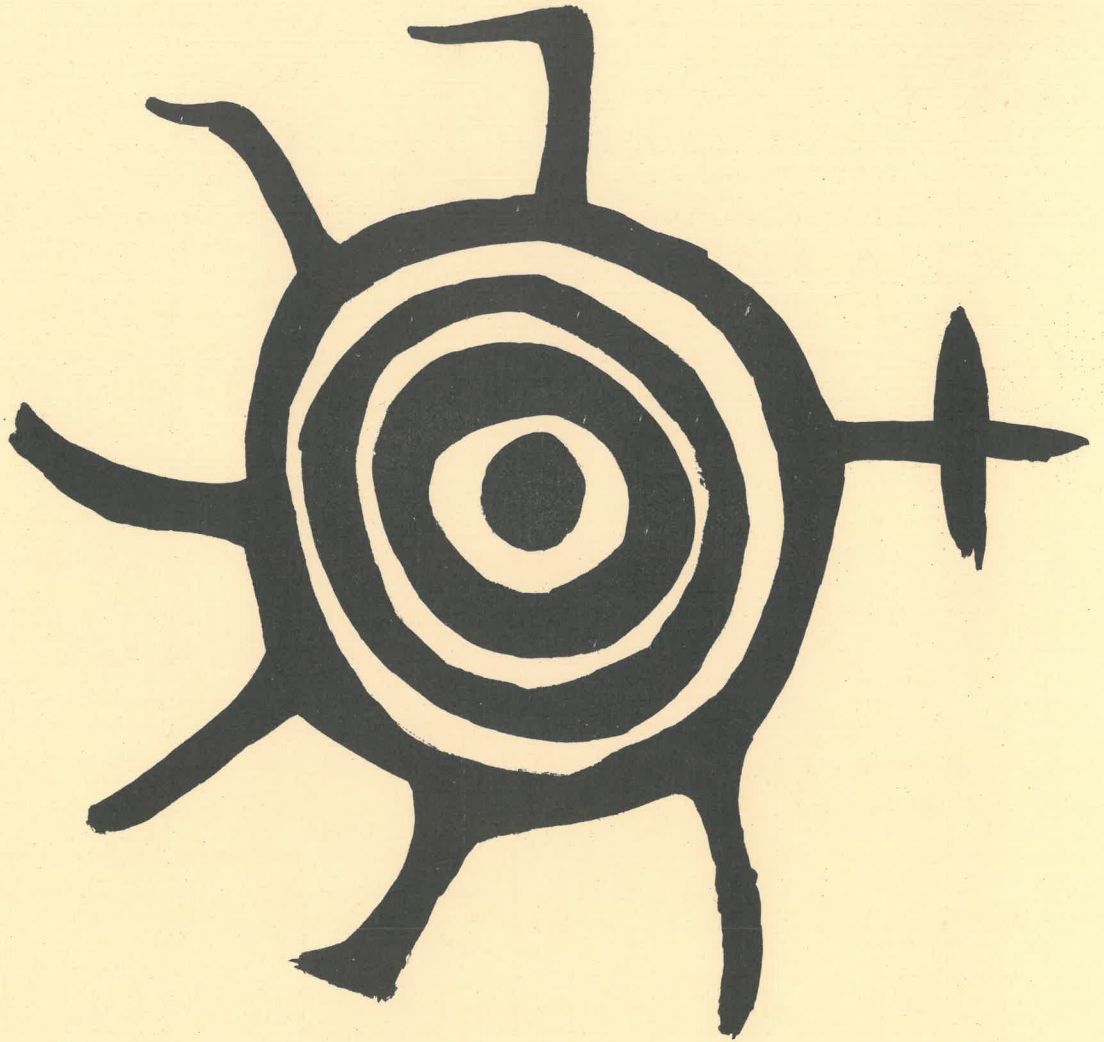


**Abstracts**



**37th ANNUAL NORTHWEST  
ANTHROPOLOGICAL CONFERENCE**

**Abstracts**

**Spokane, Washington**

**March 21-23, 1984**

37th ANNUAL NORTHWEST ANTHROPOLOGICAL CONFERENCE

Co-Hosted By  
Archaeological and Historical Services  
and  
the Department of Geography and Anthropology  
Eastern Washington University

Harvey S. Rice, Chairman  
Ruth A. Masten, Marsha Krebs, and Priscilla Wopat, Co-Organizers

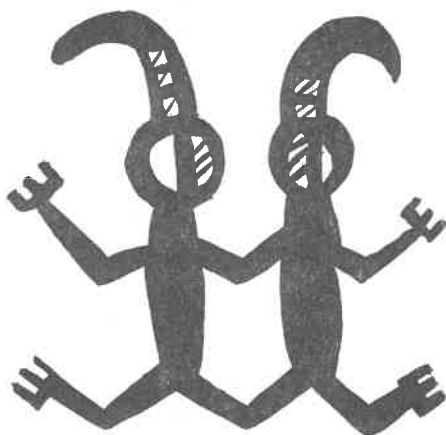
Conference abstracts were compiled by Ruth A. Masten and prepared by Priscilla Wopat. Symposia abstracts are listed first, followed by abstracts of individual papers arranged in alphabetical order by author.

Papers by Richard McClure and by James Keyser and George Knight provided the illustrations from which all pictograph and petroglyph figures were taken.

## ANTHROPOLOGY AT IDAHO'S UNIVERSITY: STUDENT REPORTS

Richard L. Fulton, II, Organizer and Chair

This symposium presents the results of anthropological research completed by students from Boise State University, Idaho State University, and the University of Idaho. It is an effort to support students' research and to help disseminate the results of their work to other anthropologists. Each paper to be presented has been recommended by an anthropologist teaching at one of the participating universities.



Pictograph from 45KT23, inundated  
by Wanapum Dam Reservoir.

### ARCHAEOLOGY IN THE JOHN DAY RESERVOIR 1958-1968

Don E. Dumond, Organizer and Chair

A synthesis of research in the major site (35GM9) of what was to become the pool of John Day Reservoir was published in 1983. This symposium reviews evidence from eight additional sites and concludes with a summary statement regarding the archaeology of the John Day Reservoir area as a whole.

### AOA SYMPOSIUM FOR OREGON ARCHAEOLOGY

Michael Regan, Chair

Members of the Association for Oregon Archaeology present a variety of papers based upon their current research interests. Topics include the use of shipwreck debris by coastal Native Americans, a microblade industry from the Standley site, the Pilcher Creek Windust phase, possible early sites along the Lower Rogue River, investigations at the Kirk Park sites, and a re-evaluation of the early willow-leaf point.

### CULTURAL RESOURCE MANAGEMENT IN GOVERNMENT

John Leier and Cathy Jerbic, Co-organizers

A symposium on cultural resource management sponsored by and for government agency personnel within the Pacific Northwest will be presented. Through panel presentations and open discussion, the symposium looks to provide the opportunity for an exchange of ideas and approaches on selected management topics based on actual agency personnel experience. Besides agency personnel participation, representatives from the Advisory Council on Historic Preservation, the Washington State Office of Archaeology and Historic Preservation, and the Idaho State Historic Preservation Office will be in attendance.

## INVESTIGATIONS AT 45D0176, A LATE PERIOD VILLAGE SITE ON THE COLUMBIA RIVER

Jerry R. Galm, Organizer and Chair

Excavations conducted for the Washington State Department of Transportation at the Avey's Orchard site (45D0176) near East Wenatchee documented the presence of a late period village. Initial testing revealed a large communal structure which then became the focus of the investigations. Subsequently, a smaller pithouse dwelling was found. Contributed papers in this session provide preliminary interpretations of the site, the two structures, and cultural debris. The combined data on stratigraphy, artifact assemblages, structural remains, tool kits, and faunal assemblages are compared to an ethnographic model of subsistence/settlement in the mid-Columbia region of central Washington.

## MOUNTAINS AS HUMAN HABITATS

Steven Hackenberger and Frank Leonhardy, Co-organizers

Within the Pacific Northwest, 16 of about 20 named physiographic provinces consist mostly of mountainous uplands. About one-fourth of the mountain provinces contain alpine environments. Recognizing these figures, and discounting our cultural predispositions toward thinking of mountains as vacation "retreats," it is possible to argue the importance of developing comparative research questions regarding the prehistoric settlement of many different mountain areas of the Northwest.

Papers in this symposium summarize and interpret the current archaeological record for some mountainous areas, or discuss resource configurations that may influence the settlement of montane regions. Three complementary approaches to archaeological studies in mountain areas are represented by symposium participants: 1) interpretation of early and late prehistoric patterns of land use from site assemblages and pollen records, 2) explanation of late prehistoric settlement patterns based on intensive field investigations of sites in relation to local environments and resources, and 3) prediction of late prehistoric economic processes for fairly large areas and relatively long periods of time. Each approach contributes to the synthesis of research questions that will help compare prehistoric uses of different mountainous areas and advance our study of the cultural ecologies of Pacific Northwest peoples.

## REALMS AND DIMENSIONS OF INTERPRETATION

Richard Chaney, Chair

An emerging polythematic self-portrait consists of diverse thematic orientations which direct our attention to diverse aspects of the problem of human consciousness. Inorganic, organic, and human evolutions are three major realms of order and flux, each needing its own conglomerations of special languages and notations. The realm of human sentiment is not explained by merely assuming it to be a phase of some other problem. According to this new polythematic portrait, human knowledge is made relevant to life only by including a knowledge about knowledge.

