which may be attributed to use by Native Americans in their seasonal rounds of subsistence. Ethnographic accounts document the use of the Slate Creek and Skookumchuck Creek drainages by the Nez Perce but archaeological information was previously lacking. A testing project by the ISHS and the Nez Perce Forest was conducted this past year at Patrol Point (10IH1603) at an elevation of 6160 feet (1878 meters) above sea level. Assessment of the artifacts revealed use of the site area over the last 2000 years.

Canid Remains from the [Pender] Canal Sites.

Avrom M. Digance, Simon Fraser University

Canid remains were numerous at the Canal sites. The largest number were recovered from DeRt 2, which also yielded the earliest specimen dated to 4320 ± 220 B.P. Osteometric analysis of cranial and mandibular elements indicates the presence of one type of dog (Canis familiaris) morphologically similar to coyote (Canis latrans). At DeRt 2 most canid remains were associated with human burials and rock features whereas at DeRt 1 they occurred in trash.

Projectile Point Classification and Type Diversity in Southwestern Oregon.

Michael P. Drews, Intermountain Research

The lack of stratified archaeological sites and paucity of radiocarbon dates largely account for poorly developed projectile point chronologies in southwestern Oregon. Lack of standardized classification methods and nomenclature have resulted in a proliferation of undefined point types. Description of a sample of projectile points from selected sites along Elk Creek illustrate use of standardized classification measures; observations of post production modification and/or use indicate the potential range of variability within types.

Whaletraps on the North Pacific?

Don E. Dumond, University of Oregon

The presence on Izembeck Lagoon of a prehistoric house with rafters of whale mandibles combines with recent studies of the behavior of the Pacific gray whale (Eschrichtius robustus) to suggest that several lagoon systems on the Bering Sea coast of the Alaska Peninsula may have functioned as aboriginal whale traps. Partial confirmation is provided by the presence of large sites at three of four other similar lagoon systems on the Peninsula. Related ethnographic reports and broader implications for the Northwest Coast are discussed.

Ethical Dilemmas in Anthropology.

Richard Dunn, University of Montana

Under discussion are the ethical choices available to anthropologists in the field. Should anthropologists adhere strictly to codified rules of ethics that have been established by the profession or should reliance on such codes be tempered by the use of situational ethics as warranted by the realities of field work? The concepts of normative ethics and metaethics are examined in

relation to one's approach to traditional cultures. Historical lapses in ethical anthropological inquiry are mentioned, particularly the ill-fated "Project Camelot."

Linguistics in a Museum Setting.

Barbara S. Efrat, Special Cultural Programs, Government of British Columbia, Victoria.

Linguistics is rarely found as a separate academic discipline within a museum in either Canada or the U.S. Any linguistic work in museums is usually subsumed udner Anthropology or Ethnology. However, a separate Linguistics Division, focussing on the native Indian languages of the province, functioned successfully in the British Columbia Provincial Museum from 1973 to 1986 alongside of an Ethnology Division. The linguistics sub-section balanced its responsibilities to various communities--the native Indian, the scientific/academic, the museum, and--last, but definitely not least--the public service in which the museum functioned as a branch of a large, multibranched government ministry. This paper describes and assesses the various programs of the Linguistics Division and explores the effects of its unique setting on the goals and output of the division.

Lithic Variability at Elk Creek: A Cost-Benefit Model.

Robert G. Elston, Intermountain Research

A cost-benefit model views variability in lithic assemblages as a function of the cost of toolstone. Toolstone cost is directly related to raw material availability, access, and quality, mediated by the overall scale of mobility and duration of occupation. The model employs various indices of toolstone cost and value, reflecting strategies of procurement and use designed to minimize the cost of lithic tools. These are used to interpret the functions of sites 35JA102 and 35JA107.

Archaeological Investigation of the Stemilt Creek Village Site, Chelan County, Washington.

Jerry R. Galm and Keo Boreson, Eastern Washington University

Excavations conducted at 45CH302 during the spring through the fall of 1986 revealed a large, multicomponent village. This site is located on the right bank of the Columbia River near the confluence of Stemilt Creek, about four miles south of Wenatchee, Washington. Late prehistoric and historic components are represented and confirm an association with the ethnographic Wenatchi village identified by Verne Ray in this area. Investigations at the site produced evidence of a diversity of features including classes related to habitation, subsistence practices, and implement/artifact manufacture or maintenance. Excavations focused on exploration of several pithouse structures and associated village features. The artifact inventory at 45CH302 suggests well-developed fishing and woodworking technologies with surprising similarities to reported coastal assemblages. The three phases of investigations at 45CH302 were conducted for the Chelan County Public Utility District in conjunction with the development of a preservation plan for remaining portions of the site. Analyses of the over 250,000 artifacts recovered are still in progress.

Cross-Correlation of Strata by Vertebrate Content.

Richard Garvin, University of Calgary

During the first year of excavation at the Pender Canal sites, specific stratigraphic zones were defined within the deposits which seemed unique in both matrix content and artifact assemblages. Further definition and subdivision of these zones was accomplished during the second and third seasons of excavation within a working framework of arbitrary levels. The purpose of this report is to examine the vertebrate remains within these designated stratigraphic zones and search for correlating zones, both intra and inter site. In the end an attempt is made to make both diachronic and synchronic statements about cultural activities which took place at the Pender Canal sites.

A Model for Kill Site Behaviour of Scavengers.

Richard Garvin, University of Calgary

This paper explores the dynamics of bone destruction and dispersal with particular reference to canids as the attritional agents at kill sites. Emphasis is placed on optimal patch use and energy extraction models in an attempt to explain recurring damage patterns and bone distributions seen in wolf and dog scavenging experiments. It is shown how the activity of scavenging animals is able to distort or mask human activity, thereby biasing the archaeologist's interpretation. Survival rates for specific bone types are then estimated and compared with actual bone frequencies from archaeological and palaeontological sites.

Congruence of Ethnohistoric and Archaeological Settlement Models in the Klamath River Canyon.

Elliott Gehr, Que Pasa Research Alliance

In response to an application before the State of Oregon and FERC in 1985 to construct a hydroelectric project, the Oregon SHPO suggested research for a resolution of two conflicting settlement models for prehistoric sites in the Klamath River Canyon. One model was offered by Joanne Mack (1976, 1983), and the other by Anaraiko, Medicine Woman for the California Shasta Nation (1984, 1985). Mack based her conclusions on archaeological data recovered from three prehistoric sites and interviewed no Native Americans. Anaraiko's model is derived from information given her by Shasta elders and includes no archaeological data. The author directed archaeological and ethnohistoric data collection in 1984 and 1985 which resulted in a third model describing settlement for the late prehistoric period, A.D. 1200-1850. This model (1) attributes settlement in the canyon to the Shasta, (2) describes functional differences among the 10 tested sites sufficient to support the Medicine Woman's model, and (3) identifies a Klamath trade and fishing station located within this easternmost Shasta settlement, explaining Mack's findings.

