

Journal of Northwest Anthropology

Volume 51 Contents

Spring 2017 Number 1

- 1 Engendering the Past: The Status of Gender and Feminist Approaches to Archaeology in the Pacific Northwest and Future Directions
Tiffany J. Fulkerson
- 37 Chemical Sourcing of Obsidian Artifacts from the Grissom Site (45-KT-301) to Study Source Variability
Anne B. Parfitt and Patrick T. McCutcheon
- 73 Exploratory Analysis and Significance Testing of the Nez Perce Settlement Patterns Model
Lyle D. Nakonechny
- 92 Ancient Artifact or New Age Totem: Analysis of a Carved Sacrum from the Oregon Coast
Dennis G. Griffin
- 103 Changes in Middle Holocene Shellfish Harvesting Practices: Evidence from Labouchere Bay (49-PET-476), Southeast Alaska
Mark R. Williams

Fall 2017 Number 2

- 131 Editorial
Darby C. Stapp
- 137 The Kyzylsyr Middle Paleolithic (Proto-Dyuktai) Culture of Northern Asia (150,000–35,000 Years Ago)
137 Introduction *Richard Bland*
139 Translated Article *Yuri A. Mochanov and Svetlana A. Fedoseeva*
162 Commentary *Roy Carlson*
- 164 Entering the American Continent: The Chehalis River Hypothesis
Dale R. Croes and Vic J. Kucera
- 184 Treaties, Coast Salish Literacy, and Thomas G. Bishop: A Republication of *An Appeal to the Government to Fulfill Sacred Promises Made 61 Years Ago*
Robert E. Walls
- 217 Owyhee Canyonlands and the Shoshone-Paiute Tribes
Ted Howard
- 220 Remembering David L. Cole (1928–2017): A Transitional Figure in Oregon Archaeology
Rick Minor and John L. Fagan
- 230 Metric Analysis of Chipped Cobble Net Weights on the Lower Spokane River (Spokane Arm of Lake Roosevelt)
Christopher M. Casserino
- 239 *Journal of Northwest Anthropology* List of Reviewers 2016–2017
- 240 69th Annual Northwest Anthropological Conference Abstracts 24–26 March 2016
- 267 Erratum in *Chemical Sourcing of Obsidian Artifacts from the Grissom Site (45-KT-301) to Study Source Variability*

EDITORS

Darby C. Stapp
Richland, WA

Deward E. Walker, Jr.
University of Colorado

ASSOCIATE EDITORS

C. Melvin Aikens (University of Oregon), Haruo Aoki (University of California), Virginia Beavert (Yakama Nation), Don E. Dumond (University of Oregon), Don D. Fowler (University of Nevada), Rodney Frey (University of Idaho), Ronald Halfmoon (Lapwai), Tom F.S. McFeat (University of Toronto), Bruce Miller (University of British Columbia), Jay Miller (Lushootseed Research), Rudy Reimer (Simon Fraser University)

Julia G. Longenecker
Kara N. Powers
Heather Hansen
Alexandra Martin
Amanda Cervantes

Operations Manager
Editorial Assistant
Production Assistant
Production Assistant
Design

Composed by Northwest Anthropology LLC, Richland, WA; Printed by CreateSpace. Missing issue claim limit 18 months.

POLICY

The *Journal of Northwest Anthropology*, published semiannually by Northwest Anthropology LLC, in Richland, Washington, is a refereed journal and welcomes contributions of professional quality dealing with anthropological research in northwestern North America. Theoretical and interpretive studies and bibliographic works associated with the four fields of anthropology are preferred, although highly descriptive studies will be considered if they are theoretically significant. The primary criterion guiding selection of papers will be how much new research they can be expected to stimulate or facilitate.

SUBSCRIPTIONS

The subscription price is \$45.00 U.S. per annum for individuals and small firms, \$85.00 for institutional subscriptions, \$30.00 for students with proof of student status, and \$25.00 for all electronic subscriptions; payable in advance. Remittance should be made payable to Northwest Anthropology LLC. Subscriptions, manuscripts, change of address, and all other correspondence should be addressed to:

Darby C. Stapp
Journal of Northwest Anthropology
P.O. Box 1721
Richland, WA 99352-1721

telephone (509) 554-0441
e-mail dstapp@pocketinet.com
website www.northwestanthropology.com

MANUSCRIPTS

Manuscripts can be submitted in an electronic file in Microsoft Word sent via e-mail or on a CD to the Richland, WA, office. An abstract must accompany each manuscript. Footnotes and endnotes are discouraged. Questions of reference and style can be answered by referring to the style guide found on the website or to *Journal of Northwest Anthropology*, 47(1):109–118. Other problems of style can be normally solved through reference to *The Manual of Style*, University of Chicago Press. All illustrative materials (drawings, maps, diagrams, charts, and plates) will be designated “Figures” in a single, numbered series and will not exceed 6 x 9 inches. All tabular material will be part of a separately numbered series of “Tables.”

Editorial: JONA's Evolving Editorial Policy for Selecting Manuscripts

Darby C. Stapp

The release of *Journal of Northwest Anthropology* (JONA), Volume 51, Number 2, marks the end of eight years since Julia Longenecker and I accepted the administrative and editorial duties of JONA from Linda and Roderick Sprague, respectively. Working under the direction of founder and Co-Editor Deward E. Walker, Jr., a number of developments in the administration and operation of the journal have occurred during the intervening years; these were identified in *Memoir 13* (Walker, Stapp, and Cervantes 2017). In this editorial I want to review changes that have affected our publishing approach, discuss our current policy for reviewing and selecting manuscripts, describe the types of manuscripts that have been accepted for publication since 2009, and discuss the types of manuscripts we encourage authors to submit in the future.

JONA's editorial policy remains essentially the same as it has since the inception of the journal in 1967:

The *Journal of Northwest Anthropology*, published semiannually by Northwest Anthropology LLC in Richland, Washington, is a refereed journal and welcomes contributions of professional quality dealing with anthropological research in northwestern North America. Theoretical and interpretive studies and bibliographic works associated with the four fields of anthropology are preferred, although highly descriptive studies will be considered if they are theoretically significant. The primary criterion guiding selection of papers will be how much new research they can be expected to stimulate or facilitate.

Our transition to digital publishing over the past eight years has led to several changes in the way the journal is produced. Concerning illustrations, while articles in printed issues will remain black and white due to the high cost of printing with color, digital versions now can make use of color. Thus, if a color image is available, readers can access it in the digital version found on our website (<http://northwestanthropology.com/volumes.php>); another benefit of digital illustrations is the ability to enlarge a photograph to see additional detail. Digital publishing has also allowed us to modify the way we publish the abstracts from the Northwest Anthropological Conference. Prior to Volume 47, all abstracts were included in the printed issues, which committed as many as 50 pages to abstracts (about 40% of an issue). We now print the abstracts for paper sessions and workshops, but only list the titles and authors for each session and poster session; abstracts for contributed papers and posters are provided in the digital copy of the journal on the Northwest Anthropology website. We can also use this method to provide supplemental information for an article; for example, if

an author would like to provide lengthy data tables to support a conclusion, we can provide them in the digital version on the website and explain in the printed version where they can be found.

Our transition to CreateSpace for printing the journal has significantly reduced our printing and distribution costs. In addition to a 75% reduction in the cost of printing an individual issue, we no longer have to purchase extra copies in case extras are needed (e.g., when libraries claim they did not receive a copy, or we get new subscribers). With on-demand printing, we can order exactly what we need for the initial distribution, and if more are needed later, we can simply order more. We can also have CreateSpace ship directly to a subscriber, rather than ship to us and we reship; this is particularly helpful with Canadian and European subscribers as going to the Post Office to mail to other countries is a time consuming and frustrating process. CreateSpace has also made it possible to put a glossy cover on JONA, enhancing our look. Finally, CreateSpace has helped with distribution, as anyone around the world can now find the journal with internet searches and order it directly from Amazon.

JONA content is primarily driven by the manuscripts submitted to us by authors. About half of the manuscripts come from individuals who have contacted me and discussed their idea for a publication. Many of these discussions occur at the annual Northwest Anthropological Conference, at the various tribal and professional anthropological and archaeological venues we attend, or via email. The other half unexpectedly appear in the JONA mail box; some have been solicited by JONA Associate Editors, while others are submitted independently. With the steady stream of manuscript submissions, we have been able to maintain a one-issue backlog; that is, as one issue goes to press, the next issue is more or less full.

All research-based manuscripts continue to be subjected to a single-blind peer review. Following initial review by the editors to make sure the manuscript meets our geographic and research-focused criteria, manuscripts are sent to at least two individuals knowledgeable about the manuscript topic to conduct a review. A JONA Peer review form is provided, though the reviewer is given the freedom to conduct the review as he or she would like. Our primary guidance to reviewers is: If you feel the manuscript should be published, how might the author improve the manuscript? We strive to make the review experience a positive one, as many of our authors are new to publishing and could be easily discouraged. The number of people in the Northwest writing for anthropology journal is not large; we need to nurture the pool of those interested in publishing as professional publishing is an integral part of the anthropological research process.

Reviews are then returned to the authors. Assuming the recommendation is to publish, authors are asked to consider the peer review comments and resubmit the manuscript. Once received, manuscripts are reviewed by the Editors to see how comments were addressed, proofs are prepared, and proofs returned to authors for approval. While our desire is to publish a variety of articles in each issue, articles are generally published as they are accepted.