## COLONIAL AMERICA

Elwyn C. Lapoint, Chair

Our understanding of colonial America has been furthered by the contributions of many disciplines--among them history, archaeology, linguistics, and sociocultural anthropology. This symposium seeks to bring various disciplinary perspectives to bear on selected aspects of colonial American culture.

The development of the several colonial cultures reflects the interplay of numerous forces, including the cultural heritage(s) of the European mother country, colonial contact with indigenous American cultures, the disparate and sometimes conflicting economic and political priorities of the colony and the European homeland, and the ecological constraints affecting the different colonial societies. How these and other factors shaped individual features of early American culture will be explored in symposium papers. Certain papers will give specific consideration to the influence of colonial culture on post-colonial America.

## THE WELLS RESERVOIR ARCHAEOLOGICAL PROJECT: A PRELIMINARY REPORT

James C. Chatters, Chair

In the summer of 1983, a consortium of the Central Washington Archaeological Survey (CWU), the Center for Northwest Anthropology (WSU), and the Office of Public Archaeology (UW) conducted evaluation and data recovery excavations at 13 archaeological sites around Wells Reservoir (Lake Pateros). Sites included Astor's Fort Okanogan, three Cascade phase camps, a series of three terminal Cascade-early Frenchman Springs phase pithouse villages, a terminal Frenchman Springs fishing camp, and others. Project research design, analysis procedures, and organization will be outlined and potential contributions of the Wells data base to research on Plateau hunter-gatherers will be discussed.

## EXCURSIONS TO EAST TURKANA AND OLDUVAI EARLY MAN SITES

Benjamine Omara Abe, North Seattle Community College

No abstract submitted.

PRELIMINARY ASSESSMENT OF CHERRY POINT STRATIGRAPHY:  
METHODS AND ITS IMPLICATIONS FOR SITE USE

W.R. Belcher and Kathy Brackett

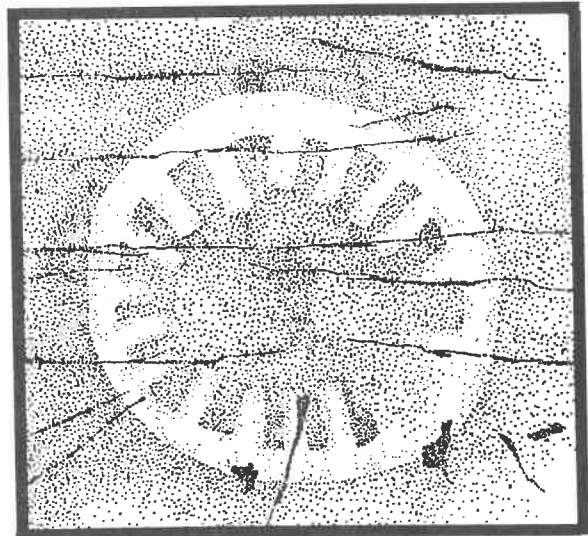
This paper proposes to examine, in a limited way, the use of E.B. Harris' laws of archaeological stratigraphy as a theoretical basis for the interpretation of site use and development on the Northwest Coast. Archaeological stratigraphy is not being manipulated to its fullest extent in this area. Strata have the potential to add more information of a site's development when viewed from a historical aspect as proposed by Harris. His ideas of stratigraphic contours, basins of deposition, and, in particular, interfaces can be used to analyze the stratigraphy of a site. These ideas can be adapted for use on sites not recorded in the Harris matrix method. Examples of this research method are drawn from the examination of material from Cherry Point (45WH1), with the permission and under the direction of Dr. G.F. Grabert.

## MULTIPLE FUNCTION LITHICS IN PLATEAU

John Benson, Central Washington University

Excavations in the Wells Reservoir area have yielded many stone artifacts with evidence of multiple use episodes. While most of the associations of wear patterns may be fortuitous, caused by re-use of available material, some appear to show consistent patterns of association among wear attributes and shapes. Previous analyses, having dealt mainly with artifacts as mono-functional tools, or the intersection of wear attributes as independent tool use events, have overlooked the possibility that some of the multiple use episode tools may have been produced intentionally. This paper will address the problems of multiple use episode tools, their identification and analysis.

Pictograph from the Yakima Firing Center.



ANTHROPOLOGICAL INTERPRETATION  
AND THE PROBLEM OF NEW GUINEA HIGHLAND SOCIAL ORGANIZATION

Jerold P. Bogorad, University of Oregon

Initial ethnographic accounts, relying on models of descent developed in African societies, depicted New Guinea Highland societies as systems of patrilineal organization. The discrepancies between these models and actual patterns of behavior became apparent and led to both the questioning of the validity of this depiction and the exploration of other principles which seem to mediate and even supplant the precepts of patrilineal descent. The various forms of analysis, their objectives and results, are examined in light of the nature of interpretation involved in these endeavors.

THE ROCK ART OF THE LOWER SALMON RIVER

Keo Boreson, University of Idaho and Archaeological and Historical Services

Seven pictograph sites located along a 50-mile stretch of the Lower Salmon River in west-central Idaho were recorded in detail from 1980-1983. These sites are described briefly and comparisons are made regarding location, complexity, and associations with other Native American cultural remains which may indicate differences in function. A detailed look at one of these sites, the Shorts Bar pictographs, reveals at least three methods of applying paint, significant repetition of some design elements, and a few exotic figures.

ANTHROPOLOGY FOR INDIANS:  
TEACHING AT A TRIBALLY CONTROLLED COMMUNITY COLLEGE

Daniel L. Boxberger, Lummi Com. College and Western Washington University

In 1978, P.L. 95-471 came into effect. This legislation established support for community colleges chartered by federally recognized Indian tribes. Currently, there are 18 tribally operated colleges funded under this program. The Lummi Community College offers a general two-year curriculum for Native American students from around the Northwest. Teaching in a different cultural setting can be an often frustrating but also rewarding experience. After 10 years of teaching and developing curricula for LCC, I have several observations to make and a few suggestions for anyone faced with a similar teaching situation.

## THE "BOLDT DECISION:" TEN YEARS AFTER

Daniel L. Boxberger, Lummi Com. College and Western Washington University

On 12 February 1974, Federal District Court Judge George Boldt released his now-famous decision guaranteeing access to 50% of the salmon harvest to 20 western Washington treaty tribes. As the tribes gear up and become better able to harvest salmon, the competition between the tribes and between the various gear types within the tribes becomes more acute. This paper will discuss the ability of the tribes to harvest their share of the resource and the intertribal and intratribal conflicts that have resulted.

THE UPLAND SIDE OF THE WINDUST PHASE:  
ARCHAEOLOGICAL EXCAVATIONS AT THE PILCHER CREEK SITE (35UN147)

David Brauner, Oregon State University

Archaeological excavations at the Pilcher Creek site (35UN147) near Baker, Oregon, in the eastern foothills of the Elkhorn Mountains were completed by Oregon State University during the summer of 1983. Funding for the project was provided by the Soil Conservation Service and the National Geographic Society. Data recovered from the site provide our first detailed description of an early pre- and post-Mazama hunting and gathering base camp on the southern periphery of the Columbia Plateau. Among the various activity loci present in the site, a soapstone pendant manufacturing area was the most unusual. A review of the data from the site and its place in regional prehistory will be the focus of the presentation.

## IMPOSED INNOVATION AMONG THE UNEMPLOYED IN KELLOGG, IDAHO

Peter J. Brown, Idaho State University

When the Bunker Hill Company shut down operations in early 1982, it left some 2000 area residents unemployed, many of whom remained in the area drawing various forms of aid. This, along with a general decline in the state's economy, put a strain on some of the state's financial resources. I argue that in response, the state, through a job-seeking skills class conducted by the Job Service, attempted to alter the unemployed's perception of the local economy and to get them to leave the area. While not an explicitly stated purpose of this course, much of what was presented can be shown to have been directed towards this goal.

## CHANGING PATTERNS OF GROWTH IN GUATEMALA AND MEXICO

Joella Busey, Boise State University

No abstract submitted.



ARCHAEOLOGICAL INVESTIGATIONS AT KIRK PARK SITES, WILLAMETTE VALLEY, OREGON

Richard D. Cheatham, University of Oregon

The 1982 and 1983 summer field schools of the University of Oregon investigated four aboriginal middens adjacent to an old meander channel of the Long Tom River. Artifact typology and presently available radiocarbon dates suggest an occupation beginning as early as 6000 years ago at Kirk Park 4, with all four sites having been occupied for the last 400-500 years. Comparative analyses of artifact assemblages, cultural debris, and floral and faunal remains recovered from the sites support the contention that the sites were occupied for different, but interrelated, subsistence purposes-- as a summer base camp, a camas processing camp, or an animal processing camp.

ON APPREHENDING THE POSSIBILITY OF BEING

Richard P. Chaney, University of Oregon

Cohen, in his discussion of the formation of or variation in ideas, states that "social evolution occurs for the very same reasons as its biological counterpart." Against this image, I wish to emphasize that there is an extraordinary difference between the "ultimate causes" of biological flux and the flux we find in individual and communal consciousness. Whereas chance mutations are occurring all the time in living systems, in the realm of human affairs, significant expansions of consciousness (wonderment or inquiry) get under way only when some difficulty or puzzlement is felt in a practical or theoretical situation.