The Summit Trail: A Look at an Historic Linear Feature on the Ochoco National Forest, East-Central Oregon.

Amy A. Gowan, Big Summit Ranger District

The Summit Trail was the first major travel route designed to access the interior of the Ochoco Mountains of east-central Oregon. As the primary transportation artery from 1906 into the 1930s, its development paralleled the economic development of the area. It served as the tie that bound together the activities of the two primary lifeways--stockraising and forest management. A comprehensive survey and evaluation of the Summit Trail was

conducted in 1986 by Forest Service personnel. A determination of National Register eligibility was sought and received based on the trail's "associative" values. The results of the inventory are presented and the future management of the feature is discussed briefly.

Historic Commercial Fishing Facilities: Cherry Point, Washington.

G.F. Grabert, Western Washington University

During the final years of the 19th century and into the early 1920s a commercial fish trap series existed offshore of Cherry Point on the Strait of Georgia. Little or nothing remains of the traps, and even less is known today of what kinds of onshore support facilities were present. During the 1975 field season traces of wood lined subterranean boxes were located. These were intrusive into cultural and naturally deposited sediments. A two-week session in 1976 further verified the historic features. In 1985 and 1986 a program of investigation was developed which focused upon area-exposure of the features and others suspected to be nearby. This area was examined in the summer of 1986. A larger and still somewhat problematic feature was exposed, which appears to be the remains of a simple shed or shelter over the features, and is seemingly related to fish-cleaning. Little in the way of artifacts appears to be directly associated with the feature remains. An interpretation is given suggesting that this small-scale installation may have been the immediate precursor of the more massive and productive trap installations of the early 20th century.

On Native American Use of Upland and Montane Regions in the Pacific Northwest.

G.F. Grabert, Western Washington University

Northwestern ethnographers have placed little importance in prehistoric and ethnographic use of the Cascades. Yet, current archaeological investigations show surprisingly numerous sites in the montane setting. These sites encompass a variety of uses from residential to resource procurement stations. Some recent studies of prehistoric adaptations in the Andes suggest that hunting/foraging/collecting economies can and did prove successful there. Several considerations are offered which may prove of use in formulating research designs and explanatory models for prehistoric land and resource uses.

A Classification of Stone Features and an Examination of Their Positional Attributes.

Phillip Cody Green, Oregon State University

The analysis of prehistoric stone structures has suffered for two separate but related reasons. The first is the lack of stringency in defining the terms attributed to these structures and, second, the perception of a lack of formal attributes exhibited by them. These two factors have made it impossible to subject these structures to the kind of rigorous analysis to which other components of archaeological excavations are routinely put. This paper accomplishes two tasks. It morphologically defines 22 types of stone features and examines positional and selected ancillary attributes exhibited by those features in order to ascertain whether certain attributes might be used to assign functions to stone structures.

Alaska Cultural Resource Management: Federal Policy vs. Native Ideals.

Dennis Griffin, Corvallis, Oregon

The Alaska Native Claims Settlement Act (ANCSA) of 1971 set aside approximately 500,000 acres of land to be used toward the protection of Native historical places and cemetery sites. The survey and conveyance of these lands has been ongoing since 1978 and is to be completed by 1991 when many of the Acts provisions are scheduled to expire. Federal policy and Native concerns over the final management and ownership of these lands vary greatly. Currently cultural resource management practices in Alaska fail to adequately protect many of these important and irreplaceable sites causing many previously identified sites to be transferred out of Federal jurisdiction without any protective covenant. Native Regional Corporations (Native land stewards) and traditional Native groups have voiced major differences over the implications and management of these historic sites. A discussion of the current legislation and Native concerns is presented in light of ANCSA's scheduled completion.

Skeletal Population at 35CS43c.

Roberta L. Hall, Oregon State University

In April and May, 1986, at the request of the Coquille tribe and the city of Bandon, a crew from Oregon State University recovered three burials which were disturbed in a city construction project and excavated several additional burials in an area scheduled for city construction. Seven individual burials and portions of at least two others were analyzed. These included an adolescent of indeterminate sex, a female of about 32, a probable male of 20, three males in their 40s, and an adult of indeterminate age and sex. No cause of death of any individual was determined and it appeared likely that the individuals were not buried at the same time but probably all date to the late prehistoric period.

An Analysis of Methods for Collecting Subsistence Information from a Coastal Midden Site.

Diane K. Hanson, Simon Fraser University

Faunal remains were collected from the Pender Canal coastal midden sites using a number of methods. Vertebrate remains were collected from one-quarter inch mesh screens and bagged by level. Units were excavated in 10cm arbitrary levels or major natural layers. An example of each shellfish species encountered per level was also collected during excavation. Invertebrate and vertebrate remains were collected in soil columns removed from the bulk of each excavation unit. The columns were screened through fine meshed sieves and all faunal material was saved. Each sampling method provides a different level of subsistence information from species presented to relative proportions of taxa. The results of these methods of recovery are compared to each other and to ratios of marine and terrestrial proteins ingested by the humans interred at the sites as determined through stable-carbon isotopes. The data from the column samples most closely match the high marine protein diet indicated by the stable-carbon isotope study.

The Franklin Project Phase II.

Gerald C. Hedlund, Green River Community College

During the first year of excavations at Franklin (1985), archeological techniques were mainly used to determine what and where to dig. During the second year, more information from informants, old photographs and maps was

utilized. Four locations were excavated, including the company store, a house, and tool shed or railroad station across the tracks from the store. The fourth location was a probable building site located some distance to the south of the others. The most unexpected artifacts found were three badly rusted Spencer rifles, excavated from the old tool shed location on the last day of digging.

The Naches Lithic Scatter Site.

Gerald C. Hedlund, Green River Community College

Forest Service Cultural Resource Technician Don Maks located an archeological site (CR05-07-31) on The Naches ORV Trail west of Government Meadows where deflation caused by ORVs exposed artifacts. Testing the site by Gerald Hedlund and Mark Vernon has produced evidence of a stratified site between layers of volcanic ash from either Mt. Rainier and/or Mt. St. Helens. Lithic materials were found to a depth of over 70cm from the surface. The site appears to be at least 3400 years old and may be as old as 6500 years.

Archeological Investigations at Felida Moorage, 45-CL-12, A Lower Columbia River Prehistoric Ceramic Site.

Charles Hibbs, Portland State University

In an effort to better define the prehistoric ceramic industry located in the Lake River locale of southwest Washington, the Ceramics Analysis Laboratory has conducted periodic archeological investigations of the Felida Moorage Site, 45-CL-12. Thus far a late-prehistoric component has been identified, dated ca. 300-400 years B.P., and is characterized by multiple house pits with stratified floors, copious faunal remains, with emphasis on terrestrial mammals, together with bone tools and byproducts. Punctate- and applique-decorated ceramic figurine and ware fragments have been recovered, but principle manufacture may have been conducted in earlier components.

The National Park Service Volunteer Archeological Excavations at the Fort Vancouver New Office: 1986 Field Season.