A review of the manuscripts published during the last nine years provides insight to the interests of current authors. Tallies of different types of material published are provided in Tables 1 and 2. Below are our current thoughts on various types of materials we would like to see submitted.

Table 1. Types of Material Published in JONA from 2009 (Volume 43) to 2017 (Volume 51)

Article Type/Sub-Type	Number	Percent	Pages	Percent
Research	81	68.64%	1576	70.08%
<i>Archaeological</i>	44	37.29%	885	39.35%
<i>Cultural</i>	24	20.34%	461	20.50%
<i>Physical</i>	2	1.69%	51	2.27%
<i>Linguistic</i>	2	1.69%	38	1.69%
<i>General</i>	9	7.63%	141	6.27%
Historical Material	12	10.17%	264	11.74%
NWAC	17	14.41%	359	15.96%
<i>Abstracts</i>	8	6.78%	246	10.94%
<i>Student Paper Winners</i>	9	7.63%	113	5.02%
Remembrance/Obituary	2	1.69%	12	0.53%
Journal Business	6	5.08%	38	1.69%
TOTAL	118	100.00%	2249	100.00%

Table 2. Types of Research Articles Published in JONA from 2009 to 2017

Time Period	Number	Percent	Pages	Percent
Pre-Contact	75	92.59%	1400	88.83%
<i>Overviews</i>	30	37.04%	700	44.42%
<i>Site Investigation</i>	10	12.35%	284	18.02%
<i>Artifact Analysis</i>	10	12.35%	223	14.15%
<i>Artifact Analysis</i>	8	9.88%	169	10.72%
<i>Methods</i>	2	2.47%	24	1.52%
Ethno-historic	9	11.11%	172	10.91%
<i>Ecological</i>	3	3.70%	84	5.33%
<i>Religion</i>	2	2.47%	38	2.41%
<i>Lifeways</i>	4	4.94%	50	3.17%
Historic	12	14.81%	203	12.88%
<i>Overviews</i>	4	4.94%	98	6.22%
<i>Site Investigation</i>	5	6.17%	72	4.57%
<i>Artifact Analysis</i>	2	2.47%	27	1.71%
<i>Methods</i>	1	1.23%	6	0.38%
Contemporary	24	29.63%	325	20.62%
<i>Tribal</i>	7	8.64%	81	5.14%
<i>Ecological</i>	4	4.94%	64	4.06%
<i>TCP</i>	3	3.70%	46	2.92%
<i>Non-Tribal</i>	10	12.35%	134	8.50%
Anthropological History	6	7.41%	176	11.17%
TOTAL	81	100.00%	1576	100.00%

Thematic Collections

We encourage sets of manuscripts that follow a spatial, temporal, or theoretical theme. Ideally these will consist of three or four articles and total about 50 journal pages (25,000 words). People also often ask about the possibility of publishing papers from sessions presented at the Northwest Anthropological Conference or some other venue; we are open to these types of collections. Interested parties should contact me or Deward to discuss.

Syntheses and Overviews

Syntheses and overviews are highly sought after for JONA because we believe they can significantly facilitate new research. We have received a number of syntheses and overviews in recent years, especially in the following areas:

- archaeological theory (e.g., gender studies, intra-regional violence)
- settlement patterns (e.g., The Dalles, Hells Canyon)
- archaeological features (e.g., acorn pits)
- artifact styles (e.g., Cascade Points, Western Stemmed Points, harpoon points)
- case studies (e.g., Port Angeles, TCP nominations)

Northwest Anthropological and Archaeological History

Manuscripts concerning various aspects of the history of anthropology and archaeology in the Pacific Northwest continue to be submitted. Many of these are historical documents of archaeological and anthropological interest. Examples are materials that were prepared but never published, such as Vern Ray's ethnography of the Lakes (Volume 50, No. 2), materials prepared but never intended to be published (e.g., Dick Daugherty's field notes from the Hoh Tribe (Volume 44, No. 2), published material in other languages (e.g., the various articles translated by Richard Bland). These documents are generally accompanied by newly prepared material that provides context, and further enlightens the reader about the significance of the material.

Related to Northwest anthropological and archaeological history is an increasing interest in institutions such as anthropology departments and government agencies and associated individuals. Much of that history has gone unrecorded, and as participants and observers pass, much of it will be lost forever. For this reason, efforts are underway by various individuals to capture some of this history. JONA will assist in these efforts by agreeing to publish institutional histories, such as the reflections by Simon Ottenberg on the University of Washington Anthropology Department (Volume 49, Number 1).

Similarly, we are reaching a point where deaths and retirements of major figures are leading to a rapid loss of Northwest institutional memory. Several colleagues have contacted me recently with suggestions on ways JONA can help combat this loss of information by recognizing individuals important to Northwest anthropology who have recently passed away. Although JONA has never published obituaries—with the exception of Roderick Sprague's in Volume 44—we believe it is time to modify this policy, and begin by presenting a Remembrance of David Cole (Oregon) in this issue. Remembrances submitted for publication should focus primarily on the contributions an individual made to Northwest anthropology.

We are also working with others to collect information about anthropologists and archaeologists who worked in the Northwest, who may not be household names, but contributed in some way. One goal is to develop academic genealogies for the Northwest. Also of interest are individuals who may have started or spent part of their career in the Northwest, but left for other regions, or perhaps passed early. To facilitate this effort, we are beginning a registry of early anthropologists and archaeologists with ties to the Northwest. We will maintain this list on the NWA website. We are also open to publishing snippets about individuals who made contributions that have remained unrecognized or underappreciated by the current generations. Individuals are encouraged to send us the names of people they are familiar with, along with important projects, interests, anecdotes, etc.

Book Reviews

JONA does not publish reviews of recently published books, at least not in the traditional sense. In volume 48, we did publish a set of reviews all focused on John Ross's *Spokane Indians*. This monumental work was the culmination of John's life spent with Spokane tribal members. He was a good friend of JONA, and we were please to acknowledge his major accomplishment with a multi-author, multi-disciplinary set of commentaries.

While we are not interested in publishing traditional book reviews per sé, we are open to multi-author, multi-disciplinary commentaries on recently published work important to Northwest anthropology. We will also entertain book review essays similar to those published in the *American Anthropologist*, which use new publications to stimulate discussion on important theoretical or methodological concepts.

Addressing the Non-Professional, Non-Academic Anthropology Audiences

One of the journal's goals has always been to support the interests of tribal communities. This includes both providing space for tribal voices, as well as making JONA articles accessible to native readers. We've done a better job on the former than the latter. Larry Campbell (Swinomish), in his Foreword to *Memoir 13*, stated, "I would like to see one article per year written in layman's terms in order to attract the nonarchaeological [nonanthropological] community. It doesn't matter who writes the article, but a solicited article by a Tribal staff member would be impactful." We intend to meet this request, and look forward to the help of those in the JONA family to help make that happen. Larry also recommended we produce a dictionary of Northwest archaeological and anthropological terms, pertaining to both the east and west sides, Native and non-Native, and generational. This effort is underway, and again, we look forward to assistance from our colleagues.

One effort we recently made to address the goal of non-professional, non-academic audience concerned basketry-related material previously published in NARN and JONA. Julie and I recently attend the 23rd Northwest Basketweavers Gathering to inform attenders about the soon-to-be published *Memoir 15, Re-Awakening Ancient Salish Sea Basketry: Fifty Years of Basketry Studies in Culture and Science*, by Dale Croes and Ed Carriere (Suquamish). Prior to attending Alexandra Martin (NWA) used the

Memoir 13 JONA/NARN DVD containing the 50 volumes of journal material (and *Memoirs 1 to 7*) to identify any basketry-related material. We then went through the hundreds of occurrences in over 60 issues and extracted the most meaningful material to include in an electronic report to distribute to the Basketweaver's attendees (Stapp and Martin 2017). Included are 50 abstracts from Northwest Anthropological Conferences, several dozen native words from three native languages, several dozen snippets from nine articles, and two full-length articles. The publication can be downloaded from on our website (<http://northwestanthropology.com/items.php>).

In closing, while this editorial has identified the types of articles that we encourage researchers submit for publication, let me also be clear that we are open to non-traditional ways of sharing anthropological information, knowledge, and wisdom. If you have something that you believe will help stimulate or facilitate Northwest anthropological research, feel free to call me, write me, or find me at the Northwest Anthropological Conference and we can discuss your idea.

REFERENCES CITED

- Stapp, Darby C., and Alexandra L. C. Martin
2017 Basketry-Related Content from the Pages of *Northwest Anthropological Research Notes* (1967-2001) and the *Journal of Northwest Anthropology*. *Journal of Northwest Anthropology, Generationally Linked Archaeology Series*, No. 1.
- Walker, Deward E. Jr., Darby C. Stapp, and Amanda S. Cervantes
2017 50 Years of Northwest Anthropology: A Content Analysis and Guide to the *Journal of Northwest Anthropology*. *Journal of Northwest Anthropology, Memoir 13*.