AN INTRODUCTION TO THE WELLS RESERVOIR ARCHAEOLOGICAL PROJECT

James C. Chatters, Central Washington University

In the summer of 1983, a consortium of the Central Washington Archaeological Survey (CWU), the Center for Northwest Anthropology (WSU), and the Office of Public Archaeology (UW) conducted evaluation and data recovery excavations at 13 archaeological sites around Wells Reservoir (Lake Pateros). Sites included Astor's Fort Okanogan, three Cascade phase camps, a series of three terminal Cascade-early Frenchman Springs phase pithouse villages, a terminal Frenchman Springs fishing camp, and others. Project research design, analysis procedures, and organization will be outlined and potential contributions of the Wells data base to research on Plateau hunter-gatherers will be discussed.

IMPACT OF PREY BEHAVIOR ON THE SIZE OF HUNTING PARTIES:  
AN ARCHAEOLOGICAL EXAMPLE FROM THE CENTRAL ROCKIES

James C. Chatters, Central Washington University

No abstract submitted.

THE MUNK CREEK WET SITE (45SK156):  
RESULTS OF TEST SAMPLING OF A WET SITE IN SKAGIT COUNTY

E.R. Chesmore, B.R. Roulette, and A.L. Reid, Western Washington University

During the cultural resource survey of the Swinomish Indian Reservation, conducted during the summer of 1982, a water-saturated site was found. A 1 x 1 meter test cut was excavated to determine the extent of the deposits. A 100% sampling method was used to recover floral and faunal materials which were subjected to laboratory analysis. This report describes the procedures used in test sampling and presents the results of the laboratory analysis to demonstrate the wealth of information recoverable from a 1 x 1 meter test excavation.

LATE PLEISTOCENE-EARLY HOLOCENE PALEOECOLOGY  
AND ARCHAEOLOGY OF THE KOOTENAI AND PEND  
OREILLE DRAINAGES

Wayne T. Choquette  
East Kootenay Community College

This paper presents a synthesis of early post-glacial paleoecological data for the Kootenai and Pend Oregille drainages and correlates it with the archaeological record derived from reservoir and transmission line studies. Data from pollen and soil profiles, sediment sequences, and terrain analyses are combined with a paleoclimatic reconstruction to interpret biotic responses during the period from ca. 12,000-5000 B.P. The archaeological record is examined in terms of settlement patterns and the temporal and spatial distributions of diagnostic lithic material and artifact types. It is concluded that human inhabitation was possible as early as 12,000 years ago, although perhaps only seasonally at first, and that systemically definable human populations have been resident from that time onward. Several major problem areas requiring future research are identified.



Deer/elk from site 24RA503, Montana.

## 450K92--OUTSIDE FORT OKANOGAN: NATIVE AND EURO-AMERICAN INTERACTION

Gregory C. Cleveland, Central Washington University

A small block excavation outside the east gate of Astor's Fort Okanogan was piece-plotted by Wells Reservoir Archaeological Project 1983 investigators. Reservoir action from Lake Pateros creates an artifact-rich lag deposit which overlies in situ material of the fur trade era. Here, evidence of metalwork, stone pipe manufacturing, charcoal preparation, and animal butchering co-occur with a recent flake stone industry.

## A "TRADITIONAL" TOPIC IN PLATEAU PREHISTORY: SOME NEW EVIDENCE

Thomas J. Connolly and Paul W. Baxter, University of Oregon

Archaeologists have noted similarities between early willow-leaf points recognized throughout the Columbia Plateau and the more recent foliate points from western Oregon. This paper reports on a comparison of the 6000-8000-year-old Cascadia Cave assemblage and the less-than-3000-year-old Standley site in southwestern Oregon. While variation is evident, the striking correspondences among many artifact classes suggest a historical relationship.

## VILLAGES OF HOPE IN IRIAN JAYA, INDONESIA

Carolyn D. Cook, University of Idaho

A resettlement project is under way in Irian Jaya, Indonesia, whose purpose is to move mountain tribes (Amung-Me and Dani), coastal tribes (Kamoro and Mimika), and migrants from other islands into one area that has neither a coastal nor a mountain environment. Diets and economics are being changed, religions are conflicting, and lifestyles are different among all concerned. Benefits sought by the project are: a better trade center, education, and medical aid. Evaluation of the project's success includes a look at the needs being fulfilled. If the people want to participate actively in government, they need to choose resettlement, but if they prefer their old way of life, they should be free to choose after being made aware of the consequences.

## ANALYSIS OF DEPENDENCY THEORY THROUGH A BOOK CRITIQUE

Lisa A. Crosby, Linfield College

In this paper, I present the various tenets of dependency theory by analyzing Anibal Quijano's book Nationalism and Capitalism in Peru: A Study in Neo-Imperialism. This book was published in 1971 and it looks at the early years of rule by the military junta in Peru. I discuss the notions of metropol-satellite relations, the great chain of dependency, and the elimination of all competing sectors at lower levels. In conclusion, a few of the criticisms which have been leveled against dependency theory by other development theorists are presented.

## DIFFERENTIAL AGGRESSION: KUTCHIN ATHAPASKAN INTERGROUP PATTERNS, 1800-1850

Robert Daugherty, Tacoma Community College

While conducting ethnohistorical research on aboriginal inter-group relations of the Kutchin Athapaskans of northeastern Alaska and northwestern Yukon Territory, an interesting anomaly was noted in both the ethnographic and ethnohistorical literature. Interactions between the eight autonomous Kutchin regional groups was unstable and volatile. Trade was common, but so were conflicts. With respect to raids, oral traditions typically cast the western Kutchin of the Yukon drainage as the aggressors in intra-Kutchin hostilities. The Peel River Kutchin were one of the three eastern or "victim" groups that inhabited the Mackenzie drainage. Peel River Kutchin rarely, if ever, initiated raids against other Kutchin, yet they were the only Kutchin who dared to maintain hostile relations with the formidable Eskimos, the most feared and avoided people in the Athapaskan areas of the upper Yukon and lower Mackenzie rivers.

## 45D0387, A SEASONAL CAMP OF THE CASCADE PHASE

John A. Draper, Washington State University

Excavations conducted at 45D0387 at Lake Pateros, Washington, yielded Cascade phase cultural materials indicative of seasonal use. Three distinct occupation surfaces containing shellfish features, hearths, lithic workshop areas, and the remains of a probable structure were delimited. Preliminary analysis of the artifacts, features, and faunal remains indicates the site was probably a seasonal fishing camp from which salmon resources were processed.

## ARCHAEOLOGY IN THE JOHN DAY RESERVOIR, SUMMARY AND CHRONOLOGY

Don E. Dumond, University of Oregon

Several criteria serve to relate the sites discussed here to the Wildcat Canyon site (35GM9). Specifically, occupation is indicated during the Canyon phase (4500-3000 B.P.), the Wildcat phase (500 B.C.-A.D. 1000), and the Quinton phase (A.D. 1000-1800). In addition, a historic component dates to the nineteenth century. The possibility of occupation during the time of the hiatus between the Canyon and Wildcat phases (3000-1000 B.C.) is discussed. Evidence of subsistence patterns and external relationships is noted.

## MODERN LIVING ON THE JOHN DAY: HISTORIC HOUSEPITS AT 35GM22

Pamela Endzweig, University of Oregon

This paper discusses preliminary results of the analysis of site 35GM22, situated on the John Day River 1.5 miles upstream from its confluence with the Columbia. Excavation of two of eight recorded housepits prior to construction of John Day Dam produced a combination of both aboriginal and Euro-American artifacts. Dating time-diagnostic historic material suggests Native American occupation during the 1860s.

## INTERGROUP STRUCTURE ON THE PLATEAU: AN ECOLOGICAL MODEL

Phillip M. Everson, University of Washington

The analysis of intergroup relations on the southern Columbia Plateau by Anastasio provides a regional perspective within which questions of group social interaction can be explored. His analysis contains an implicit set of assumptions and an explicit set of statements useful in constructing an ecological model of a regional social network. The model and the basic parameters are examined. An "expected" social network is generated and compared to an "actual" network from the Southern Plateau by goodness-of-fit criteria. Results are discussed with respect to modeling, the Southern Plateau, and hunter-gatherers in general.

## AMBIGUITY AND INTERPRETATION: AN EXAMPLE FROM PONAPE

Suzanne Falgout, University of Oregon

Anthropology, a product of the Western intellectual, has considered knowledge to be a static, impersonal text which reflects the truth about the "world" it represents. These epistemological assumptions have been imputed to the native cultures under study and have set the standard for ethnographic method and interpretation. In this case study of native epistemology and important knowledge, we will explore the Ponapean production, use, and evaluation of ambiguity. The existence of this ambiguity at the level of our data will hold implications for anthropological method and theory as well as for policy decisions.

## THE UMATILLA TOWNSITE (35UM35)

Gary Foulkes, University of Oregon

This site located within the town of Umatilla was initially excavated in the summer of 1965 by the University of Oregon. Eleven features were recognized, including a housepit with post molds. Although much of the area had been disturbed by historic activity, a secure C-14 date of  $2420 \pm 120$  was obtained for the housepit. The presence of over 100 projectile points, numerous heavy cobble tools, scrapers, and both mammal and fish bones throughout the site suggests a reliance on a fishing and hunting way of life from the aforementioned date up to historic times.

FORKED EYE MOTIF OF THE SOUTHEASTERN CEREMONIAL COMPLEX

Richard L. Fulton, II, Boise State University

The earthen mounds of the southeastern United States have yielded a wide variety of artifacts in the form of ceremonial pottery, hand axes, shell gorgets, and other burial goods. These burial goods often have a number of different types of symbols and motifs etched or painted on their surfaces. One of the more prominent of these motifs is the forked eye motif. This paper will deal with some of the different types of forked eye motifs found in the southeastern United States as well as theories concerning their derivation.