Charles Hibbs, Portland State University

In 1986, the Oregon Archaeological Society initiated historical-archeological investigations of the Hudson's Bay Company New Office, constructed in 1845 at Fort Vancouver, as part of a long term volunteer archeology plan under the auspices of the National Park Service. Excavation of the north 1/3 of the building yielded significant stratified cultural deposits including burned footings, and evidence of the 1829 east stockade which underlies the 1845 deposits.

Smooth Stones and Sharp Points.

David Johnstone, Simon Fraser University

A replicative experiment was undertaken to determine the production processes and the time involved in the making of ground slate tools and the exhaustion of abrading stones. The characteristic wear patterns produced on the abraders by the action of stone grinding may be distinguished from wear patterns on those abraders used to grind bone by examination under a binocular microscope. An examination of the collection of abraders and ground slate tools from the Pender Canal sites indicates the local production of ground stone tools and the selection of abrader raw material in light of their intended use.

The Episcopal Church: Women Clergy and the Diocese of Oregon.

Linda Kahlbaum, Oregon State University

This report will discuss the history and current status of women clergy of the Episcopal Church in the Diocese of Oregon. I will report on the results of a questionnaire sent to every parish in the diocese asking for historical information on women. The results of interviews with bishops, female and male clergy will also be discussed.

Madison River Toll Bridge Site: Systematic Intensive Surface Collection in Recognition of Site Structure.

Kenneth W. Karsmizki, Museum of the Rockies, Montana State University

A common element in the development of transportation frontiers is the toll bridge. Transportation sites linked the surrounding economic communities and were placed within a larger transportation network at key locations. Toll bridges, like many other transportation sites, were isolated and characterized by special activities related to their role in supporting traffic. Location of these sites and their limited function suggest that these sites may have a structure that assumes a recognizable pattern. Systematic intensive surface collection of 45,000 square feet of the Madison Toll Bridge Site and test excavation of an additional 600 square feet was conducted during 1985 and 1986 field seasons. The data was analyzed to determine site structure, the spatial patterning of functional elements of the site.

Episodes of Alluviation in the Upper Rogue River Drainage, Southwestern Oregon.

Keith L. Katzer, University of Arizona

Seven terraces on Elk Creek are delineated; their relative ages are constrained by radiocarbon dates, obsidian hydration, Mazama ash, and correlation of local soils to a regional soil chronosequence. Episodes of aggradation and erosion on Elk Creek are broadly out of phase with similar episodes of alluviation on the Rogue River. After the Mazama eruption, aggradation occurred along portions of the Rogue River while erosion took place in the headwaters. Thus, mid-Holocene age sediments (6900 to ca. 2350 B.P.) are absent from Elk Creek, and few archaeological sites are known from this period.

Analysis of Manufactured Items from Site 35CS43c: Bandon, Oregon.

Anthony R. Keith, Oregon State University

Salvage site 35CS43c, located at Bandon, Oregon, was excavated by Oregon State University. This excavation occurred during April and May of 1986. This report describes and discusses manufactured items recovered from 35CS43c, including both prehistorical and historical artifacts.

Europe's Earliest Artists: Paleolithic Painters of the Dordogne.

James D. Keyser, USDA-Forest Service/Cultural Heritage Foundation

Approximately 30,000 years ago the Cro-Magnon inhabitants of the Franco-Cantabrian region of northern Spain and south-central France began producing the world's first rock art. Best known from the famous caves of Altamira and Lascaux, this art flourished between 12,000 and 20,000 years ago in the Dordogne region of central France. Here, in the famous caves of Pech Merle,

Lascaux, Font de Gaume, and Rouffignac, paintings of mammoths, bison, reindeer, horses and other animals let us see the ice age fauna of the European steppes through the eyes of these hunter-artists. The lifelike paintings, rivalling those of modern naturalists, are done in living color in the deepest darkest chambers of fantastic limestone caverns. Associations between the painted/engraved animals and objects deposited in the caves provide detailed insight into the religion and mysticism of our ancient European ancestors.

Stratigraphy and Lithic Technology of 45SJ24 at English Camp.

Kim Kornbacher, University of British Columbia

Data are being analyzed from three seasons of excavation of 45SJ24, a prehistoric shell midden located on the National Park Service site of English Camp, San Juan Island, Washington. The initial stage of analysis, involving the correlation of facies from different excavation units, is facilitated by the construction of Harris Diagrams. Employment of this method allows the definition of larger stratigraphic units within which variation can be monitored. In the second stage of study, lithic artifacts recovered within these strata are analyzed to determine the character of site occupation--short-term specialized or long-term broad-based--and then compared to document changes in the occupation over time.

Tumbling Thru the Crack: The Nez Perce ARPA Nightmare.

James Lawyer, University of Idaho

The question can be asked why the Nez Perce Tribe provided maximum participation in the Federal Energy Regulatory Commission preliminary permit process for hydroelectric applications including appearance before the 9th circuit court whereas before the Boise court in the Kelly case the tribe provided zero participation. This paper answers that question. The Nez Perce Tribe received an Indian Self-determination grant to develop a protection response process for Environmental and Archaeological matters presented to the tribe. The program supervision was by the tribal planning manager, a business development position. As a result of the failure of business objectives the Environmental and Archaeological process was to be finally developed as a business function and not as a protection function. This intervention by the planning manager in the Archaeological work investment resulted in the fiasco of the Kelly case decided by the Boise Federal court.

Dimensions of Archaeological Sites in the Salmon River Mountains, Idaho.

Frank C. Leonhardy, University of Idaho

Survey of a 118 square mile sample area in the Salmon River Mountains, east central Idaho, recorded 58 archaeological sites. These are described in terms of dimensions such as site type, habitat type associations, elevation, associated water type, and primary and secondary topographic position. Analysis of variables shows strong correlations between the dimensions site type, habitat type, and elevation. For example, sites with house depressions are almost exclusively associated with steppe vegetation; talus pits are in or adjacent to steppe vegetation; and lithic scatters above 6000 feet are near habitat types containing white bark pine. A warranted assertion is that site location is a function of proximity to specific seasonal resources and topography.

Northwest Coast Canoe Type Classification and Distribution.

Leslie Lincoln, University of British Columbia

The research focus is to assimilate a workable classification and distribution of the types of Northwest Coast cedar dugouts which are found in primary ethnographic descriptions, illustrations, and photographs. This coastal and riverine distribution extends from Alaska to Mid-California. The adequacy of existing typologies shall be reviewed. A further utility is to contribute substance for the postulated connection of related hull types and technology between the Northwest and Asia. This study may offer understanding of the origin of the early maritime peopling of the Northwest Coast, through the work may simply document maritime evolution.

Analysis of Nonhuman Remains at Site 35CS43c: Bandon, Oregon.

Lee W. Lindsay, Jr., Oregon State University

The salvage site 35CS43c at Bandon, Oregon, was excavated by Oregon State University in April and May of 1986. The site included both historic and prehistoric components. The abundant faunal and lithic materials recovered will help reconstruct the methods and means of subsistence for the prehistoric component. The site proved to have similar percentages of sea and land animals as other coastal sites. The faunal evidence showed a reliance on the sea for subsistence. This does not include plant dependence, for which there was no evidence.