An Introduction to Mochanov and Fedoseeva's Kyzylsyр Middle Paleolithic Culture of Northern Asia

Richard Bland

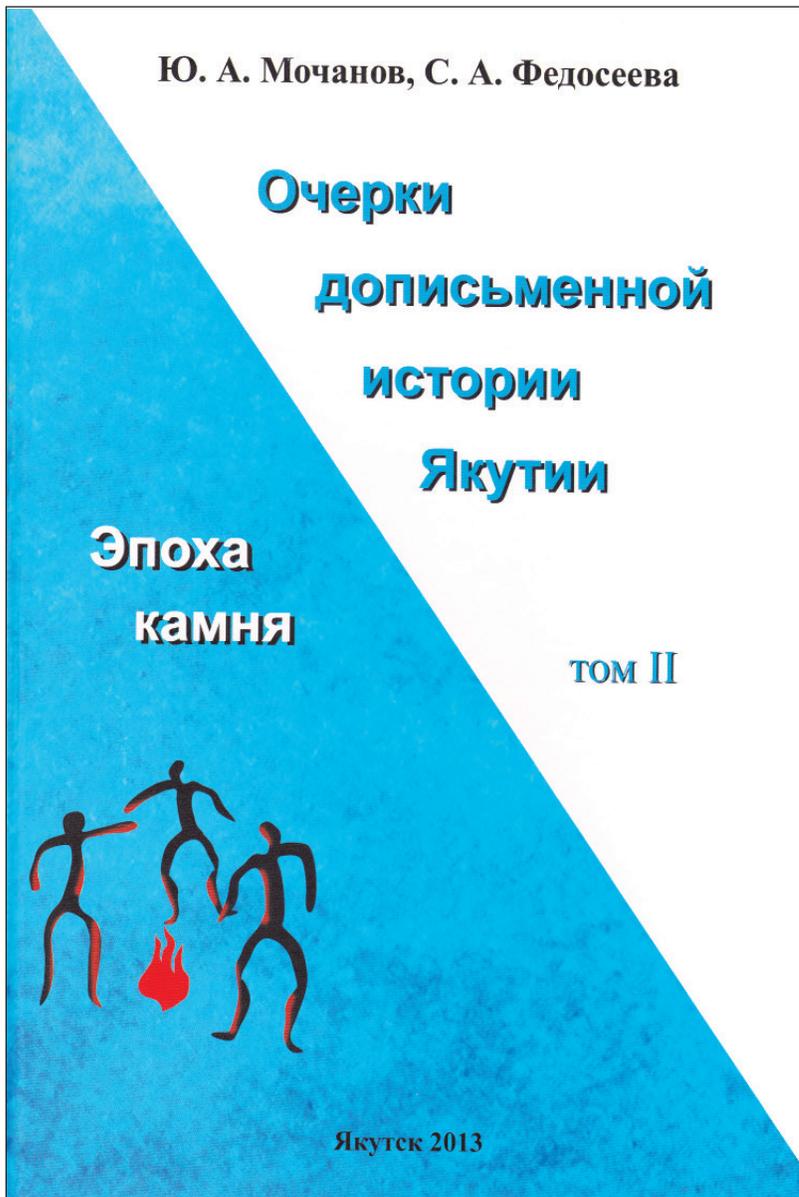
Abstract *This essay, translated from Russian to English by Richard Bland, deals with discoveries of tools in the Russian northeast, which the authors describe as dating to between 150,000 and 35,000 years ago. The authors provide the reader with a brief survey of the ideas about settlement of the New World, then about archaeological discoveries in Northeast Asia. They then report on excavations at sites, particularly Kyzylsyр, along the Vilyui River where the early tools were found. Finally, the placement of the finds within the archaeological confines of Northeast Asia and their importance to the populating of the New World are discussed. To provide context, a commentary by Roy Carlson follows the translation.*

Introduction

The essay translated below was written by Dr. Yuri Mochanov and Dr. Svetlana Fedoseeva, two Russian archaeologists well known to students of Asian prehistory. The essay comes from a recent two-volume work entitled *Essays on the Preliterate History of Yakutia* by Mochanov and Fedoseeva (2013), in which they discuss their years of archaeological work in Siberia. The essay focuses on discoveries in the Russian northeast of tools dating to between 150,000 and 35,000 years ago. The authors report on excavations at sites, particularly at Kyzylsyр, where the early tools were found along the Vilyui River. The Kyzylsyр discoveries are then discussed in terms of their importance to ideas concerning the populating of the New World.

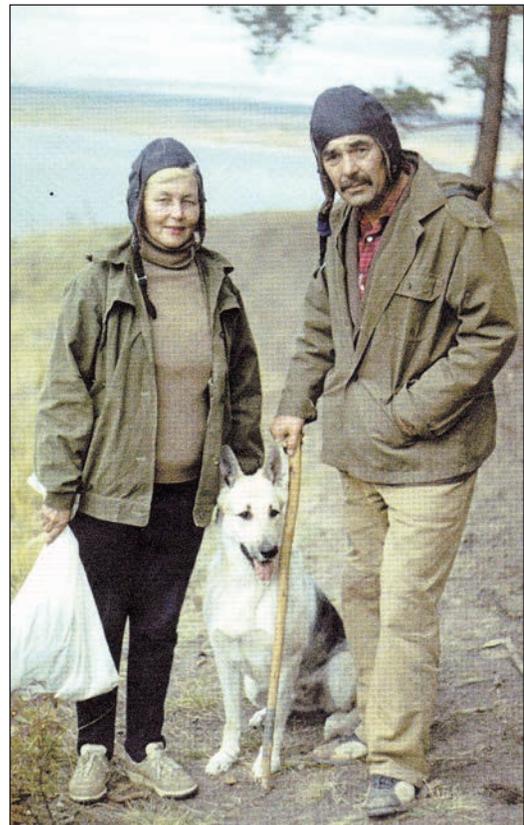
My association with the authors dates to the early 1990s, when Don Dumond suggested that I translate Yuri Mochanov's "Most Ancient Paleolithic of Diring," which I did (Mochanov 1993). I was able to meet Mochanov at the Northwest Anthropology Conference held at Simon Fraser University in Spring 1992 where he was a speaker. At the conference he gave me permission to publish the Diring article, and since then has sent me various things to translate. Two relevant translations are Mochanov and Fedoseeva (2008) and Mochanov (2009).

As discussed below by Roy Carlson, Yuri Mochanov and his late wife Svetlana Fedoseeva have made major contributions to Russian prehistory. It is also true that many of their ideas and conclusions have fostered considerable debate (Turner 2008). Such is sure to be the case with the dates assigned to the Kyzylsyр (proto-Dyuktai) culture, which, according to the authors, dates to 150,000 to 35,000 years ago.



Cover of Mochanov and Fedoseeva's 2013 *Ocherki Dopis'mennoi Istorii Yakutii: Epokha Kamnya* [Essays on the Preliterate History of Yakutia: The Stone Age, Volume II], from which the original, untranslated essay is taken.

Photograph of Svetlana A. Fedoseeva and Yuri A. Mochanov (date unknown).



The Kyzylsyr Middle Paleolithic (Proto-Dyuktai) Culture of Northern Asia (150,000–35,000 Years Ago)¹

Yuri A. Mochanov and Svetlana A. Fedoseeva

Many secrets are preserved by the ancient land of Siberia. One of them is the secret of the appearance of people in America.

About 500 years ago the people of Europe, Asia, and Africa did not at all imagine that on the earthly sphere somewhere far beyond the oceans lay a huge inhabited land stretching from the north to south poles. No one knew that the people who lived there built cities, erected majestic pyramids, constructed canals, and carved gigantic stone columns inspiring hymns to the Sun.

But then in 1492 the three caravels of Christopher Columbus crossed the Atlantic Ocean and arrived at Cuba. Five years later the English sailing ships of John Cabot reached the shores of Newfoundland. Then the voyages of Amerigo Vespucci and Magellan followed. Comparison of the maps of the different mariners permitted realizing the tremendous, for the 16th century, truth—the discovery of a new, hitherto unknown continent. To this continent they gave the name America. Since that time Europe, Asia, and Africa have been called the Old World, and America, the New World.

The discovery of America naturally raised the question: How did people arrive on the American continent? Did they live there from time immemorial or did they arrive from some region of the Old World?

“So began,” as the former president of the Society for American Archaeology Robert Wauchop (1966) noted, “a great discussion about the origin of the American Indians and their culture, which has continued for more than four centuries. With the flow of time not only scientists were drawn into it but also public figures and theologians, and finally, in some countries this discussion acquired national importance.”

Participants of the multi-century discussion were separated into two large camps: some asserted that the Indians evolved from American apes, others—that man arrived in America from the Old World.

With this, both the former and the latter for a long time based their assumptions, as a rule, not on strictly verified facts but only on some guesswork.

It is sufficient to say that as the ancestors of the Indians were believed to be ancient Egyptians, and ancient Romans, and Scythians, and Tatars, and the missing tribes of Israel, and residents of legendary Atlantis.

Attempting to prove that the Indians evolved from New World (broad-nosed) monkeys, some researchers, such as the Argentinian paleontologist Amegino, now accepted the bones of large predators of the cat family, with an age of 15 million years, now the deformed skulls of modern people that were occasionally found. Not until the 20th century did scientific study of the problem of the origin of the Indians begin.

¹ Translated from *Ocherki dopis'mennoi istorii Yakutii* [Essays on the Preliterate History of Yakutia], vol. II, pp. 7–68. Yakutsk, 2013. Some illustrations and discussion removed due to spatial limitations.

Large archaeological and paleontological expeditions were organized, determination of the physical type of the Indians was conducted, and systematic data on the languages of the peoples of America were collected. And, finally, individual aspects of the problem of the origin of the Indians began more or less to be clarified.