THE AVEY'S ORCHARD SITE (45D0176),  
A LATE PREHISTORIC VILLAGE ON THE COLUMBIA PLATEAU

Jerry Galm, Archaeological and Historical Services

Excavations undertaken for the Washington State Department of Transportation at the Avey's Orchard site (45D0176) located two prehistoric structures and associated living debris dating to the late prehistoric period. This investigation focused on complete excavation of a large communal dwelling and partial excavation of a circular pithouse structure. Radiocarbon dates on these features range between ca. A.D. 840-1100, indicating a mid-to-late Cayuse phase occupation. Preliminary descriptions and interpretations of the two structures are provided. Both appear to be dwellings associated with a larger Cayuse phase village extending to the south of the area excavated. The larger of the two structures appears to be a communal winter dwelling that was abandoned after burning. Stratigraphic and artifact assemblage data are compared to other sites in this region and provide a preliminary assessment of late Cayuse phase subsistence/settlement patterns in the mid-Columbia area of central Washington.

A COMPARATIVE STUDY ON INCOME, NUTRITION, AND CONSUMER SPENDING PATTERNS  
IN THE UNITED STATES

Denise L. Garceau, Central Washington University

Many assumptions are currently being made with regard to the relationship between income and nutritional deficiencies, yet few studies actually explain why low income people have nutritional deficiencies. I will examine income, nutrition levels, household size, and food consumption patterns to determine if poor nutrition is due to lack of income, lack of education, or poor money management.

## MAKAH ETHNOBOTANY--THE FOOD PLANTS

Steven J. Gill, Makah Language Program and Washington State University

Plants played an important role in all aspects of Makah culture. Food plants are available throughout much of the year, beginning with "sprouts" in early spring and ending with late-ripening fruit and roots towards the end of November. Specific data concerning various food plants are provided using culturally important species as examples, and evidence from the Ozette archaeological site is summarized. The correlation between cultural significance and the native terms applied to various plant species is explored.

THE NAMING OF PLANTS IN MAKAH, NITINAHT, AND NOOTAK -  
AN ANALYSIS OF MEANING

Steven J. Gill, Ann M. Renker, and John Thomas, Makah Language Program

Makah, Nitinaht, and Nootka plant names are analyzed semantically. Most currently known plant names correspond in a one-to-one fashion with botanical species. Because Nootkan languages are polysynthetic, most plant names can be analyzed into morphemes reflecting some innate characteristic of the plant, association with another plant or animal, the way the plant was utilized, or its resemblance to some other object or plant. Cultural significance of plants correlates positively with the number of specialized terms associated with them and the degree of lexical retention in the post-contact period.

WOOD TECHNOLOGY AND HOUSE 1 EVIDENCE AT 45D0176

Paul Gleeson, Archaeological and Historical Services

Burned structural remains recovered from the floor of House 1 at 45D0176 provide insights on the wood technology and building methods employed in house construction. The pattern of charred wood recorded appears to be part of the roof of this structure. Construction methods and woodworking techniques are described and serve as a basis for reconstructing house form.

TOTEM POLES IN THE MAINSTREAM: AN EXPLORATION OF CULTURE TRANSFER

John Golden

Once unique to Northwest Coast Indians, the totem pole has become a popular art form in today's mainstream culture. Although mainstream poles derive directly from classic Northwest Coast traditions, many significant elements have changed, i.e., who carves them and who commissions them, where they are used and why, how they are made--materials, tools, and techniques, and how they are designed--style and symbolism. The diversity of non-traditional, mainstream poles is as remarkable as their rapid geographic spread. Looking at these poles and hearing the stories behind them provides fascinating insight into the process of culture transfer in action.

PREHISTORY OF SOUTHWESTERN OREGON:  
AN ANALYSIS OF THREE SITES ALONG THE LOWER ROGUE RIVER

Dennis Griffin and Chrystal Schreindorfer, Oregon State University

Recent excavations in the coastal mountains of southwestern Oregon along the lower Rogue River have revealed a time depth reaching back at least 7000 years. A radiocarbon-dated charcoal fragment recovered in 1982 yielded a date of  $6485 \pm 80$  years, and cultural material extended at least a meter below this sample. This evidence suggests there were probably thousands of years of occupation previous to that time. Three sites along the river itself are used to lay the chronological foundations of the area.

NINETEENTH CENTURY BRICKMAKING IN THE PACIFIC NORTHWEST

Karl Gurcke, University of Idaho

Although quite common on many historical sites, bricks have long been neglected by archaeologists. Historians likewise have been remiss in investigating the brick industry. However, bricks have several attributes which can give important clues as to how, where, and even when they were made. In addition, the Northwest brick industry is of considerable antiquity and has played an important role in the local, regional, and international markets. The purpose of this paper is to provide a brief historical overview of the industry as well as pointing out some of the major diagnostic features of bricks.

SIMULATING LONG TERM RESOURCE VARIATION FOR A MONTANE ENVIRONMENT:  
CONSEQUENCES FOR HUMAN ADAPTATIONS IN THE SALMON RIVER MOUNTAINS, IDAHO

Steven Hackenberger, Washington State University

Estimates for the amount and relative density of ungulates and salmonids are calculated. Changes in these resources are simulated on the basis of a 1000 year record of winter precipitation and spring/summer stream flow inferred from correlations between tree ring width and historic meteorological observations. Consequences of changes in resource availability for the size and organization of human population aggregations are simulated. Results illustrate less significant short-term impacts of montane resource fluctuations than previously conceived by cultural ecologists. However, certain periods of time are characterized by resource configurations that may have contributed to changes in prehistoric economics.



## AN EXPERIMENTAL PITHOUSE IN RAINY WESTERN WASHINGTON

Gerald C. Hedlund, Green River Community College

During archaeological excavations on the Enumclaw Plateau of western Washington state, evidence of semisubterranean housepits was found. One oval-shaped excavated structure was approximately 10 m long by 4 m wide and 0.8 m in depth. After much speculation about the practicality of living in a housepit through the winter in western Washington, a structure was designed and built. The structure was constructed on the Green River Community College campus, based on what was found archaeologically as well as on historically known structures. The pithouse was constructed from materials similar to those which could have been used prehistorically. The structure was completed on October 30, 1983, and has been an effective shelter against rain and cold throughout the fall and winter, based upon the experiences of several students and instructors.

## AN ARCHAEOLOGICAL ANALYSIS OF THE LOWER BLALOCK ISLAND SITE (45BN83)

Brian E. Hemphill, University of Oregon

The Lower Blalock Island site (45BN83) consists of a housepit up to 8 meters in diameter having four occupational floors. The site is located on an islet in a dune area only 2 meters above the high water level. Analysis of the faunal evidence indicates that rabbits, birds, squirrels, and above all, freshwater mussels were important foodstuffs. The preponderance of broad-necked over narrow-necked projectile points, coupled with a radiocarbon date of 2980  $\pm$  80 B.P. from an ash stain on the lowest floor in the site, indicated that 45BN83 may be one of the earliest developments of the Wildcat phase in the John Day area.

## THE SOCIALIST DEVELOPING COUNTRIES: THE LITTLE RED MONOLITH THAT COULDN'T

Brian E. Hemphill, University of Oregon

This paper asserts that much of the animosity demonstrated by the United States to development efforts in Third World socialist countries is the result of two broad-based misconceptions. First is the false belief that the Third World socialist countries are a unitypic monolith having common problems, peoples, and resources. Second is the false belief that the adoption of socialism by the Third World socialist countries represents an espousal of Soviet ideology, policy, and nationalism. Rather, it is asserted that often socialism is adopted because it is frequently more in line with traditional values than is Western capitalism.

## THE PURGATORY SITE, 935GM15

Claudia B. Hemphill

The Purgatory site, situated on a low ridge on the south bank of the Columbia, yielded evidence of use during three phases radiocarbon-dated to between A.D. 1 and A.D. 1700. Between A.D. 1 and A.D. 500, large pithouses were occupied seasonally by people exploiting riverine resources. Use of the site after this period was sporadic and non-intensive. After about A.D. 1400, small, shallow pithouses were dug. Diet of these latest occupants included deer as well as riverine foods. Materials from the site supplement the chronology constructed for the middle Columbia, and help document changes in riverine exploitive technology.

## LITHOSOLS: GROCERY STORES IN THE PLATEAU AND GREAT BASIN

Lucile A. Housley, Linfield College

The need to describe natural environments associated with archaeological areas accurately has recently been propounded; seasonal availability of those plant resources also needs to be determined. Plants do not grow randomly but in easily identified communities that are related to soil and climatic conditions. One plant community, that found growing on lithosols, has been used prehistorically and is still exploited in the spring by different linguistic groups from several locations. This paper attempts to show where some of those areas are, who uses them, and what ethnographic evidence there is of past use. Clues will also be presented to help identify plant communities found growing in the Great Basin and Plateau.

## THE ARCHAEOLOGICAL OCCURRENCE OF FISH REMAINS IN THE SOUTHERN PLATEAU

Robbin Johnston, University of Idaho

A common assumption is that fishing, especially for salmon, was important to the prehistoric peoples of the Southern Plateau. This notion is based primarily on ethnographic and historic accounts. The notion that fishing was an important economic activity is not supported by the direct evidence of fish remains or fishing tools from sites in the Southern Plateau. Of the excavated sites in the Southern Plateau, only 24% have reported fish remains. Of those sites which have fish remains, fish remains comprise less than 3% of the faunal assemblages. The fishing tools comprise less than 5% of the total tool assemblages for most of the sites. It is obvious that there exists a disparity between the ethnographic and archaeological records and that the data reported from excavations do not confirm the economic importance of fish. This disparity may be the result of several factors, including limited preservation of fish remains, inadequate sampling techniques, investigation biases, and the possibility that fishing may not have been as important for some periods in the past as it was in historic times.