Brokering "Traditional" and "Modern" Exchange Systems: How to Make Do on Next to Nothing in the Andes.

Thomas F. Love, Linfield College

Why do herding peoples of the high Andes persist in barter exchange in a cash market economic system? Is it that alpaca/llama herders have a relatively self-sufficient, production-for-use, altitudinally complementary economy, supplemented by periodic entry in the cash market to sell alpaca wool? Or is it that these herders are fundametnally enmeshed in the cash economy, albeit in a marginalized condition, and engage in barter only to supplement their meager cash incomes? In this paper I argue that neither of these dichotomizing modes of analysis captures the phenomenon adequately. Herders broker two systems of exchange--"modern" (cash) and "traditional" (barter)--as a creative response to complex economic and ecological realities.

Incised Sea Mammal Tooth Pendant from the Bandon Site 35CS43.

Mariana Mace, Oregon State University

This paper describes a 4.5 by 1 cm crescent-shaped, incised pendant recovered from a burial in the city of Bandon. The artifact is apparently fashioned from a sea mammal canine. The paper will be concerned with preliminary attempts to answer questions of origin, manufacture, style and use.

Cultural Resource Surveys in the Southern Washington Cascade Mountains 1980 through 1986.

Guy Marden, Mt. St. Helens National Volcanic Monument

Between 1980 and 1986 approximately 415 archaeological survey projects involving over 78,000 acres were conducted in the southern Cascade Mountains of Washington State. These surveys were conducted by or for the USDA-Forest

Service, Gifford Pinchot National Forest on the Mount Adams, Packwood, Randle, and Wind River Ranger Districts, as well as the Mount St. Helens National Volcanic Monument. This cultural resource management program has resulted in an extensive data base which includes record of prehistoric, protohistoric, historic and eruption related sites.

A Paradigmatic Classification System for Lithic Material Types.

Stephan E. Matz and Linda Clark, Oregon State University

A paradigmatic classification system for identifying lithic material types has been designed to help determine the technological and/or the functional potential of lithic materials. The system is based on the dimensions of texture (amount of mineral and/or rock constituents), size (size of mineral and/or rock constituents), quartz content, and other auxiliary dimensions which may be added to the classification system to meet specific research objectives. To demonstrate the utility of the classification system, analyses are presented for the Sylmon Valley School site (35DO275) near Roseburg, Oregon, and the Seal Rock site (35LC14) on the central Oregon Coast.

Alpine Obsidian Procurement in the Goat Rocks Wilderness: Preliminary Research.

Richard H. McClure, Jr., Gifford Pinchot National Forest

South of Mount Rainier, within the Goat Rocks Wilderness, is the Elk Pass Quarry site, one of three known obsidian sources within Washington. At 6700 feet in elevation, the site represents the highest prehistoric lithic procurement and reduction locale within the state. Four additional alpine-subalpine sites related to obsidian reduction are nearby. Initial investigation of the quarry site resulted in x-ray flourescence analysis of the obsididan. Data generated have made it possible to trace obsidian artifacts from several sites within the upper Cowlitz River drainage to this source. The archaeological contexts of sourced specimens indicate a time depth for quarry use from at least 3500 to 500 years B.P.

Archaeological Investigations along the Fall River Drainage, Central Oregon.

Janine Ruth McFarland, Oregon State University.

In 1986 test excavations were conducted at five prehistoric open-air lithic scatters located along the Fall River in Central Oregon. Comprehensive testing strategies were employed to sample these large, widely dispersed, low density sites. Settlement networks are inferred by the distribution of cultural materials along the drainage. The two assemblages (Dusty Mink and Grayling Springs) which yielded a sufficient amount of Late Prehistoric tools and debitage offer an opportunity to study lithic technology. Supplementary data are provided by the results of obsidian hydration dating and obsidian sourcing of artifactual remains.

Art Styles as Reflections of Sociopolitical Complexity.

Elizabeth Merrill, Oregon State University

Statistical analysis confirms the general hypothesis (derived from Fischer's cross-cultural study, 1961) that Shoshone-Bannock sociopolitical complexity increased over time after Euroamerican contact, the artistic designs on their products shifted from elements found in "egalitarian" societies to those found in "hierarchical" societies. Shoshone-Bannock time sequence comparing the early reservation to contemporary period indicates significant change occurred

with either mean or variance of design in the majority of cases. The most striking shift is observed from simple to complex designs. Suggestions are offered as to why sociopolitical complexity and complexity of art seem to go together.

Local Involvement in Natural Resource Development: Opportunities for Anthropology, with Asian Case Examples.

Donald A. Messerschmidt, Washington State University

People's participation is a key concern in many development aid projects. This paper briefly reviews the history of donor agency approaches to people's participation, their assumptions, and several strategies for achieving the goal. Anthropologists have an important role to play--but critics say that the anthropological approach is too time-consuming in the face of immediate need for action. This paper challenges that assumption by pointing out the overriding long-range benefits of local involvement in the area of natural resources development. Case examples from Asia are given.

Archaeological Reconnaissance in the Near Timberline of the North Cascades National Park.

Robert R. Mierendorf, North Cascades National Park

Before summer of 1986, Cascade Pass constituted the only high elevation area of the Park examined for archaeological sites. Subsequent exploration has revealed the presence of other near timberline sites in widespread portions of the Park, far removed from Cascade Pass. The small site assemblages thus far observed reflect local procurement and reduction of vitrophyre and other alpine/subalpine resources in the Park far removed from ethnohistorically reported trade/travel routes. These assemblages are considered to address problems of the "upland" concept and the role of alpine/subalpine resources in lowland subsistence models.

Migration Theories and the Search for Pleistocene Man on the Northwest Coast of America.

Molly Raymond Mignon, Simon Fraser University

Major theories seeking to place the peopling of the American continents in the Pleistocene epoch are reviewed, and major problems encountered by each are defined. Ethnohistoric, ethnolinguistic, archaeological and physical anthropological evidence for intercontinental migration by various routes is summarized and evaluated. Arguments for early vs. late initial population movements into the New World, as well as possible alternative routes and their feasibility during glacial maxima and minima, are discussed. Some implications of the earliest human remains found in the Northwest are explored.

The Life History Approach to Cultural Heritage Projects on the Northwest Coast.

Marjorie Mitchell, Camosun College

The collection of life history narratives from Northwest Coast native people is viewed not only as a useful anthropological tool for eliciting ethnographic and culture history data but also as a framework for organizing and focussing cultural heritage projects. The evolution of one such project is assessed in terms of the presentation of the life history concept by the researcher, the acceptance of the concept by native people at three levels of involvement, and

the research strategies that it entailed. In addition, the life history approach is evaluated for its potential contribution to studies of Northwest Coast Indian culture, personality, and culture change.

Inner Contradictions in Doukhobor Beliefs vis a vis Fractiousness and Factionalization.