The long search for the most ancient hominid in America, undertaken by paleontologists, proved unsuccessful. This was not surprising: no man-like apes, distant biological ur-ur-ur-ancestors of *Homo sapiens*, lived in the New World.

At present it is considered axiomatic that the initial stages of anthropogenesis did not occur in the Americas, but that it was settled by man in the upper Pleistocene from Asia through regions adjacent to Bering Strait. This axiom is based on recognition of the closest similarity of the physical anthropological type of the Native population of the New World to Mongoloids and the existence in individual stages of the Quaternary period of a land bridge joining Chukotka with Alaska.

The most ancient archaeological sites of America were left by hunters of mammoths, horses, ancient bison, mastodons, and other presently extinct animals. As the most characteristic tools of the hunters, who came to be called Paleoindians, were stone points of spears and knives worked on all sides by the removal of small spalls. Some of them, for convenience of attachment to a handle, had a longitudinal flute in the base.

Almost all specialists maintain the opinion that man must have penetrated from Alaska to the south earlier than 25,000–24,000 years ago. They suggest that in even earlier times man must have settled in Alaska.

No less complex than the establishment of the time and number of initial migrations of man into the New World is clarification of the sources of the ancient American cultures. This is explained by the fragmentary nature of the data about American cultures that precede the ancient Llano complex and by the fact that until recently not a single Paleolithic culture was known in the Old World that, based on time and appearance, could be considered the starting point for the development of the ancient Llano and the American cultures preceding it. "This situation," noted the well-known American archaeologist Chester Chard (1969), "frequently leads to unnecessary theorizing."

For actual scientific resolution of the problem of the settlement of the New World a great deal of factual material on the Paleolithic of Alaska and Northeast Asia is in first order necessary.

Chester Chard, who from 1950 to 1970 occupied himself intensively with the problem of the connection of the ancient cultures of Northeast Asia and America, believed that in the Paleolithic sites of Northern Asia there are no "predecessors" of bifacial points of the projectile tools of the New World. He noted that "the closest finds of similar prototypes" were made in "pre-Neolithic layers of archaeological sites of the European part of the USSR" (Chard 1959:48). Chard believed that the presence of a large number of bifacial points in Neolithic sites of Siberia was possibly explained by influence of American cultures on Asian. Chard (1969) also noted that the Pleistocene archaeology of this region was in its "infancy."

Not until the 1960s, through intensive fieldwork, did the situation gradually began to change, both in Alaska—the identification of the Akmak and Denali complexes (Anderson 1970; Hadleigh-West 1967), and in Northeast Asia—the identification of the Dyuktai culture (Mochanov 1969a; 1969b).

Of critical significance for the identification of the new Paleolithic culture of Northern Asia—the Dyuktai—was the discovery in 1967 of the Paleolithic site at Dyuktai Cave on the Aldan River. About 10,000 siliceous stone worked by man were found in the Pleistocene deposits of the cave under clear stratigraphic conditions together with the bones of mammoth, bison, and muskox. Among the most important were bifacially worked subtriangular and leaf-shaped points of spears and darts, as well as double-bladed and backed knives (Mochanov 2007: Plates 30–68). With this, the latter are the same leading (diagnostic) types of stone inventory of the Dyuktai culture, as are the various types of bifacial points of spears and darts.

Of course, isolation of a special Dyuktai Paleolithic culture was based not just on the materials from Dyuktai Cave alone but also on materials from other Paleolithic sites discovered on the Aldan in 1968. In subsequent years, Paleolithic sites—the materials of which were similar in some degree with materials from the Aldan sites of the Dyuktai culture—were also found on the Lena, Vilyui, Olekma, Maya, Olenek, Indigirka, Kolyma, and in northwestern Priokhot'e. However, of greatest significance for isolation of the Dyuktai culture and its study were the Paleolithic sites on the Aldan. This can be explained by the fact that many of them lay in clear stratigraphic conditions in alluvial deposits of diachronic river terraces, for the different levels of which numerous radiocarbon dates were obtained and faunal and floral complexes identified.

In the article “The Upper Paleolithic Dyuktai Culture and Some Aspects of Its Genesis,” comparing the Dyuktai sites with the earliest sites of North America, was noted (Mochanov 1969a:239):

For clarification of the genesis of the Dyuktai culture two circumstances are exceptionally important. First, the Dyuktai complex is presently impossible to directly derive from any Upper Paleolithic culture of Siberia. Second, the Dyuktai complex has many analogies in the Middle Paleolithic sites of Central Asia, in particular, at the Dintsun site in Dongbei (Movius 1956) and at the sites of Sary-Arka in Eastern Kazakhstan (Medoev 1964). Characteristics for them are the Levallois technique of flaking stone and a good series of hand axes of Acheulean appearance. The upper boundary of these Middle Paleolithic sites, based on their stratigraphic position, can now be determined as approximately to 35,000 to 40,000 years. From this, in our view, follows the conclusion that on the Aldan are recorded the remains of the middle and concluding stages of the Dyuktai culture. The remains of the early stage, transitional to the Middle Paleolithic, are still to be discovered. They will evidently be found both in Southern Siberia and in Yakutia. This certainty is based on the fact that the remains of the Dyuktai culture presently known are closely similar to artifacts of Paleoindian cultures existing in southern North America.

Finds of the Dyuktai culture and Paleoindian cultures are assigned to one cultural tradition, but at present they cannot be considered derived from one another. Their similarity most probably attests to their origin from a single cultural substrate. It is quite probable that this substrate is represented by an early stage of the Dyuktai culture

that has presently not been found. The discovery and study of sites of this stage will have the most critical significance for resolving the problem of the initial stages of settlement of America from Northeast Asia.

In 2000 S. A. Fedoseeva discovered the Mungkharyma I site (Figures 1–8) on the lower reaches of the Vilyui River, based on the materials from which a proto-Dyuktai Middle Paleolithic culture was distinguished (Plates 1–38). The main distinguishing feature of this culture is the bifacially worked tools (bifaces): quartzite axes and spear points, knives, and skreblos (Mochanov 2007b: Plates 1–28). With this, the backed knives are of the most critical significance for comparison with the Dyuktai culture. Based on the perfection of their forms and technique of modification the artifacts from the Kyzylsyr culture are in no way inferior to type specimens of the various cultures of the “Mousterian bifacial” of Europe.

This culture was named Kyzylsyr based on the Kyzyl-Syr VIII site discovered by S. A. Fedoseeva in 1980 in southern Yakutia on the Peledui River, a left tributary of the Lena. There, on the shoreline under the cutbank of a 30-meter terrace, she discovered various, primarily quartzite, stone artifacts, and among them two bifaces (Mochanov and Fedoseeva et al. 1991: Plate 139). The small number of finds and the uncertainty of their geological-geomorphological position did not permit precisely determining their cultural-chronological association at that time. However, we supposed that they should be assigned to the very beginning of the bifacial late Paleolithic or to the Middle Paleolithic. After 20 years the Kyzylsyr materials find the greatest similarity in materials from the Mungkharyma I site.

In 1967 at Dyuktai Cave on the Aldan a Paleolithic site was discovered, based on the materials of which the Dyuktai Paleolithic Culture was distinguished. Then, with the introduction of new materials, also the Dyuktai Bifacial Tradition of the Paleolithic of Northern Asia was also discovered (Mochanov, 2007). Distinguishing this culture and this tradition totally changed the idea of the Paleolithic of Northern Asia. It was proven that the Paleolithic of Northern Asia did not enter into any special “Siberian-Chinese sphere” of the late Paleolithic, as S. N. Zamyatnin (1951:121) believed, or into the “East Asian-Siberian sphere,” as A. P. Okladnikov (1966:222) believed. The biface sites of the Dyuktai late Paleolithic culture were substantially closer by their technical-typological indices to biface sites of the late Paleolithic of Europe than to the uniface sites of the late Paleolithic of the Yenisei (Mochanov 1977).

In the article *The Upper Paleolithic Dyuktai Culture and Some Aspects of Its Origin*, comparing Dyuktai sites with the earliest sites of North America, it was noted (Mochanov 1969a:239):

Exceptionally important for clarification of the origin of the Dyuktai culture are two circumstances. First: It is impossible at present to directly derive the Dyuktai complex from any single Upper Paleolithic culture of Siberia. Second: The Dyuktai complex has many analogies in the middle Paleolithic sites of Central Asia, in particular, at the Dintsun site in Tungpei (Movius 1956) and at the Sary-Arka sites in eastern Kazakhstan (Medoev 1964). Characteristic for them are the Levallois technique of flaking stone and good series of hand axes of Acheulean appearance. The upper

boundary of these middle Paleolithic sites, based on their stratigraphic position, can now be determined at approximately 35,000-40,000 years.

From here, in our view, it can be concluded that on the Aldan the remains of the middle and final stages of the Dyuktai culture have been recorded. The remains of the early stage, transitional to the middle Paleolithic, is still to be discovered. They evidently will be encountered both in Southern Siberia and in Yakutia. This certainty is based on the fact that the presently known remains of the Dyuktai culture have a very close similarity to artifacts of the Paleo-Indian cultures of the Sandia, Clovis, and Lerma types, which existed in southern North America.

Finds of the Dyuktai culture and Paleo-Indian cultures are assigned to one cultural tradition, but at present they cannot be considered as originating from one another. Their similarity most probably attests that they originate from a single cultural substratum. It is quite probable that this substratum is represented by an early stage of the Dyuktai culture still not found. The discovery and study of sites of this stage will have the most important significance for solving problems of the beginning stages of settlement of America from Northeast Asia.