## TOWARD A SOCIO-MUSICOLOGY

L.M. Klug, Central Washington University

Many ethnographers go into the field unprepared for an encounter with non-Western music. Once in the field, they fall in love with the music but feel a sense of ignorance and helplessness with regard to bringing back musical materials that are anthropologically significant. Ethnomusicology tests are of little help, often being more terrifying than informative. I present here a simplified format of data acquisition for the musicologically unsophisticated.

## AN INVESTIGATION FOCUSING ON WOODWORKING TOOL KITS AT 45D0176

Dan Landis and John Erp, Archaeological and Historical Services

Burned portions of the structure of one large house at 45D0176 are in the form of split planks and split logs. Thus, it is assumed that woodworking tool kits were essential to the basic construction and refurbishing of the house(s) there. First, however, tool kits in general and woodworking tool kits in particular are defined operationally. These definitions are derived from pertinent literature and designed to segregate woodworking from other tool kits potentially present in the materials recovered from the site. The co-occurrence of tool kits from a variety of more-or-less specific tasks may obscure the identification of discrete task-specific tool kits. Consequently, the variety of expected and identifiable tool kits is examined to filter out the "noise" and to identify the woodworking tool kits as reliably as possible. This is approached through the horizontal and vertical distribution of tool classes. Interpretations then are based on the observed clustering of the kinds of tools expected to be in a "typical" woodworking tool kit. Furthermore, interpretations of the woodworking tool kits are integrated into the overall interpretation of the site's development.

## JUGS, CROCKS, AND SEWER PIPES.

THE UTILITARIAN STONEWARE INDUSTRY OF THE PACIFIC NORTHWEST 1850-1920

Gerald K. Landreth, University of Idaho

During the exploration and settlement of the Pacific Northwest, extensive deposits of clay suitable for ceramic manufacturing were located. Utilization of this resource for stoneware production began as early as 1851. By 1890, factories employing techniques of mass production were well established. Assisted by improved rail transportation, these industries produced wares on a scale large enough to compete with and to exclude almost all eastern goods of this type. By 1920, production of stoneware had virtually ceased due to the replacement of stoneware by more durable tinware, hard paste earthenwares, and glass storage containers. This paper summarizes the development of the stoneware industry, its technology, and its methods of production.

## COFFINS AND CASKETS: THEIR CONTRIBUTION TO THE ARCHAEOLOGICAL RECORD

Kathryn A. Lang, University of Idaho

The primary difference between a coffin and a casket is shape: a coffin is hexagonal and a casket is rectangular. Patent records reveal that the transition from the coffin to the casket began in the 1850s. A.D. Fisk introduced the first major changes in style in 1848 with the Fisk Metallic Coffin. From there, casket manufactures went on to develop drop sides, couches, life detectors, and the present-day luxury models. These changes and popular trends in Euro-American burial containers help date burials that leave no other clues as to their age. In addition, these changes provide an insight into how the population viewed death.

## A SATAN FOR SALEM: THE ORIGINS OF A WITCHCRAFT CRISIS

Elwyn C. Lapoint, Eastern Washington University

Despite rich documentary evidence and careful analysis by historians and social scientists alike, many aspects of the Salem witchcraft outbreak in 1692 remain obscure even today. Especially problematic is the question of the origins of the episode. The present paper examines this question. It is shown that the witchcraft crisis resulted from a constellation of several key factors, among them village factionalism, Puritan values and family organization, and tensions current within the larger New England society.

DESIGN FOR ARCHAEOLOGICAL RESEARCH  
IN THE RIVER OF NO RETURN WILDERNESS AREA, IDAHO

Frank Leonhardy and Fred Thomas

Archaeological research in the River of No Return Wilderness Area is intended to determine how prehistoric people adapted to a montane environment. Settlement/subsistence theory provides the basis for understanding interrelationships between resources, technology, and people. Present evidence suggests a fine-grained adaptation specific to this mountain habitat. Because the wilderness has been minimally disturbed, the opportunity for quantifying the native resource base is good, thus enhancing the application of archaeological theory.

## LEVI-STRAUSS: "THE TRUTH WITHIN" INTERPRETED

Susan C. Lewis, University of Oregon

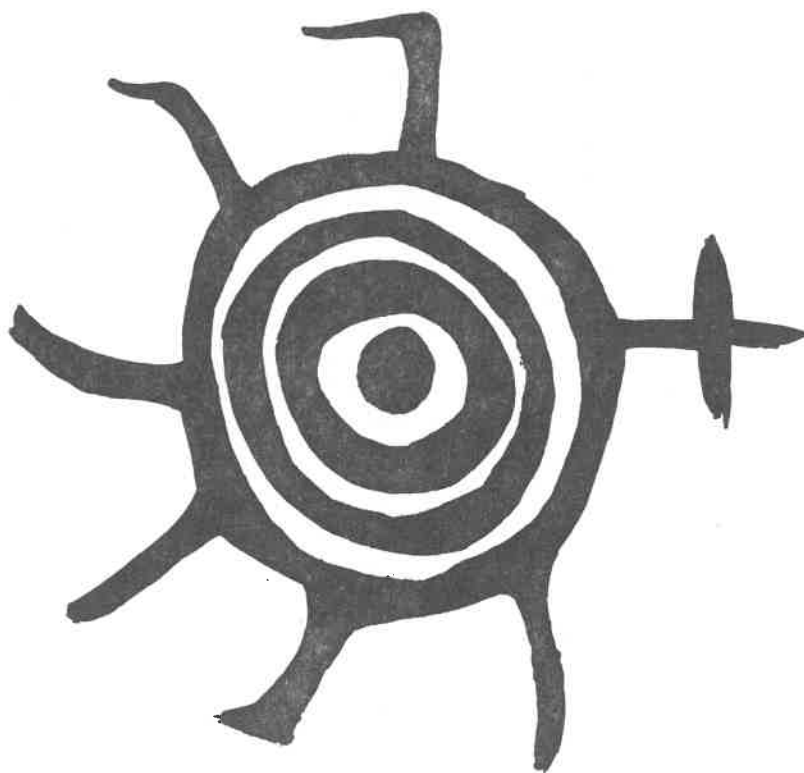
Employing concepts from structural linguistics but working through a phenomenological-hermeneutical mode, Levi-Strauss employs metaphorical language and analogical processes of abstraction, not to formulate a method, but to create a text to be interpreted. The various interpretations and critiques of his work produce in turn a meta-statement on the problem of interpretation itself. Levi-Strauss' text is a working through of what he sees as the human condition which he also poses as its dilemma. The way out of the hermeneutic circle involves a paradox bearing upon ethics and the humanistic enterprise. Geertz, working in a similar tradition and asking some of the same questions, reveals, however, another side of the paradox.

DOCUMENTATION, ANALYSIS, AND INFERENCE:  
NEW VIEWS OF PRIVATE PROJECTILE POINT COLLECTIONS

Ramona M. Livingston, Idaho State University

Private collections of projectile points are viewed as sources of information about regional variability, and as valuable resources for testing quantitative typological principles. The Albert Mosbrucker Collection, in Aberdeen, Idaho, contains over 700 complete projectile points. During the winter of 1982, I photographed and identified each point using regional Great Basin typologies. Now, using metric and stylistic attributes, these original typologies are constructed mathematically for comparisons to the quantitative typologies of Thomas and Holmer. Variation between northern and central Great Basin typologies is then examined. The goal of this research is to show that private collections of projectile points have value beyond that of aesthetic appreciation.

Chalked petroglyph from  
45KL84 (the McCredie  
Petroglyph site), innun-  
dated by John Day Dam.



THE ROLE OF THE 19TH CENTURY ARTIST IN  
RECORDING ETHNOGRAPHIC INFORMATION

Charles Luttrell, Eastern Washington University

The purpose of this paper is to demonstrate how several nineteenth century artists, contrary to the opinion of modern detractors, frequently were quite accurate in their graphic representations of Indian culture, ecological setting, and physical characteristics of these peoples. In addition to this legacy of paintings and drawings, some early artists recorded ethnographic information, and consequently made valuable contributions to anthropology and history. It is true that the work of some early artists was perceptually ethnocentric by virtue of their training in the conventions of classical European art, for example, the portrayal of mothers with infants in the idealized style of Renaissance madonnas or their depiction of Indians as noble savages. It is proposed, however, that the work of such criticized painters as Catlin, Bodmer, Point, and Miller provide contemporary anthropologists and ethnohistorians with useful insights to Plains culture.



Pictograph from 45OK14.

FAUNAL ANALYSIS AT AVEY'S ORCHARD, WASHINGTON (45D0176)

R. Lee Lyman, Oregon State University

The Avey's Orchard fauna is described and compared with fauna from the nearby Boat Ramp (45CH212) of similar age to illustrate interpretive difficulties emanating from sample size, e.g., the larger number of Avey's Orchard faunal remains (NISP = 608 mammal bones) displays a greater taxonomic richness (N of mammalian genera = 16) than does the smaller number (NISP = 427 mammal bones) of Boat Ramp faunal remains (N of mammalian genera = 6). These problems are explored further via an analysis of the temporal distribution of bison and antelope bones in eastern Washington wherein it is shown that the abundances of these two taxa are a function of sample size. The zoogeographic and paleoecological potential of eastern Washington archaeofaunas is illustrated by reporting an 850 B.P grizzly bear (Ursus arctos) mandible from Avey's Orchard.