Nina M. Olson, University of Western Washington

The Doukhobors who now reside in British Columbia have been a thorn in the side of governments from Czarist times until the present. They have experienced internal divisiveness and exhibited fractious behaviour. Explanations have been offered for the internal and external conflict, however none have been completely satisfactory. This paper contends that a fundamental characteristic of the Doukhobor belief system was introduced after 1654 and is an internal contradiction which allows for social stratification, hereditary theocracy and factionalization. Understanding this feature of the Doukhobor beliefs might aid in solving the antagonism, power struggles and depredations between the factions.

Ideology in a Political Drama: False Consciousness and Affirmation in a Small Turkish Town.

James M. Orr, University of Oregon

Inspired by Paul Ricoeur's reflections on hermeneutics, history, and ideology, I will show how a "founding day" celebration ignored known events and presented a false image of local history. The central drama renewed national identity by reproducing a familiar model of accepted state history. Although misrepresenting facts in favor of the state, the metaphor affirmed important values and suggested a possibility-of-being yet to be achieved.

1986 Excavations in Elk Creek Valley: Preliminary Report.

Richard M. Pettigrew, INFOTEK

NO ABSTRACT

The Human Rights Situation and Legal Violations on the West Bank.

Linda Pitcher, Lewis and Clark College

What is the reality of the Israeli occupation of the West Bank? Are the Palestinians suffering? Is there violence? Who is perpetrating it? Where does one draw the line between the often legitimated "strong-hand" policy that accompanies any military occupation and those specific and extraordinary transgressions that constitute crimes against humanity and merit international recognition and response? Upon a recent five-month visit to Israel, I studied these questions and found that inordinate human rights violations do exist in the military policies of the West Bank, and exist quite blatantly. Given the breadth of the subject matter, the presentation will address those violations most pressing. Identification Confiscation, Land Expropriation, Demolition, Curfew, Deportation, Administrative Detention, the Military Court System, Arrests and Imprisonments. In examining these policies, I hope to demonstrate the role of the Israeli Defense Force in implementing them.

Hunters in the Highlands: Archaeological Implications of Mountain Dene Subsistence and Settlement in the Mackenzie Mountains, Northwest Territories.

David Pokotylo, University of British Columbia

This paper examines aspects of contemporary Mountain Dene behavior that shapes site structure at high elevation, limited activity and occupation sites in the eastern slopes of the Mackenzie Mountains. Using ethnoarchaeology observations and memory cultures accounts I describe the organization of activities at short-term base camps, hunting blinds and lithic quarries, and indicate how they are reflected in the distribution of refuse and features. This information is then used as the basis for patterning likely to be expected in the archaeological record of hunter-gatherers. This research calls into question assumptions often used in the conduct of archaeological research.

Anthropology and the Future: The Value of Anthropological Training and Its Relationship to Employment in Other Fields.

Jean Postlethwaite, Central Washington University

Anthropology is the most powerful of the liberal arts, yet it is the least understood. It is both underrated in printed media and romanticized on screen. University career counselors, faculty advisors and placement officials discount the value of an undergraduate degree, while faculty in other departments often do not know what anthropology is or the relevance it has to other fields. The attitude that "only a few can be 'anthropologists'" is conveyed in newsletter articles and association bulletins even within the discipline. Anthropology is relevant to the modern world with all levels of experience and education. Recent reports of alumni surveys support this view. Anthropology does have a place outside the university. Who else, but anthropologists, are better equipped to meet this problem. This paper is a call for (1) attitudinal changes within the profession, and (2) program changes within the discipline which draw upon the experience and creativity of the 'general anthropologists' employed in other fields.

Wildfire Effects on Cultural Resource Sites and Their Management.

David W. Powell, Wallowa-Whitman National Forest

This paper reviews the impacts of wildlife on cultural resource sites as experienced on the Wallowa-Whitman National Forest. Historic sites sustained high levels of damage from wildfires while prehistoric sites received more damage from suppression activities. Fires created decreased ground visibility in most cases, hampering post wildfire surveys for sites. Ash and charcoal camouflage lithic scatters and scorched needles fall, creating a heavy duff layer. Recommendations are made to facilitate rapid response to protect sites during wildfire emergencies. Improved documentation during initial fieldwork is recommended including HABS documentation for all historic structures that are eligible for the NRHP.

Aboriginal Plant Use at the Long Tom and Chalker Sites, Willamette Valley, Oregon.

Guy Prouty, University of Oregon

During the Phase III excavations of 35 LA 439 and 35 LA 420 along the Long Tom River, magnetometer surveys revealed numerous camas ovens. Various charred macrobotanical remains, namely camas, hazelnuts, and acorns, were recovered in the screens as well as through flotation. The relative importance of the plant resources, and their changes in the local subsistence patterns through

time will be examined. Various techniques of ethnobotanical analyses useful for such sites will also be discussed.

Archaeological Investigations at the Saltsgaver Site, Southwestern Oregon.

Guy Prouty, University of Oregon

In 1966, a remarkable 107 "clay lined" pits in a three-acre field were discovered on the property of Dixon Saltsgaver. These pits, which average 40-60 cm. deep and up to 1 m. in diameter, have sandy bottoms overlain by basalt FCR. The walls, which have been fired, extend down to just above the sandy bottoms. These features, which may have served as acorn leaching pits and ovens, will be examined and compared to the current ethnobotanical knowledge of the region. A temporal framework for the site will also be discussed as well as suggestions for future research.

Root Utilization among the Coos and Coquille Tribes of SW Oregon.

Reg Pullen, Bureau of Land Management

The importance of root crops to prehistoric/historic populations in southwestern Oregon largely has been ignored by anthropologists. Ethnographic data for the Coos and Coquille tribes indicate that some 14 species of roots were utilized, forming a very significant part of the diet. Camas bulbs, while important food sources, were not as preferred as several root species. Root gathering sites were usually available near coastal villages, contrary to the popularly held belief that Camas Valley was the favored location for this activity. Ownership rights were exercised for these sites, suggesting the importance of the resource. Several of these root gathering sites are identified, and the methods of collecting and preparing the various root species are described.

Flaked Stone Technology at the East Bug-A-Boo Site, Linn County, Oregon.

Anan W. Raymond, U.S. Fish and Wildlife Service

Despite the absence of C-14 determinations, obsidian hydration analysis, clear-cut stratigraphy, diagnostic tools, faunal remains, etc., one can still learn a lot from a site by describing and analyzing the flaked stone debitage. The East Bug-A-Boo site in the western Cascade Mountains serves as an example. The debitage is described with the aid of a simple debitage typology. The technology of obsidian reduction and biface manufacture is analyzed. A description of the East Bug-A-Boo lithic technology permits inferences about the function of the site.

Microarchaeological Analysis of the Chinese Workers' Area at the Warrendale Cannery Site, Oregon.