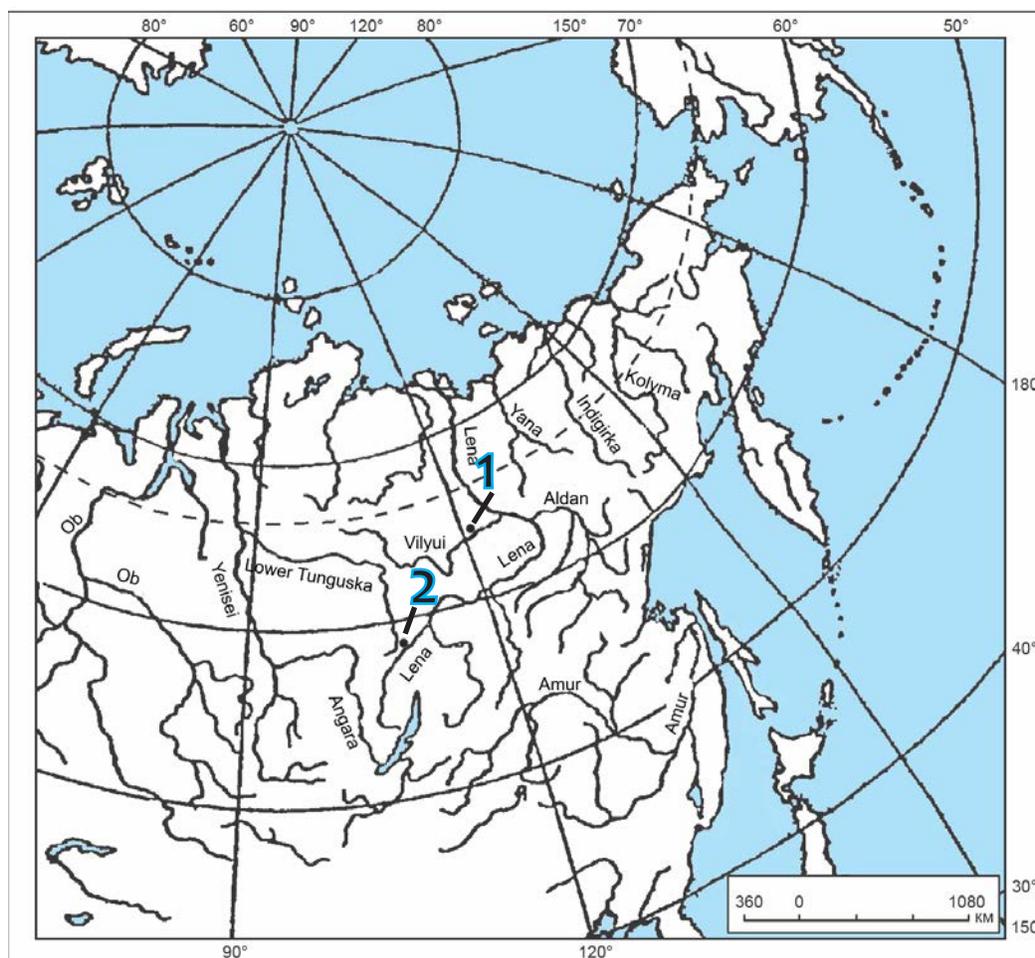


Figure 1. Survey map of Northeast Asia. 1- Mungkharyma I and II sites, 2- Kyzyl-Syr I–VIII sites

In 2000 S. A. Fedoseeva discovered on the lower reaches of the Vilyui River the Mungkharyma I site (Figures 1–4), based on the materials of which the proto-Dyuktai middle Paleolithic culture was distinguished (Plates 1–14). The main distinguishing feature of this culture is bifacially worked tools (bifaces): quartzite axes, points, knives, and skreblos. Based on the perfection of their forms and the technic of work these artifacts do not yield in any way to standard samples of various cultures of the *Mousterian bifacial* of Europe.

The Mungkharyma I site is located on the left bank of the Vilyui River 225 km from its mouth (64° north latitude, 123° east longitude). The first finds were made by S. A. Fedoseeva in 2000 on the river shore under the outer scarp of the basal terrace and in its denuded face. At the brow, this terrace has a height of 13.5–15 m. Toward the rear scarp the terrace rises smoothly and at a distance of 60–65 m from the outer scarp it is 20–21 m high.



Figure 2. Air photo (1:25,000) of the area in the region of the Mungkharyma I(1) and Mungkharyma II (2) sites.

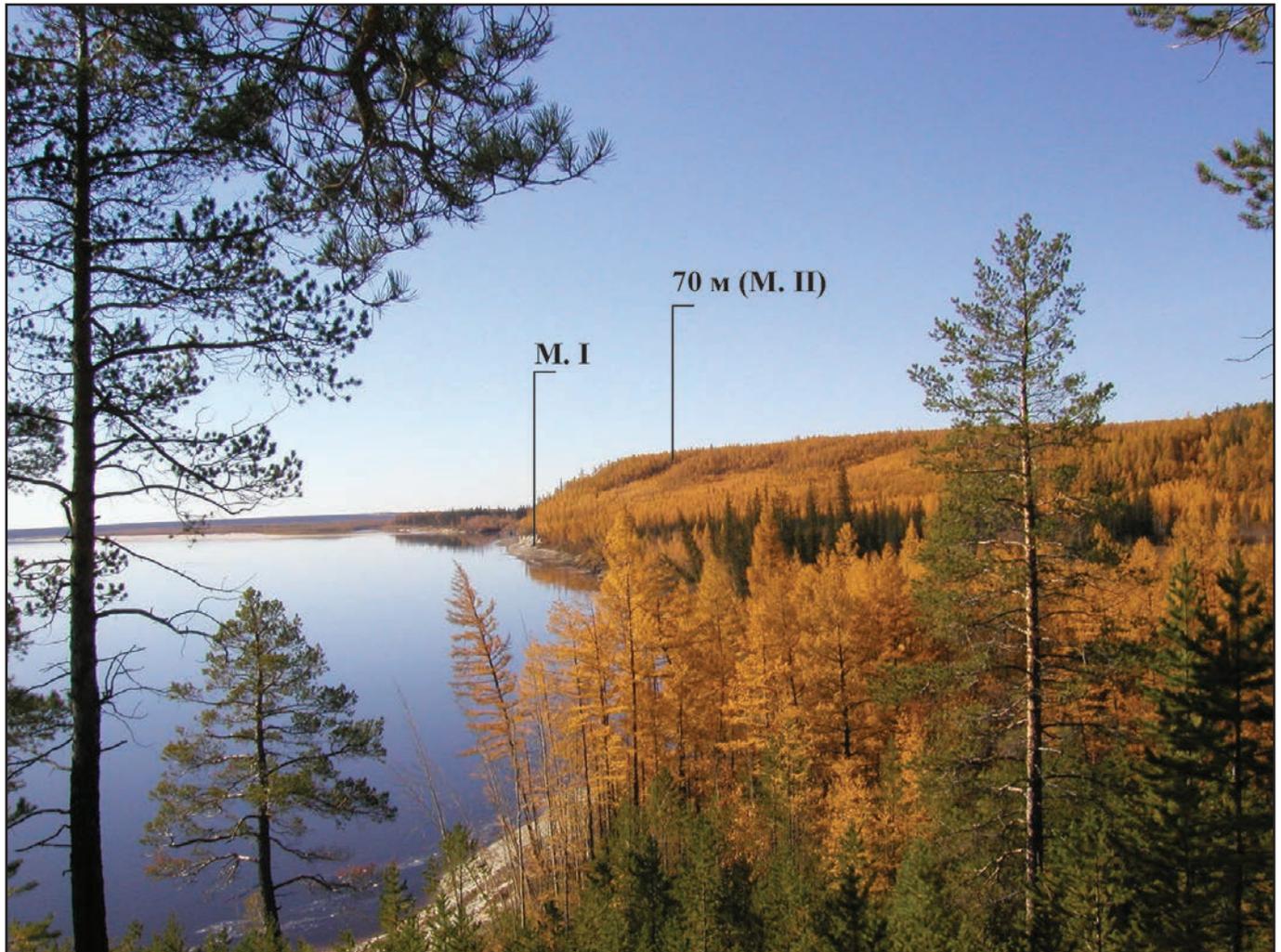


Figure 3. A view of the left bank of the Mungkharyma River at the Mungkharyma I site and the 70 meter terrace of the Vilyui River bordering it at the Mungkharyma II site.

This terrace is sunken [?] or connected [?] to the 70-meter terrace of the Vilyui River. Its rear scarp does not stand out clearly in relief, since it is covered with a slide-slopewash apron running along the slope of the 70-meter terrace. The present surface of this terrace has a rumpled appearance. Such surfaces emerge, based on data from permafrost studies (Uoshborn 1988; General Permafrost Studies, 1974), on shallow ($>3^\circ$) slopes with traces of frost-crack formation in the ground of the active layer. The whole surface of the 13–15 meter terrace is covered with thickly-clustered small-trunked ($d > 3$ cm) larch forest with sparse mixture of pine and birch.

At the outer scarp of the terrace the frost cracks are largest and deepest. They contribute to the severe destruction of the outer scarp of the terrace and to cryogenic (solifluctional) flow of the soil along its thawing slope. Together with the soil, along the slope slip to the river shore at low water, as well as at high water, directly to the Vilyui the cultural remains of the Mungkharyma I site—stone tools and animal bones.