THE RESOURCE AREA: AN ETHNOGRAPHIC ANALOGUE FOR RESOURCE USE PATTERNS  
AT ARCHAEOLOGICAL SITE 45D0176

Ruth Masten, Archaeological and Historical Services

This paper provides a synopsis of information on the subsistence and resource use patterns of the Middle Columbia and Wenatchi Salish. Ethnographic descriptions are utilized in the development of a resource use model for the area along the Columbia River in the vicinity of archaeological site 45D0176. This analogue provides a context for interpreting the archaeological pattern, including analyses of site placement and functions, during the late prehistoric and ethnographic periods.

THE HOOK SITE (35GM3)

Patricia McClenahan, University of Oregon

The Hook site, 35GM3, is located approximately 3 miles east of the mouth of the John Day River on the south bank of the Columbia and is 1 mile west of the former Hook railroad station. Excavations were carried out in 1964 after extensive pothunting threatened the entire site. A radiocarbon date of  $1170 \pm 160$  B.P. from geological Stratum B suggests occupation prior to A.D. 780. The site has two components which correspond to the Wildcat and Quinton phases of 35GM9, Area 5. Subsistence activities included the taking of deer, small game, and fish. Major features include two house floors in Stratum B.

AN ANALYSIS OF THE LITHIC ARTIFACTS FROM THE BEEDE DRINKWATER SITE (35HA439)

Steven E. McCormick

This is a study of the lithic artifacts from the Beede Drinkwater site in Harney County, Oregon (35HA439). Most of the artifacts come from the surface, although two artifacts were recovered from test augering. In this analysis the artifacts are separated according to raw material, stage of flake manufacture, type of tool, and size. The majority of artifacts are composed of obsidian and cryptocrystalline silicates; of these, about 12% are actual tools. Most of the tools are between 1 and 3 cm in size and exhibit relatively moderate use wear. Spatial analysis shows that the concentrations of lithic debris and tools lie in the center units of the site. From the analysis, it is evident that little elaboration in tool use occurred here. Most of the tools are utilized flakes with unifacial edge wear, and evidently were produced where they were used. In conclusion, two hypotheses have been put forward to explain the hue of the Beede Drinkwater site: 1) human use involved primarily light maintenance activities, and 2) lighter work, such as the preparation of raw material for basketmaking, took place at this site.

## PALEO-NUTRITION, COLUMBIA PLATEAU

Claudia McHargue, Central Washington University

No abstract submitted.

NINE MONTHS WAITING: MOTHERS' AND PHYSICIANS' VIEWS  
OF THE COURSE OF PREGNANCY

Karen L. Michaelson, Eastern Washington University

Both physicians and expectant mothers share a concern for the successful outcome of a pregnancy. Physicians attending the expectant mother perceive a fairly regular pattern of concern in their patients: concern for normal infant development in the first trimester, a relatively carefree second trimester with concerns about the mother's weight gain, and a final trimester where expressions of concern for the baby's growth and safety are common. Expectant mothers share a somewhat different set of concerns which revolve not only around the infant's development and their own loss of shape, but include concerns about labor and delivery and lifestyle and relationship changes which may occur not only during pregnancy but with the birth of the new baby. These concerns and expectations vary with the number of prior births, rural vs. urban residences, and the social network in which the woman is embedded.

## THE JOHN DAY RESERVOIR PROJECT: INTRODUCTION AND OVERVIEW

Rick Minor, University of Oregon

This paper reviews the archaeological research conducted by the University of Oregon in the John Day Reservoir area on the middle Columbia River from 1957 to 1968. Fieldwork was carried out at approximately 40 archaeological sites during this period. The most important of these sites, the Wildcat Canyon site, contained evidence of occupation spanning at least the last 8000 years. This overview is intended to set the stage for the presentation of papers in this symposium about a number of the other archaeological sites investigated during the John Day Reservoir Project.

## 45DO372: A TERMINAL FRENCHMAN SPRINGS PHASE FISHING CAMP?

Guy Moura, Central Washington University

No abstract submitted.



## HOBO CAVE, 35GM24

Robert R. Musil, University of Oregon

Hobo Cave was a multiple occupation hunting shelter located along what is now old Highway 30, 7 miles east of the mouth of the John Day River. The earliest cultural levels lie below a C-14 date of 6125  $\pm$  250 years ago, and above a depositional layer that is believed to be volcanic ash from the eruption of Mt. Mazama. These artifacts show affinities with material of the Canyon phase at Wildcat Canyon (35GM9). The cultural levels divide into three components spanning the last 7000 years of human occupation in the area.

## ARCHAEOLOGICAL INVESTIGATIONS AT THE ALDERDALE SITE (45KL5)

Albert C. Oetting, University of Oregon

Excavations during three summers were conducted in one area of 45KL5, a large site on the Columbia River near Alderdale, Washington. Numerous cultural features were found, including 15 housepits. The stratigraphic positions of these housepits and an elevational difference in the projectile point types recovered suggest that two occupations are represented here. Based on radiocarbon dates and the projectile point types present, the two occupations appear to correspond to the early and middle subphases of the Wildcat phase, 500 B.C. to A.D. 500.

## TOM'S CAMP (35MW10)

Brian O'Neill, University of Oregon

The Tom's Camp site (35MW10) is situated on the south bank of the Columbia River ca. 3 miles west of Boardman, Oregon. Originally located by the River Basin Survey in 1950, it was subsequently excavated by the University of Oregon in 1967. Periodically occupied from ca. 1800 B.P. until historic times, the site consists of a series of three superimposed pithouses and two "occupational levels." The artifact assemblage, projectile point types, and radiocarbon dates indicate that the site was occupied during both the Wildcat and Quinton phases.

ANTHROPOMETRY AND SUBMAXIMAL WORK PERFORMANCE  
OF PRE-ADOLESCENT AYMARA BOYS AT HIGH ALTITUDE.

Robert F. Pastor, University of Oregon

A group of 67 Aymara boys between the ages of 7.7 and 11.8 years was assessed anthropometrically and for submaximal work performance. The subjects were healthy and had resided since birth in LaPaz, Bolivia (3700 m). Skinfolts were geerally near the 50th NCHS percentile, but considerably greater compared to other Amerindian populations. Body fat and linear growth appeared to be affected differently by hypobaric hypoxia. Stature and weight were correlated highly with work performance. Submaximal  $V_{O_2}$  of the Aymara boys was greater than European boys residing at any altitude. Differences in submaximal work performance within the sample may have been due to carbohydrate and fat intake.

NEW EVIDENCE ON THE COQUILLE MICROBLADE INDUSTRY:  
THE COLLECTION FROM THE STANDLEY SITE, CAMAS VALLEY, OREGON

Richard M. Pettigrew and Thomas J. Connolly

The 1978 hypothesis that a local variant of the Plateau Microblade tradition, called the Coquille Microblade industry, is represented in prehistoric assemblages along the Middle Fork of the Coquille River in southwestern Oregon can now be critically evaluated with a large body of data from the recently excavated Standley site (35D0182) in Camas Valley, Oregon. Analysis of end scraper microblade cores and microblades shed new light on the nature of microblade technology and raises new issues concerning the recognition and definition of microblade technology wherever it is found.

SELECTIONS FROM THE MEDICAL VIEWS OF COTTON MATHER

D.F. Pierce

Cotton Mather, best known for his theological views and writings, was deeply interested in the ills of the flesh which troubled mankind. He gave considerable thought to these matters and frequently mentioned them in his correspondence. His thoughts on medical matters appear in a number of his writings and are extensively reported in the unpublished Angel of Bethesda. This paper touches on such matters as Mather's views on the causes of disease and cures for various maladies. The emphasis is upon the cause and cure for smallpox and the process of variolation.

A QUESTION OF BALANCE: THE ROLE OF CONTEXT IN EURO-AMERICAN OBSERVATIONS  
ON ESKIMO GROUPS OF THE YUKON-KUSKOKWIM REGION, WESTERN ALASKA

Ken Pratt, Western Washington University

Historical-anthropological data on Eskimo groups of the Yukon-Kuskokwim region of western Alaska seldom agree on either the names, territories, or number of distinct groups that traditionally inhabited this region. The extent of these inconsistencies renders the standard Yukon-Kuskokwim Eskimo groupings indefensible. Several of the reasons for this situation involve methodological problems that characterized the Euro-American observations and ethnographic data collections these groupings were based upon. These problems concern a) the objectives behind the observers' presence in the region, b) the duration and seasonality of their observations, and c) linguistic constraints that affected their data collection.

NEW LIGHT ON CASCADE PHASE SETTLEMENT PATTERNS

Constance Reid, Central Washington University

The archaeological manifestation called the "Cascade phase" occurred in the Columbia Plateau approximately 8000 to 5000 B.P. While previous discussions of the Cascade phase have been based on generalized descriptions of isolated sites, this paper deals with three recently excavated sites that are within 5 miles of each other on the Columbia River. Each site has been radiocarbon-dated to between 6400 and 6900 B.P. We hypothesize that each site represents a different season of occupation. Because of their proximity in location and estimations of age, these sites provide information which may allow us to infer seasonal subsistence patterns within the Cascade phase at a specific area and specific period of time.