Jo Reese, The Cultural Heritage Foundation

Amost 90 volume samples have been analyzed to determine their microarchaeological content in order to identify activity areas in the vicinity of the Chinese living quarters at the Warrendale Cannery Site (35MU53), Oregon. Microartifacts recovered include metals, glass, ceramics, faunal remains (including large and small mammal bone, fish bone, scales and teeth, and eggshell), brick and mortar, charcoal, and newspaper, as well as other items. Major refuse disposal areas and part of the site boundary can be determined. The pattern of microarchaeological remains also indicates behavioral information and suggests the location of buildings not found within the study area.

Ethnohistorically Noted Aboriginal Uses of the Western North Cascades.

Alfred Reid, Western Washington University

Aboriginal use of the rugged North Cascade Mountains has been considered marginal in the culture of the groups living adjacent to them. This is especially true of the upper forks of the Nooksack River around Mount Baker. Specifically the area now administered by the U.S. Forest Service as the Mt. Baker Ranger District. Many early explorers and surveyors noted the detailed knowledge of this area possessed by the local native Americans. These uses included resource procurement locations and the routes leading to and between these areas. Accounts of Custer, Coleman, and Tenant are reviewed for references to this use. While anthropological data are used to demonstrate what part of the group's seasonal round would have utilized the mountains.

The Other Side of the Mountain.

Kurt Russo, Kluckhohn Values Center/Lummi Indian Tribe

Over a period of six years, the Values Project Northwest (xwlemi), has been engaged in cross-cultural research, in close association with the Lummi Indian tribe. Structured interviews have been completed in the tribal community, and in public and private sector resource management agencies. More recently, identical interviews were completed among different groups in the Republic of South Africa. The results provide a description of the value profile of these groups, how they perceive others in their own group as well as the "cultural other." This presentation will summarize some of the findings to date, and will describe how this information is being used in the interest of cultural resource management and improved understanding between cultural groups.

Early and Mid-Holocene Occupation along the Similkameen River.

L.V. Salo, U.S. Army Corps of Engineers, Seattle District

Reconnaissance of a proposed water development project along the Similkameen River and Palmer Lake in Okanogan County, Washington, identified 46 cultural resource sites. Prehistoric sites include river- and lake-side housepit associations. Probable fishing sites with mid-Holocene aged components are found along a creek south of Palmer Lake. There appears to be a Windust component at one site on the northeast shore of Palmer Lake. The prehistoric assemblages suggest a strong Cascade phase efflorescence in the Similkameen drainage. Projectile point assemblages suggest affiliation with the northern Columbia Basin. Curiously, there are few indications of intensive use of the project area after about 2000 years ago. Geomorphological and other reasons for this distribution are examined.

Game Distribution as a Determinant of Archaeological Site Location in the Olympic Mountains.

Randall Schalk, University of Washington

This paper discusses archaeological site distributional patterns in the montane interior of Olympic National Park. The effects of food resource distributional structure, especially deer and elk, on site location are examined. The summer and winter ranges of these animals are described and evaluated as factors influencing aboriginal settlement systems at different time periods. There are marked differences in the relative abundance of deer and elk between the windward and leeward Olumpics as well as other important environmental contrasts within the interior of the Olympic Peninsula. Existing data on archaeological site distribution in the montaine interior of the Peninsula are reviewed in light of these environmental characteristics.

Early Information on Mid-Columbia Basketry: Gleanings from the "Literature."

Mary D. Schlick, Kamiakin Research Institute

Early ethnographic accounts and archaeological reports contain little mention of the distinctive coiled, twined, and bark basketry made by the native people of the Mid-Columbia region. This paper broadens the interpretation of "the literature" to include tribal legends, 19th and early 20th century paintings and photographs and collectors' records. A search of these sources helps provide more comprehensive information on the materials, techniques, design, and basket forms utilized by early Mid-Columbia basket weavers and the place of basketry and basketmaking in their lives. Many examples of such supplementary records will be described or illustrated.

Southwest Oregon Archaeofaunas: New Perspectives on the Economic and Distributional Analysis of Broken Bone.

Dave N. Schmitt, Intermountain Research

Most zooarchaeological investigations focus on identifiable skeletal remains. However, analysis of small unidentifiable bone fragments, at several sites in southwestern Oregon, has provided significant behavioral and subsistence data. Frequency and distribution studies of faunal specimens by fragment size are used to define occupational surfaces and refuse disposal locations and to infer butchering and animal food processing techniques.

Solving Common Property Problems.

Courtland Smith, Oregon State University

Common property problems in Western Society highlight competition between two systems of values. One is ecological goals that are not adequately valued by market systems. The other is the complex of values about economic growth and the social processes for maintaining an economically healthy society. Societies solve common property problems using a variety of technical, social, and legal mechanisms. Where these solutions succeed, they balance ecological and economic values. Examples include barbed wire, associations of users, private property rights, and systems of rule-making. These solutions allocate agricultural lands, water resources, timber, rangelands, and wildlife. Fisheries represent a unique problem because the environment is fluid, three dimensional, and crosscuts political boundaries. Nonetheless, technical, social, and legal solutions apply here too. Solving common property problems in fisheries requires determining the relative weight given to ecological and ecoomic values.

GIS Applications in Archaeology: Notes from a Sorcerer's Apprentice.

William Smith, Central Washington University

Like many other sophisticated analytical tools, digital geographic information systems (GIS) readily lend themselves to misuse. Given sufficient computing power, simple mistakes and errors in logic can easily be compounded into major blunders. Fortunately, such systems also provide the means for avoiding simple mistakes. This paper reports some cautionary examples based on the author's recent GIS-based research on the Yakima Firing Center in central Washington.

Cascade Settlement Patterns.

Sandra L. Snyder, University of Oregon

Research is currently underway examining the distribution of approximately 1700 prehistoric sites in the Oregon Cascades. Settlement patterns will be interpreted in light of a land use model based on both Cascade vegetation/environmental zones and ethnographic data of aboriginal groups whose activities in the Cascades are documented for the contact period. A subset of sites which have been subjected to subsurface evaluation is expected to yield more detailed cultural information than that afforded by surface inspection alone in defining site function and probable period of occupation. "Non-site" areas will also be incorporated into the study.

Champoeg: A Perspective of a Frontier Community in Oregon 1830-1861.

Lou Ann Speulda

Champoeg, located along the Willamette River, developed as a transportation center for both river and overland travel and as a shipping point for agricultural products. The area was first settled by retired employees of the Hudson's Bay Company with large numbers of American settlers arriving soon after. A flood in 1861 destroyed the town creating an effective archaeological time-marker, as efforts to rebuild the town were minimally successful. The research problem concerns adapting a frontier model developed for East Coast sites and applying it to a West Coast site. The data base used was the archaeological collection recovered from the townsite of Champoeg as well as land records and historical documentation. Adaptation of the frontier model included reorganizing the artifact classification system and retabulation of the model parameters. Champoeg reflects the adjusted frontier pattern suggesting that the model is a useful indicator of a frontier material culture.

Non-Ferrous Objects from 35-TI-1: Metallurgical and Metallographic Comparisons.