Figure 4. View from the right bank of the Vilyui to the Mungkharyma I and Mungkharyma II sites.

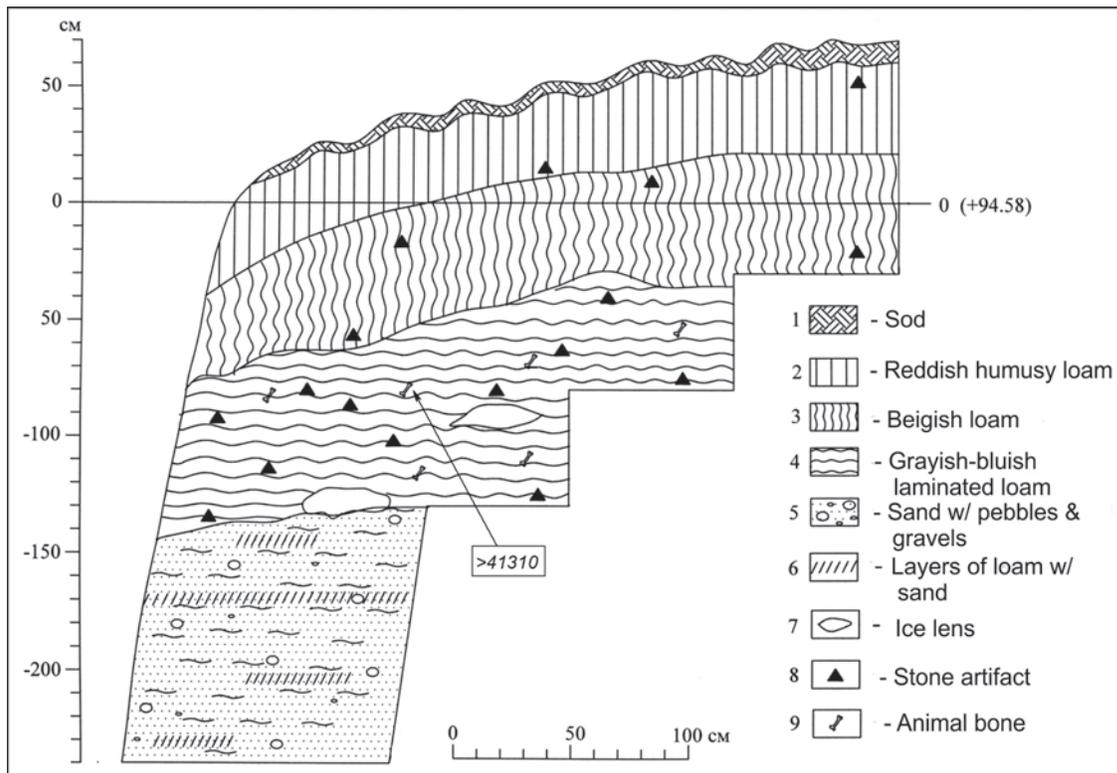


Figure 5. Mungkharyma I site. Cross section of the west wall of Excavation II at the outer scarp of the 13–15-meter terrace of the Vilyui River.

As a result of the work carried out by the authors from 2001 to 2010 (Figure 5), the following stratigraphy of the Mungkharyma I site was established in the region of its outer scarp (Figure 6):²

1. Basal formation. This is represented by sandstones of Cretaceous age. In them lie lenses of coal and interstratified cobbles, pebbles, and gravel. The elevation of the basal formation from the Vilyui waterline is 10–12 m.
2. Fluvial alluvia. Present were interstratifications of obliquely laminated and horizontally laminated inequigranular grayish-yellowish and whitish sands. The sands were saturated with small and large gravel. Especially much of it was in the obliquely laminated sands. Isolated lenses of gray loam are here and there encountered in the sands. In the contact of the fluvial sands and superimposed deposits lie lenses of coarse gravel in places, their thickness 0.2–0.5 m. Large and small gravel and cobbles of quartzite predominate. Now and then flint and chalcedony pebbles are encountered. The total thickness of the fluvial deposits is 1.5–2 m. In some places at the bottom of the fluvial deposits are lenses of ice that penetrate through cracks into the basal formation.
3. Dark-gray horizontally-laminated loams. The stratification is formed due to alteration of fine (1–1.5 cm) interbedding of grayish-brownish and bluish loams and fine (0.5–1 cm) interbedding of large-grained yellowish (ferruginated) sand. The thickness of this layer is 1.6–2.1 m. Various cryogenic structures can be easily seen in the layer—traces of solifluction, soil veins, and pseudomorphs. The lower part of the parcel (approximately 1 m) has a grayer color than the upper (Figure 6).
4. Light-brown (beigish) loams. In them is a horizontal stratum due to the inclusion of small (1–2 cm) lenses of grayish-bluish loams and light-yellow sands. Both these and other small lenses often form various eddies. The thickness of the layer is 0.5 to 0.8 m.
5. Dark-brown (reddish) cloddy humusy loam with the inclusion of various small pieces of coal, and sometimes also small carbonaceous lenses. The thickness of this layer is 0.3 to 0.6 m. It is evidently the upper part of Stratum No. 4 reworked by edaphic processes.
6. Sod. Thickness 3 to 15 cm.

All the strata, beginning at a depth of 55 to 75 cm, are in a permafrost state.

The flood-plain facies of alluvium of the 13–20-meter terrace is evidently represented by Strata No. 3 and No. 4. However, ultimately the facies association of these deposits can be established only after opening up the rear scarp of this terrace. Isolated finds of quartzite artifacts, including one quartzite bifacial hand axe (Plate 9:1), were made in 2000 in the contact of the deposits of fluvial and flood-plain facies of alluvium. Further work has shown that stone artifacts lie not only in the lowest deposits of the flood-plain facies of alluvium at the contact with deposits of fluvial facies, but are encountered in the whole thickness of the deposits lying above the fluvial alluvium. Individual finds were also in the soil layer directly under the sod

²Upon profiling the walls of Excavation III the zero point had an elevation in Baltic System of +94.58 m from the Vilyui waterline. At low water on 16 July 2008 the waterline was +79.60 m by the Baltic System. Thus, the zero point from the Vilyui water was +14.98 m.

(see Figure 6). The soils from all strata were carefully washed through a screen with a mesh size of 2.5×2.5 mm.

No noticeable differences in the technical-typological indices (TTI) and preservation of the surface between the lowest and the highest quartzite artifacts are presently evident.

On the shoreline 854 specimens of various quartzite artifacts and 496 specimens of animal bones were found. Upon profiling the denuded face of the terrace and in the excavations 1,698 specimens of different stone artifacts and 214 specimens of animal bones were found. The animal bones found on the river shore and in the denuded face of the terrace belong to the same species—mammoth, woolly rhinoceros, bison, Pleistocene horse, and reindeer. The species composition of the fauna was determined by paleontologist N. D. Ovodov.

The preservation of bones from the river shore and from the deposits in the terrace is practically identical. This confirms the fact that the bones found on the river shore were washed from the deposits of the terrace quite recently and did not



Figure 6. Mungkharyma I site. Contact of the flood-plain and fluvial facies of alluvium of the 13–15 meter terrace of the Vilyui. On the right a thawing ice vein can be seen.



Figure 7. Mungkharyma I site. Excavation II. Cleaning fragments of mammoth scapula from which a radiocarbon date of >41,310 years (SOAN-6361) was obtained.

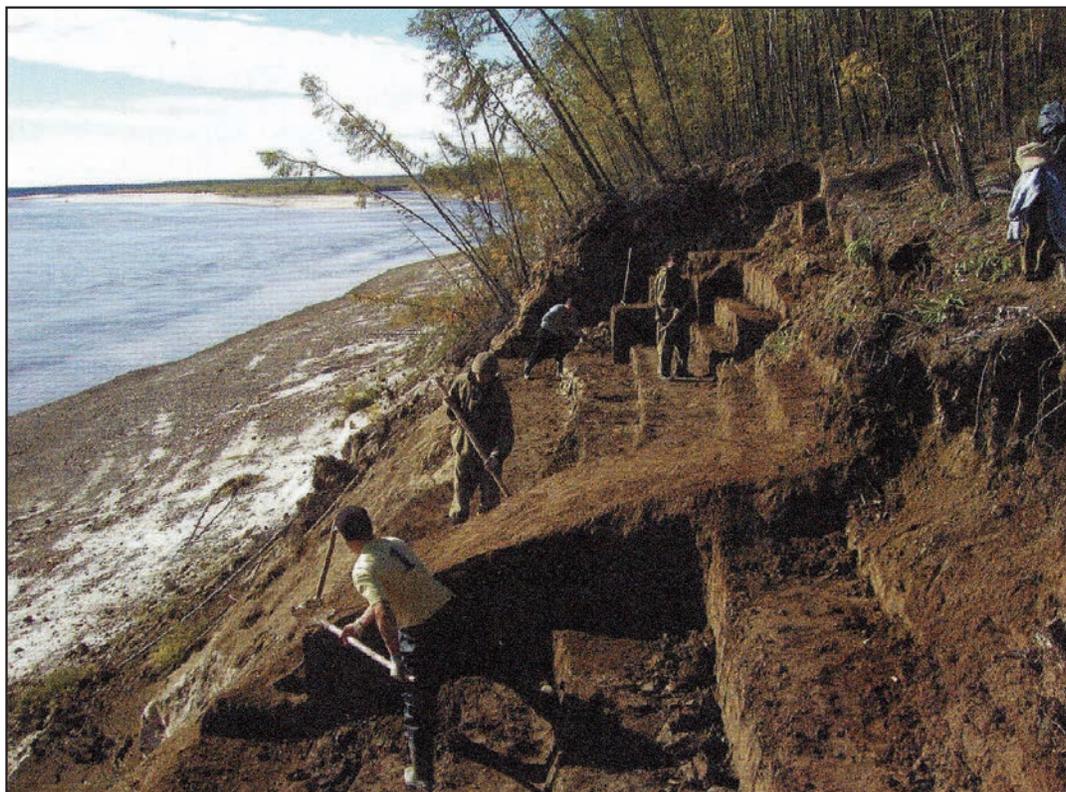


Figure 8. Mungkharyma I site. Excavation II. Profiling in steps the outer scarp of the 13–15 meter terrace of the Vilyui River. On the lower steps the dark-gray horizontally-laminated loams containing the basic cultural remains are examined.

have time to weather in the air. Intensive destruction of the terrace due to erosion and thawing of the permafrost occurs annually, based on information from local fishermen.