SOME OBSERVATIONS ON PREHISTORIC ADAPTATIONS  
IN THE SOUTH-CENTRAL WASHINGTON CASCADES

David Rice, U.S. Army Corps of Engineers, Seattle District

No abstract submitted.

ARCHAEOLOGICAL INFERENCE FROM HISTORIC PHOTOGRAPHS II

Harvey S. Rice, Archaeological and Historical Services

At the 36th Annual Northwest Anthropological Conference held in Boise, Idaho, a presentation entitled "Archaeological Inference from Historic Photographs" was made. The time allotted proved to be too short to show all of the graphic material available and the people attending the presentation were told that the remaining photographs would be presented at the 37th Northwest Conference. The research which led to the collection of the graphic material is now completed, and has cumulated in a monograph entitled Native American Dwellings and Attendant Structures of the Southern Plateau. The graphic material remaining from last year's conference will be presented and the results of the research will be summarized.

## KOOTENAI ARCHAEOLOGY: IN SITU DEVELOPMENT

Tom E. Roll, Montana State University

The northern Rockies provide an excellent laboratory in which to investigate the nature of prehistoric adaptations to a mountainous, temperate coniferous forest setting. Recent work on the Kootenai River near Libby, Montana, has resulted in re-evaluation of models used to explicate native subsistence/settlement systems in this transmontane region. Most such models depend either on indigenous populations participating in long-distance movement to gain access to valued resources or on intermittent occupation of immigrant populations as a result of stress in favored habitats. A more elegant model suggests that after initial occupation, native populations developed in situ adaptations to locally available resources that required neither extensive annual migrations nor external input to resolve local problems. This model suggests that people in the Canyon locality of the Kootenai region practiced a seasonal round that called for relative aggregation of populations in the river bottoms during late fall-early spring and population dispersion throughout the remainder of the year. Resources in the bottomlands decrease during late spring and summer--the deer move to higher ground, the fish runs are either completed or have not begun, and berries and many roots have not yet matured. Given these parameters, the difficulty found in selecting an appropriate model revolves around the kind of demographic assumptions that are made. A small population could subsist in a single location indefinitely. The limited resources of the summer would encourage dispersion of a larger population to higher life zones.

THE UTILIZATION OF INDIGENOUS MATERIA MEDICA AMERICANA BY BRITISH COLONISTS

John Alan Ross, Eastern Washington University

This paper discusses why the early British colonists, were, of necessity, largely dependent upon Indian medicaments and procedures in treating both immigrant-borne and indigenous maladies, ones that sometimes assumed epidemic proportions. Some further considerations will be classification of the materia medica americana utilized by the Anglo culture, and the reasons why certain procedures of Indian medical practitioners were almost totally rejected by Calvinistic people who viewed the Amerind as a heathen.

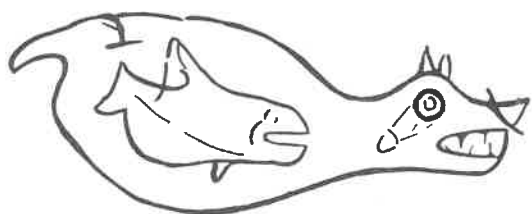
THE OCCURRENCE AND SIGNIFICANCE OF THE BERDACHE  
AMONG THE SOUTHERN PLATEAU SALISH

John Alan Ross and Kavan di Pignatelli, Eastern Washington University

There are few references in the anthropological and historical literature regarding the occurrence or significance of the berdache in the Plateau. Existing references are at best ethnographically incomplete, providing little explanation as to how an adolescent male traditionally acquired this intermediating role of accommodation or what specific occupational or thermomorphic functions were fulfilled by Plateau berdaches. This paper posits that berdaches existed in all Plateau groups, possessed power to cure certain illnesses, and were influential in the location, management, and economic conversion of some plant resources. It is suggested that reservation life dramatically altered the annual subsistence round, which consequently tended to de-emphasize traditional male roles, but had less effect on women's roles relative to subsistence activities.

FOOD AND FEELINGS

Catherine Sands  
Central Washington University



Petroglyph from the Archawat site (45CA219) on the Makah Indian Reservation.

Our language reflects food preferences--and that is peachy keen--but it also reflects our temperament--like when I get in a stew because of something. It's a funny thing about food--some of it sticks to our ribs, some of it is used as a sexual stimulant. We all know that real men don't eat quiche and that frozen food is packaged for the He-Man. We all trust Grandma's cookies and Uncle Ben's rice because they are somehow consanguineal relatives as well as gustatory friends. We are really funny animals and hopefully this has given you food for thought.

WHO WERE THE WEAVERS?  
THE SEARCH FOR WASCO/WISHXAM BASKETMAKERS

Mary D. Schlick, Kamiakin Research Institute

Twined "Sally" bags of the Wasco/Wishxam bands of the mid-Columbia region grace many collections of Native American basketry. Frequently, they are presented as sterile artifacts of a world long gone, the makers long forgotten. Using research in ethnographic collections and numerous personal interviews with Columbia River native people, the author pieces together a picture of the weavers in the context of their environment and their way of life. This study led to the discovery of the earliest documented Wasco bag and to the work of the last traditional Wasco weaver. These and many other examples will be illustrated and described.

"DONTOCHRONOLOGY:" DENTAL INCREMENTAL LINES AND ASSESSMENT OF  
ONTOGENETIC AGE AND SEASON OF DEATH IN *ODOCOILEUS*

Dave Schmitt, Oregon State University

The counting of dental cementum incremental lines (much like counting tree rings) is a technique for microscopic determination of age and season of death of mammalian taxa. This procedure, first observed in humans and later used in age estimations of sea mammals, is a more efficient and accurate technique for assessing individual age of archaeologically recovered fauna than epiphyseal fusion or dental eruption and wear. The techniques involved in the thin section procedure, problems in interpreting incremental line counts, and an example of the procedure employed on deer (*Odocoileus* sp.) teeth recovered from an archaeological site in the Applegate Valley, southern Oregon, are discussed.

ANTHROPOLOGICAL CONTRIBUTIONS TO A THEORY OF ANARCHY

Dennis C. Shaw, Lower Columbia College

In the arena of modern political thought, we are often limited to two political options. American-style democracy places a strong emphasis upon political equality while allowing for considerable economic inequality, and Marxist-style socialism places a strong emphasis upon economic equality with little or no emphasis upon personal liberty and political equality. A third option, libertarian socialism, has been granted very little credibility and, as a viable political option, has been considered too impractical and idealistic. This paper will argue that many of the objections concerning the feasibility of libertarian socialism comes not from a scientific understanding of the human condition, but from certain ideological premises about the characteristics of human nature. Moreover, it will be argued that many of the modern developments in the anthropological and social scientific literature offer evidence which contradicts these assumptions. The basic ideological premises to be challenged include: 1) that human motivations are primarily cynical, 2) that the human condition is totally malleable, and 3) that societies without the threat of force cannot function well.

OBSERVATIONAL LEARNING IN JUVENILE BABOONS

Jeffrey R. Snyder, Western Washington University

Prior experiments designed to demonstrate the presence of observational learning in baboons have been inconclusive, which may be due in part to the social environment in which the testing took place. The presence of a dominant animal may have inhibited the learning of subordinate members in a group. Therefore, this study reports the results of an experiment whereby the effect of the dominant animal's presence is reduced. Juvenile male baboons are believed to possess more flexible dominance hierarchies and thus two groups of juvenile males were compared in their ability to acquire a novel behavior, one group with prior exposure and one without. The results demonstrate a strong observational learning element in juvenile baboons. Phylogenetic implications are also discussed.

## AGING IN LESS COMPLEX SOCIETIES: A RE-EVALUATION

Robert F. Speyer

Most descriptions of the anthropological study of the elderly have centered around ideas that status of the aged declines as societies have become more modernized. Furthermore, such changes are due to the elderly as information carriers and sources of wisdom. However, such views have concentrated attention on status of the aged in horticultural and agricultural societies. Cultures at the hunter-gatherer level have largely been ignored. This paper emphasizes that hunter-gatherer peoples often do not provide high status and great care for their elderly. It also appears that environment and geographic mobility are more important in explaining such differential treatment.

DESCRIPTION OF AN INDIAN TRAIL AND SOME ASSOCIATED PREHISTORIC SITES  
IN EAST CENTRAL OREGON

Norm Steggell, Malheur National Forest

An "Indian trail" is marked on an 1884 Government Land Office map of an area of east central Oregon. The Malheur National Forest initiated a cultural resource inventory over a portion of the trail corridor. A light, culturally derived lithic debitage scatter was identified all along that portion surveyed. Seven distinct associated activity areas were also recorded. The east-west-trending trail may have been a route to transport obsidian from quarry workshops in the west and southwest to a large, heavily utilized valley at the headwaters of the Malheur River drainage to the east. Historic and ethnographic data and artifactual evidence indicate the area has been utilized for several thousand years up to historic times.

VIEWS FROM THE FLOOR: BOTANICAL REMAINS  
FROM AN EARLY CLASSIC HOUSE AT KAMINALJUYU, GUATEMALA

Nancy A. Stenholm, Chief Joseph Dam Project

This paper deals with botanical remains recovered from the house and grounds of an Early Classic house from the Mirador Plaza at Kaminaljuyu. Retrieval methods featuring deflocculations and flotation uncovered an array of cultigens and other charred plant remains used by Mayan families in the first millenium A.D. Maize, beans, squash, chili, and avocados were some of the typical edibles. One surprising find, quantities of seeds from the "toothache plant" (Spilanthes), may represent a Mayan medicinal plant.