Harvey Steele, Oregon Archaeological Society

From 1956 to 1958 the archaeological site designated 35-TI-1, located in Tillamook County near Netarts, Oregon, was excavated, under the direction of L.S. Cressman of the University of Oregon. In 1958, excavations in House 13 of the site, under the direct supervision of Thomas M. Newman, led to the recovery of 14 metal artifacts, of ferrous and non-ferrous composition. Seven of the artifacts, including two bangles, one disc, three rolled tube beads, and one modern shotgun casing, were of copper or copper alloy composition. No precise analysis of dating was attempted for the metal artifacts at the time of the original report. The author has subjected the non-ferrous objects to metallurgical and metallographic analysis. With the assistance of the U.S. Customs Laboratory, San Francisco, and the Albany Research Center, Bureau of Mines, Albany, Oregon, elemental analysis using Emission Spectroscopy, and metallographic photomicrography was completed. Relevant material from comparative metallurgical and metallographic studies was reviewed, and profiles for non-ferrous objects from European, Native American, South and Central American, Middle Eastern, Chinese and Japanese non-ferrous objects were constructed. The metallography, indicating manufacture by European rolling processes of the late 18th to mid-19th century, and the metallurgy, suggesting elemental profiles most consistent with pre-19th century European practices, permit a tentative conclusion that the objects originated in the maritime fur trade.

Examples of Chinese Hang-t'u (Tamped Earth) Dams in Northeast Oregon.

L.R. Steeves and Phyllis Lancefield-Steeves, University of Oregon NO ABSTRACT

A Pattern for the Prehistoric Site Locations in East Central Oregon.

Norm Steggell, Malheur National Forest NO ABSTRACT

San Juan Island Archaeological Project: Sampling a Shell Midden.

Julie K. Stein, University of Washington

At Garrison Bay, San Juan Island, an extensive shell midden (45SJ24) underlies the historic English Camp of the San Juan Island National Historic Park. Shell middens contain matrix that is itself subsistence material (as opposed to mineral sediment). Because there is no component of the record that can be legitimately discarded, the mechanics of excavating shell middens are particularly challenging. An excavation strategy has been devised by the University of Washington and the National Park Service that records the location of artifacts, quantifies the volume of all types of deposits, and allows for the identification of a statistically significant number of subsistence materials. The strategy utilizes the sedimentological concept of facies. This concept was chosen because the research goals of sedimentology are similar to some of those for archaeology (e.g., those related to describing the content of the deposit and interpreting its formational processes).

The Prehistoric Ceramics of Lake River.

Alison Stenger, Portland State University

Although uncommon in prehistoric sites of the Northwest, five sites along Lake River in southwest Washington have so far been identified as having a ceramic technology. In every example, the fabric of the clay is extremely fine, and in some specimens the application of decoration is unique to prehistoric North America. This paper will discuss these ceramics with respect to the methods of decoration, intentional clay mixes, and the apparent relationship of design to specific object shapes.

The Peter Pan Syndrome as an Explanation for Concealed Estrus in Hominids.

M.E. (Stevi) Stephens, University of Calgary

Most theories about the evolution of concealed estrus in hominids are based on a model emphasizing an exchange of sexual favours for meat among early hominids. Research on sexuality and bonding in other primate groups and a comparison of female transfer among the great apes and preliterate societies indicate that concealed estrus may better be explained in terms of female competition. Females without obvious estrus probably were able to remain in the natal group for a longer period of adolescence and, thus, master the increasingly complex skills required for reproductive success.

The Peninsula I Site, 35-JE-53.

Scott E. Stuemke, University of Oregon

The Peninsula I site is a rockshelter located on the east bank of the Deschutes River, in Central Oregon. Excavations of the cultural bearing deposits were conducted in 1961 by amateur archaeologists, Barbara and Ken

Robinson of Bend, Oregon. Stratigraphic control and care in the excavations led to an excellent data recovery project. The purpose of this paper is to bring to light information concerning the cultural materials recovered and their importance in prehistoric interpretation for Deschutes drainage and the Central Oregon area.

Was the IRA Good for Indians? Anthros and the Indian New Deal.

Steve Talbot, University of Oregon

The fundamental goals of the 1934 Indian Reorganization Act (IRA) were Indian economic development and the restoration of self-determination through the tribal council system of government. Yet, according to the 1977 report to Congress by the Ameican Indian Policy Review Commission, these are the twin failures of contemporary Indian policy. Since anthropologists played a major role in the Indian New Deal and the implementation of the IRA, Native Americans may well ask what were the roles, methods and theoretical assumptions of these social scientists from 1934 to 1945. This paper will reexamine the IRA and the Indian New Deal from a critical, indigenist perspective.

Human Remains from the Central Oregon Coast.

Guy L. Tasa, University of Oregon

An analysis of human remains from three central Oregon coast sites (Whale Cove, Seal Rock, and Umpqua-Eden) was conducted in 1985 and 1986. These remains are unique in that few have been reported from the central Oregon coast. They are also unique in that they contribute data on deciduous teeth, so far unknown from the Oregon coast. The size and completeness of the skeletal material prohibits any synthesis but it is hoped that the descriptions and data will add to the knowledge of prehistoric populations along the coast of Oregon and as an example that descriptions of material as scanty and fragmentary as these can still provide valuable information.

Chemical Analysis of Organic Residues on Stone Tools.

Winston Tennant, Intermountain Research

Discovery of biologically active blood on prehistoric stone tools, detected by urinalysis strips and other chemical tests, has generated considerable interest among archaeologists. Tools from site 35JA102 and 35JA107 were examined for organic residue, relying on three chemical tests (Chemstrip 5L, phenolphthalein, and orthotolodine). Results of the study indicate that urinalysis strips, elsewhere used to screen for the presence of blood residues, are sensitive to plant peroxidase and can result in high frequencies of false-positive readings. Experimental studies suggest conditions of burial and surface exposure account for blood preservation on prehistoric tools.

Oregon's Liminal "Canayien-français."

Dorice Tentchoff, Oregon State University

The paper discusses a new course, "The French-Canadian Settlement of the North American Continent," and suggests some reasons for the unexpected student interest in it, one of which is the surprising number of Americans of French-Canadian ancestry enrolling in it.

On Considering the Strategy for the Discovery and Protection of Archeological and Ethnographic Sites in the Sub Alpine, Alpine and Montane Regions of Crater Lake, Mount Rainier, Olympic, and North Cascades National Parks.

Jim Thomson, National Park Service

Continuing investigations suggest that high altitude sites exist in more numerous quantities than originally projected for these mountainous areas. Concurrent demographic studies predict at least a doubling of visitors to these parks by the year 2000. This increased visitation, combined with National Park Service efforts to accommodate their needs, pose a threat to these archeological resources. Several options for the protection and management of these sites are proposed.

A Precontact Duwamish Population Projection.