The stone artifacts from the river shore and from the cutbanks of the terrace also have the same preservation. The un-rolled nature of the stone artifacts on the river shore attests that they lie directly under the cutbanks from which they came.

Almost all the stone artifacts found on the river shore and in the terrace deposits are quartzite items.

Especially important for the characterizing the stone inventory of the Mungkharyma I site and determining it as initial in the origin of the Dyuktai biface tradition of the late Paleolithic are bifacially-worked spear points (Plates 1:1; 2:2; 3:1) and knives with a butt similar to knives of the Klauzennishe, Bokstain, and Prondnik types (Plates 4:2, 3; 6:1; 5; 6), which are characteristic for the middle Paleolithic cultures of the «Mousterian bifacial» of Europe (Debenath and Dibble 1994). Based on their TTI the quartzite complex of Mungkharyma I is rather similar to materials of the Ak-Kaya Mousterian culture of the Crimea (Kolosov 1986).

Besides backed knives and spear points, artifacts like chopping knives are characteristic (Plates 7:1; 8:3). Axes and axe-like artifacts form a large series (Plates 7:2; 9; 10; 11:2). Quartzite uniface choppers (Plate 13) and skreblos are only rarely encountered. No special cores were found at the Mungkharyma I site. Slabs of quartzite, obtained by splitting cobbles of platy quartzite, served as blanks for various tools.

After Yu. G. Kolosov became acquainted in detail with the stone inventory of the Dyuktai culture in Yakutsk, and we in Kiev and the Crimea with the Ak-Kaya culture in 1982, we repeatedly discussed with him the fact that, if the Ak-Kaya culture were found in Yakutia, it could be considered the source for the Dyuktai culture. Yu. G. Kolosov wrote (1986:134) regarding the similarity of these two cultures:

In the late Paleolithic sites of the Dyuktai culture in Siberia, besides semi-discoid skreblos or knives that Yu. A. Mochanov calls semilunar knives, bifacially worked knives close to the Klauzenishe and Bokstain types are well represented. . . In industries of the Dyuktai culture there are also bifacial forms of laurel-leaf spear points similar to the Ak-Kaya, made not from slabs of flint, but from platy silicified slate. It is indisputably difficult to see in these asynchronic similarities of artifacts—the roots of which go back to a distant genetic base—the occurrence of migrations. It is clear that we encounter a convergent phenomenon, which can be explained by the influence of the raw material on the external appearance of the stone tools.

Importantly significant are bifacial hand axes for justification that at the Mungkharyma I site an archaeological complex was found that is more ancient than those recorded before this in the earliest sites of the Dyuktai late Paleolithic culture (Plate 9). They are basically characteristic for the early and middle Paleolithic of Eurasia, and are not encountered at the late Paleolithic sites of the Dyuktai culture. Based on their TTI, they do not in any way yield to the *hand axe* from Bogorodskoye, which Okladnikov (1979) and Abramova (1992) assign to *Acheulean times*.

The early age of the Mungkharyma I site is corroborated by various dates of the deposits. The age of the layers of fluvial alluvium underlying the cultural finds is

determined by a radio-thermoluminescent date of 600 ± 150 thousand years (RTL-957). Based on fragments of mammoth scapula found in the grayish-bluish loams of Stratum 3 at a depth of 1.5 m below the present ground surface (Figure 8) a radiocarbon date of $>41,310$ years (SOAN-6361) was obtained. In this same stratum a jaw, a tusk, and fragments of the pelvis of a young mammoth were found, as well as a piece of the thigh and teeth of a woolly rhinoceros and numerous quartzite artifacts.

At the same time it must be noted that recent work at Mungkharyma I revealed in the deposits we assigned to the flood-plain facies of alluvium, as well as on the river shore, several flint and chalcedony artifacts—scrapers, burins, wedge-shaped cores, and flakes—along with the quartzite artifacts. All these flint and chalcedony finds, based both on TTI and on petrography, fall outside the complex of quartzite artifacts of Mungkharyma I (Plate 15).

It can be supposed that the primary location of the middle Paleolithic site was on the surface of the 70-meter terrace. On it a site named Mungkharyma II was found in 2007. In geological test pits on the 70-meter terrace flint artifacts were recorded lying in the soil layer under the sod, while at the contact of the fluvial sands and loam, by which the flood-plain facies of alluvium is evidently represented, quartzite artifacts were discovered (Mochanov and Fedoseeva 2013, Figures 32, 32a). It is possible that the early and middle Paleolithic quartzite artifacts from the Mungkharyma II site, as well as the late Paleolithic flint and chalcedony artifacts, were mixed due to slope processes and redeposited in the deposits of the 13–20-meter terrace, where the Mungkharyma I site is now located.

However, it is not impossible that isolated flint and chalcedony artifacts are a component part of a single middle Paleolithic complex of the Mungkharyma I site since in and of itself wedge-shaped cores, small scrapers, and burins in principle do not contradict an early age for the site.

To some degree the situation of the mixing of the isolated flint and chalcedony artifacts with the basic quartzite complex of the Mungkharyma I site is reminiscent of the situation, revealed in Kostenki at the Streletskaya 2 site. Its researchers (Rogachev and Anikovich 1982:91) noted:

The association of the inventory of Streletskaya 2 with the Kostenki - Streletskaya culture is not doubted. However, there are also substantial differences. Thus, not in one other site of this culture was there such a large number of artifacts of Cretaceous flint, or such broad use of lamellar blades. The scrapers and burins have no analogy in other industries of this culture. Two explanations are possible. Either this is connected with our insufficient knowledge of the Kostenki-Streletskaya culture as a consequence of sparseness of data or in Streletskaya 2 there is mechanical mixing of materials from different sites. Judging by the severe redeposition of the stratum, the latter is entirely acceptable. However, to find a method of checking such hypothesis would, at least, be difficult. As a consequence of heavy sliding of the slope deposits from the point on which the site is located it is hardly possible to expect to find the cultural layer there. A previous test pit provided only negative results.

At Mungkharyma I the stratigraphic work will be continued. In order to clarify where the isolated flint and chalcedony artifacts come from that intrude into the basic quartzite complex it will be necessary to place several stratigraphic trenches in the slope of the 70 meter terrace and along the whole 13–20 meter terrace from its rear scarp—which presumably is at an elevation of 20–21 meters above the Vilyui waterline—to its outer scarp, in which archaeological materials are recorded. To do this will be very difficult here since all the deposits that must be opened with stratigraphic trenches are in a permafrost state. It is evident that drilling work is necessary, but it is less reliable for stratigraphic conclusions than trenches and test pits.

From our point of view, the Kyzylsyr (proto-Dyuktai) culture, represented by quartzite artifacts from the Mungkharyma I site (Plates 1–14)—based on the technical-technological indices of its stone inventory—should be assigned to the beginning stage of the middle Paleolithic. Based on geological data it should be assigned to the Kazantsev (Riss-Wurm) time. In absolute numbers its age should be in the framework of 150,000–70,000 years.

At present it is possible to think that this age is no less substantiated than, for example, the age of the Mokhovo 2 site. About it Derevyanko and his coauthors report (Derevyanko et al., 1990:155) that based on geological data it should be assigned to the Kazantsev (Riss-Wurm) time, and based on archaeological data—to late Acheulean or early Mousterian.

Excavations at the Mungkharyma I and II sites must be continued. Test pits in them have established that stone artifacts lie in the depths of the terrace at a distance of at least 20–25 meters from the walls of the excavations farthest from its outer scarp, and perhaps even farther. In both sites it will be necessary to conduct excavations overbroad areas in order to leave some parts of the excavations to natural thawing of the permafrost and drying of the culture-containing strata.

Study of the Kyzylsyr culture permits answering many questions connected with the origin of the Dyuktai culture. The search for sites of the Kyzylsyr culture is one of the basic tasks of archaeologists studying the Paleolithic of Northeast Asia. It is most probable that sites of this culture can be found in first order on the Vilyui (down from the mouth of the Markha River), on the lower Aldan, on the Kolyma and Chukoch'e, and on the Yana and Indigirka—where the primary localities of Pleistocene fauna are concentrated.