## WHY SOCIOBIOLOGISTS ARE COY ABOUT COUSIN MARRIAGE

M.E. Stephens

A basic tenet of sociobiology is that organisms strive to transmit their own genes to the next generation. This is an advantage of inbreeding. However, inbreeding has costs. An analysis of the costs and benefits shows that regulations had to evolve to prevent inbreeding between persons related by a degree of 0.5 and 0.25. First cousin relationships equal 0.125. A cousin marriage balances the costs and advantages of inbreeding. Due to paternal uncertainty, one would predict that maternal parallel cousin marriage would be the most common form. It is the least common.

## FERTILITY AND MORTALITY IN THE MIXTEC ALTA REGION OF OAXACA, MEXICO

J.C. Stevenson, P.M. Everson, and M.H. Crawford  
Western Washington University, University of Washington,  
and University of Kansas

Migration from rural areas in Mexico to urban centers in Mexico, the United States, and abroad has been increasing in recent years, and is the result of a variety of social and economic factors. Certainly population pressures due to high fertility and lowered mortality play an important role in this shift. The objective here is to report on the post-World War II fertility and mortality experiences of three communities in the Mixtec Alta. Life expectancy and age-specific fertility rates are estimated for 1980 using two different models.

NATIVE MANAGEMENT PRACTICES: AN ANALYTICAL AND EMPIRICAL ESSAY  
IN THE MAINTENANCE OF AMAZON SUBSISTENCE RESOURCES

Anthony Stocks, Idaho State University

This paper analyzes the practices of the Cocamilla Indians of eastern Peru that tend to maintain or enhance fish and game populations. It is argued that no single theoretical approach in current anthropology can explain the data on resource management for this group. The Cocamilla have a three-tiered set of management practices that are rooted successively in 1) community level decision making, 2) maximization of individual fitnesses, and 3) cultural practices that effectively enhance resources but are not consciously so directed.



COLONIALISM, IDENTITY AMBIGUITY, AND LANGUAGE USE  
AMONG THE LOUISIANA FRANCOPHONES

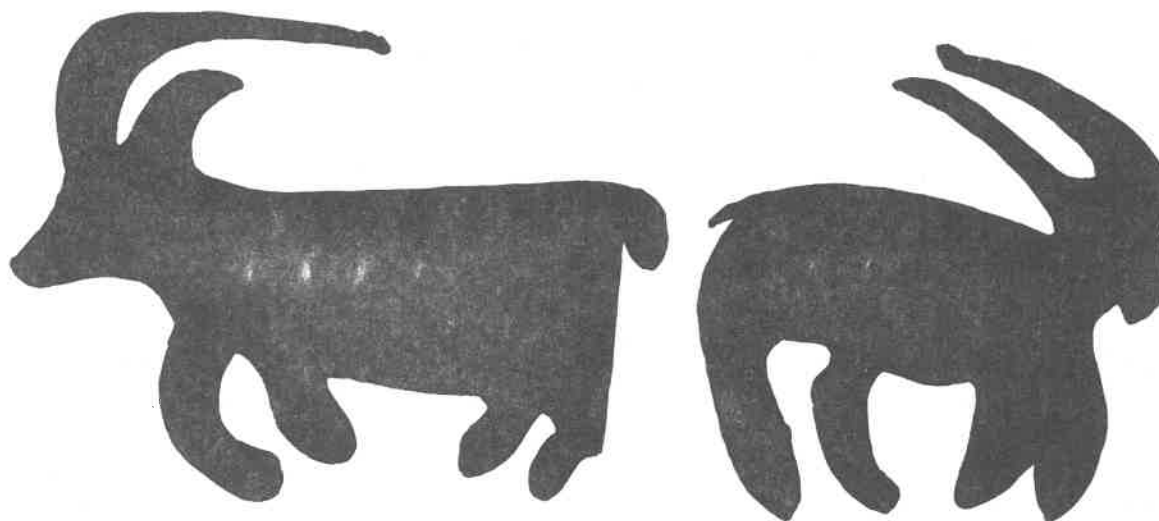
Dorice Tentchoff, Oregon State University

This paper will sketch the colonial processes that led to the formation of Cajun culture and society in southern Louisiana. It will suggest that the identity ambiguity and patterns of language use which characterized the Louisiana Francophones derive from the post-Civil War period of North American domination. The new regulations enforced by this outside power served to de-structure and fragment Cajun society at the same time that it created a new self-consciousness among them. A redefinition of themselves in this new context ensured an ultimately ambiguous but persistent identity.

ARCHAEOLOGICAL SURVEY AND EXCAVATION  
IN THE RIVER OF NO RETURN WILDERNESS AREA, IDAHO

Fred Thomas and Robin Johnston, University of Idaho

Archaeological excavations and surveying in a portion of the River of No Return Wilderness Area provide data for a settlement/subsistence model for adaptation in a montane environment. Excavations at 10VY31 provide information about houses and tools and about faunal and floral exploitation. Surveying in specified resource areas revealed a variety of site types. From this data, we hypothesize heavy year-round utilization of major stream canyons and limited utilization of specialized upland resources.



Mountain sheep from the Alberton Pictograph site (24LA1021).

## DECISION-MAKING AND STUDENT NURSES' CAREER PLANNING

Candice Corrigan Turner, Idaho State University-University of Kentucky

Informal interviews were conducted with baccalaureate nursing seniors. Data elicited included decision criteria, cultural factors, and the decision-making process used in making career choices. From this data, a predictive model was constructed and tested.

## TRADITIONAL HEALTH CARE: THE CASE OF THE FIDENCISTAS

Greg Uberuaga, Western Washington University

It has been shown that traditional healers, in their effective delivery of health care, incorporate culturally meaningful symbols. Curanderos of the spiritist movement in north Mexico will be shown to work within a system which reflects the dominate/subordinate relationships of the overall Mexican social structure. By demonstrating familiar status and role patterns within their system, curanderos provide a culturally meaningful basis for the delivery of traditional health care. The discussion will be in the context of the Fidencistas, followers of folk-saint El Nino Fidencio.

## NOTES FROM THE KHAYBER PASS

Zaher Wahab, Lewis and Clark College

This paper is based on the author's recent visit to the Afghan-Pakistani border area and will deal with the following: the military aspect of the Afghan war, profiles of and tensions among the insurgents, problems of the refugees, the war's impact on children, "uses" and abuses of the strife, cultural deformities created by the war, some ways and means of coping with dislocation, and likely prospects for the future.

BESIDES POLLY BEMIS: HISTORICAL AND ARTIFACTUAL  
EVIDENCE FOR CHINESE WOMEN IN THE WEST

Priscilla Wegars, University of Idaho

Although Chinese women began coming to the West over 135 years ago, the earliest arrivals are usually remembered only as prostitutes. Although most were, it was generally not by choice, and they gradually began to enter other occupations as they became open. What is known of the early history of women in Idaho is explored in somewhat more detail, and the meager archaeological and other artifactual evidence of their presence in the West is examined.

A REPORT OF PRELIMINARY ARCHAEOLOGICAL INVESTAGATIONS AT 45CA201,  
A MULTICOMPONENT SITE NEAR SAND POINT, OLYMPIC NATIONAL PARK, WASHINGTON

Gary Wessen, Wessen and Associates

Preliminary investigations at 45CA201 have demonstrated that it is a large site composed of both shell midden and non-shell midden cultural deposits representing approximately 600 years of deposition between ca. 2300-1700 B.P. The site is not associated with the modern beach and it contains more evidence of stone chipping than is characteristic of later sites in this area. The site is rich in faunal materials and its contents indicate that late prehistoric and historic maritime adaptations oriented toward off-shore resources (particularly fir seals) were well established by ca. 2000 B.P.

OLCOTT AND OLD CORDILLERAN:  
PERSPECTIVES ON THE EARLY PREHISTORY OF WESTERN WASHINGTON

Gary Wessen, Western Heritage, Inc.

Current ideas about the early prehistory of western Washington have been heavily influenced by Butler's Old Cordilleran culture and Kidd's Olcott complex, but they are flawed by numerous uncertainties. During the last 20 years, the Olcott site (45SN14) and its contents have assumed the character of a type site for an apparently early phase, but this is unwarranted on the basis of the data actually available. Presently, at least 35 sites are known which may contain materials similar to those described by Butler and Kidd. While dates are limited, these sites may reflect both early and mid-post-glacial occupations and they are probably related to similar assemblages from other portions of the Pacific Northwest.

THE NON-NATIVE TEACHER IN ALASKA AND THE NEED FOR ANTHROPOLOGICAL TRAINING:  
A CASE STUDY

Dawn Marie Whitman, Boise State University

This paper is based on personal experiences as a teacher in the Eskimo village of Chevak, Alaska. The major focus is on education with special emphasis on the conditions encountered by the non-native teacher. There is an examination of the position which the school and those associated with it occupies within the community. In addition, the argument is made for the need to incorporate an anthropological training and framework into the preparation of those who enter such a stituation.

## PREHISTORIC SHIPWRECKS ON THE OREGON COAST? ARCHAEOLOGICAL EVIDENCE

John Woodward, Mt. Hood Community College

Nineteenth-century Euro-American and Native American folklore described a prehistoric shipwreck(s) on the northern coast of Oregon. This paper discusses the substantial archaeological material (Asian ceramics, beeswax, iron, and bronze derived from a shipwreck) which was collected, modified, and utilized by the Nehalem Indians prior to A.D. 1700. The archaeological evidence supports the local folklore and established the wreck-derived materials as significant prehistoric chronological markers in northern Oregon coastal sites.