Kenneth D. Tollefson, Seattle Pacific University

The aboriginal population projection for the Puget Sound by Mooney (1928:2), Kroeber (1967:212), and Taylor (1963:161-162) seem to be unreasonably low given more recently revised estimates for other North Pacific Coast regions such as Lantis (1970:179) and Harris (1974:14). These early estimates were based upon data collected after a series of devastating diseases had decimated the Indian people. Historical data suggest that a single epidemic could wipe out up to one-half of the population in a given opportunity within a period of three months (Krause, 1956:43). Therefore, this study seeks to add a measure of objectivity to the precontact population of one tribe by basing the population estimate upon the number of longhouses, the number of fire pits per longhouse, and the number of individuals per fire pit for the Duwamish people.

The Analysis of Artifacts from Franklin, Washington.

Mark A. Vernon, University of Washington, and Gerald Hedlund, Green River Community College

After two summers of excavating at this turn-of-the-century coal mining community, thousands of artifacts were compiled. In analyzing them, they were categorized into four sections. These were: a) consumed goods such as found in bottles and cans; b) personal items such as clothing parts, jewelry and toys; c) architectural artifacts, such as building parts, doorknobs, nails, and fire bricks from England; and lastly d) miscellaneous items related to the history of Franklin, including three Spencer repeating carbines and a Chinese buckle. This information is used to reconstruct the daily lives of the inhabitants of this once company-owned community.

A Bandon Perspective on 3543c.

Betty Vogel and Roberta L. Hall, Oregon State University

Site 35CS43c, part of which is located under a concrete sidewalk adjacent to First Street in the Old Town section of Bandon, Oregon, occupies an area that is in a prime location favored by prehistoric Native Americans and Euroamerican settlers. Burials uncovered at this site in the spring of 1987 were intact in some areas and disturbed in others. This paper reports on an investigation of historical records that discovered how the piece of property has been used during the Euroamerican period. Historical factors which protected and preserved these burials include the construction of roads and sidewalks, instead of basements or buildings; factors that caused disturbances include construction of sewer lines and insertion of a telephone pole.

Pender Population Profile.

Sylvia Weeks, Simon Fraser University

Skeletal remains excavated during three fieldseasons on North Pender Island were analyzed to describe such demographic aspects as age-at-death, sex, stature, pathology, and burial practice. The burials represent approximately 4000 years and preliminary evidence indicates a continuous, homogeneous population. Further analysis of the data has resulted in a life table, crude birth rate, crude death rate, estimated population size, survivorship curve, and other paleodemographic evidence.

Inmates of Body House: Prostitution in Moscow, Idaho, 1885 to 1910.

Priscilla Wegars, University of Idaho

In the fall of 1983 an archaeological excavation took place in downtown Moscow, Idaho, north of the former site of a Chinese laundry. While little evidence of the laundry was recovered, its next-door neighbor, according to the available Sanborn fire insurance maps, was a "female boarding" establishment, at that time a euphemism for a house of prostitution. Seven other similarly-labelled buildings were found on Moscow maps from 1891 through 1904. This paper traces the early history of prostitution in Moscow, utilizing information from newspapers, oral histories, property ownership and census records, and jail ledgers.

Textiles for Tourists: A Socio-Economic Analysis of the Marketing of Native Weavings in Cusco, Peru.

Terry L. West

Textile production is an ancient skill of peasants in the Central Andes of South America. Production was usually for domestic consumption. Exchange was limited to trade between pastoralists and residents of lower elevation agricultural zones. Post-1960s growth in tourism created a demand for native textiles in urban "handicraft" markets. The purpose of this essay is to examine this market sector in the city of Cusco, Peru. Several critical issues are explored in the process. The recent influx of weavings from rural production sites to urban Cusco is problematic. Does it mean that weavers are shifting from production for use to market production? What is the commodity flow pattern of the weaving trade? The proliferation of middlemen who extract rural weavings for urban resale raises the issue of income distribution. When extant traditional weavings are all sold off will they be replaced by artesan products manufactured in urban zones? These questions are not merely academic problems. Instead they are important because they are relevant to problems of regional development and the protection of cultural heritage in Latin America.

Lithic Source Implications of Netsinkers.

James Seeley White, Portland State University

Initial observations suggest that notched netsinkers are of basalt material, while grooved and perforated netsinkers tend to be of softer, more porous igneous rock. Geological consultation has shown a notched specimen to be of Columbia River basalt. This material is found adjacent to three fishing sites sampled. In contast, grooved and perforated examples from the same sites are of a diktytaxitic rock, Boring lava. This material is found at varying distances from the fishing sites, and at limited locations. This suggests that in later stone netsinker use, travel was required to gather raw material, or a trade pattern developed.

Elvi Whittaker, University of British Columbia

From Fort Simpson to Mazatlan: Tracing Pacific Islanders Through the Archival Record.

Sandwich Islanders and other Pacific Island peoples had an active involvement in the labour history of the West Coast of the Americas and constituted ethnic enclaves still surviving in the ethnic consciousness of descendent and in geographical place names. This paper reports the first part of an ongoing study to reconstruct the connection between the Pacific Islands and the West Coast through the documents that at present represent the only "official" record. The archives consulted include those of the Hudson's Bay Company, the state archives of Hawaii, California, Oregon, Washington, New South Wales and Queensland, the provincial archives of British Columbia, records of historical societies like the Sierra County Historical Society, materials in the British Museum and a variety of nineteenth century newspapers and journals.

Look to the Past: See the Future.

June Wilburn, USDA Umatilla National Forest

A preliminary report on the results of two educational projects which attempt to convey traditional Indian values to the children of today. The cultural fabric of a society is woven through the process of educating the young. When the traditional processes have been disrupted, as in the case of American Indian people, reinstituting traditional values is both difficult and challenging. With the aid of visual and audio recorders these projects follow an holistic approach to understanding American Indian culture.

Management Training in the South Pacific.

John A. Young, Oregon State University

Economic development requires various skills and expertise that do not exist in traditional Pacific communities. As a member of the Institute for Social and Administrative Studies at the University of the South Pacific in 1982-83, I participated in several training workshops. This context presented clear indication of training needs in relationship to the local modern management training directed toward the acquisition of new skills is particularly important in order to achieve effective means of accountability.

Not Just Fisherman's Wives.

Kathleen Z. Young, Western Washington University

At the turn of the century, significant numbers of Croatians immigrated to the United States and began their domination of the purse-seine fishery. There are few references concerning the motivation of females to emigrate, except to follow their men. Our concentration on male control of property (fishing boats) has colored our perception of fishing communities. Croatian females were instrumental in placing their consanguineal kin on fishing boats. An analysis of the female influence in the development of the purse-seine fishery recognizes Croatian women as more than slavic stereotypes or "fisherman's wives."

Obsidian Hydration Studies at 35JA107: A Study of Alternate Methods and Interpretations.

Charles D. Zeier, Intermountain Research

Obsidian hydration may be a useful method for dating sites in southwest Oregon where C-14 samples often are not available. Four different approaches to obsidian hydration were attempted at site 35JA107. Two hydration equations consider the effects of chemical composition and variation in hydration temperature; two do not control for these variables. Of the four, the induced hydration equation has provided reliable chronology while controlling for major determinants of the hydration process and site specific depositional features.