In 1973, examining the areas of the Dyuktai biface and Mal'ta-Afontova uniface cultural traditions, Mochanov noted that, considering the poor study of the Paleolithic of Northern Asia at that time, one could not entirely exclude the possibility that there were large self-contained areas of these cultures and that they could coexist intermingled, as was established, for example, in Priangar'e (Mochanov 1976:550). In general, the problem of intermingled coexistence in the Paleolithic in one territory of different populations of people, food for whom was the same species of animals, is of great scientific interest. It is important not only for reconstruction of the ancient history of humanity, but also for refinement of several questions of biological speciation. However, archaeologists do not at all occupy themselves with this problem.

In 1989, on the lower reaches of the Vilyui, on its left bank, A. S. Kirillin and N. M. Cherosov discovered the Timirdyakh-Khaya site (64° north latitude, 123° 25' east longitude). In it they opened an excavation with an area of 9 m² and 20–25 cm deep. Of course, the finds made were very few, and they were not able to give an idea

of the cultural association of the site. In 2005 the Prilensk Archaeological Expedition, upon profiling the terrace in the region of the excavation by Kirillin and Cherosov, obtained an abundance of archaeological materials. The materials confirm that the site belongs to the late Paleolithic and that bifacially worked tools are entirely absent from its inventory. Many artifacts from the site have traces of corrosion. The precise age of the site meanwhile has not been established. Meanwhile no clear analogy with materials from sites of the unifacial cultures of Northern Asia has been revealed.

In 1991 O. V. Zadonin discovered on the right bank of the Lena, 30 km below the Kirensk, the site of Alekseevsk 1 (57° 50' north latitude, 108° 20' east longitude). In an excavation with an area of 135 m² material was obtained that was dated to an age of 22,000- 24,000 years ago. Studying the materials of this site, Zadonin concluded (1996:25) that, based on the absence of signs of the technique of bifacial working, the Alekseevsk 1 industry is sharply different from the inventory of sites of the Dyuktai Paleolithic tradition of Northeast Asia.

At present the Chirkuoskaya culture of the middle paleolithic or beginning stage of the late Paleolithic (Mochanov and Fedoseeva 2008, Plates 20–24), discovered by S. A. Fedoseeva on the upper Vilyui in 1962, can attest to the fact that there were no large self-contained areas of archaeological cultures and many of them existed intermingled. The Chirkuoskaya culture belongs to the Mal'ta-Afontova tradition and has its greatest similarity with sites of the Shuidungou type and the Transbaikalian site of Tolbaga. Based on the TTI the Chirkuoskaya culture does not have any similarity with bifacial cultures— Kyzylsy and Dyuktai.

How long Paleolithic cultures of different traditions were able to coexist in one territory is unknown. It is not impossible that the sites containing artifacts of the Chirkuoskaya culture, as well as the Alekseevsk 1 and Timirdyakh-Khaya sites, could all be traces of episodic visits of some Paleolithic populations in the primary area of the Paleolithic bifacial tradition. That episodic occupation in a foreign area took place is attested by the small Daur group, isolated on the Aldan among the Yakut and Tungus in the 17th century (Dolgikh 1960:495, 496, 498, 507).

Plates

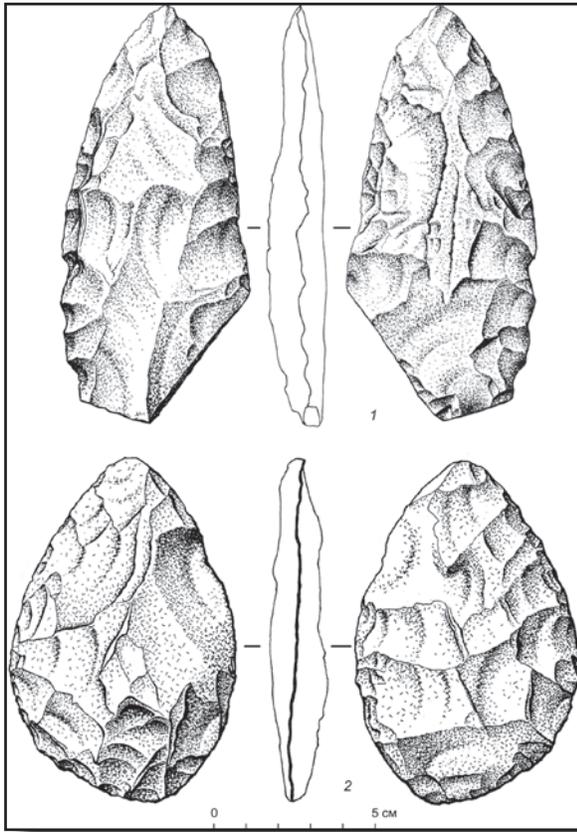


Plate 1. (Above Left) Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

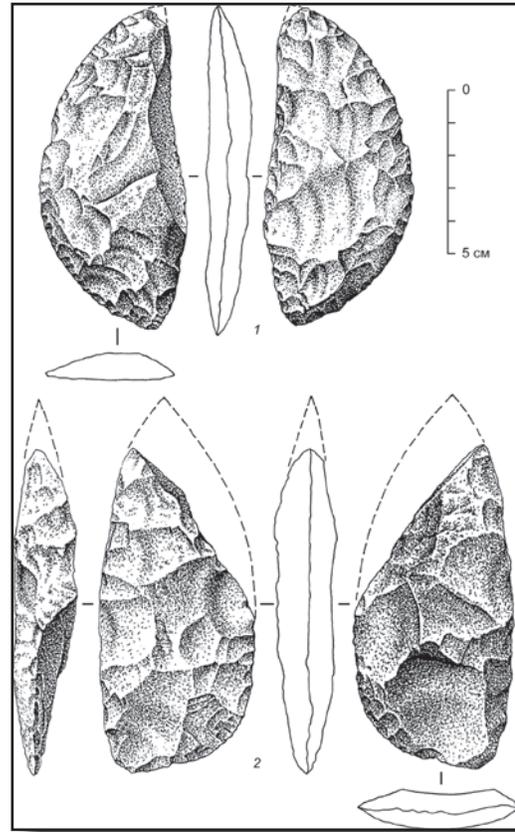


Plate 2. (Above Right) Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

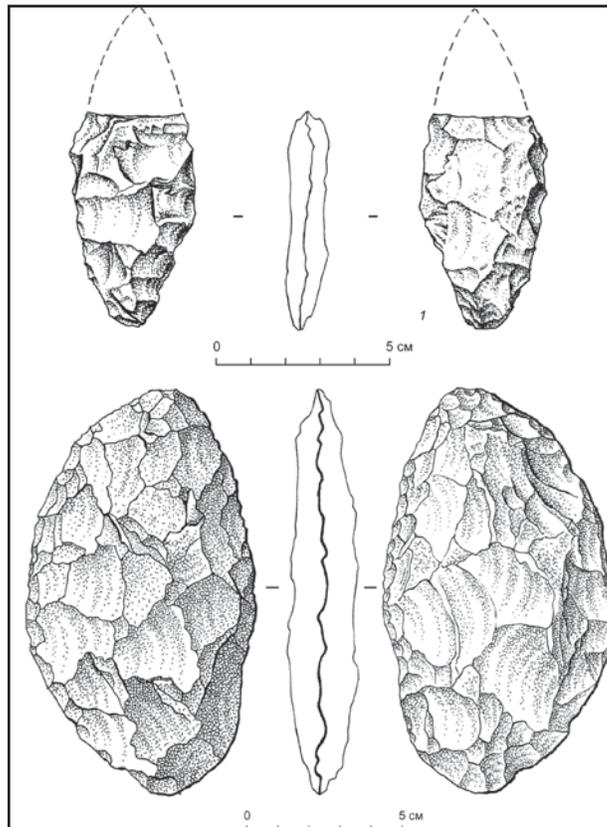


Plate 3. (Below Center) Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

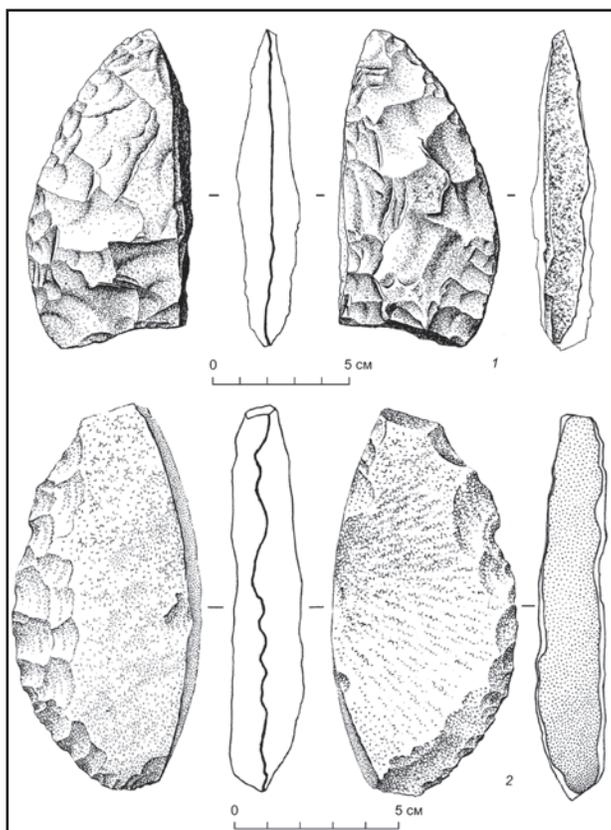
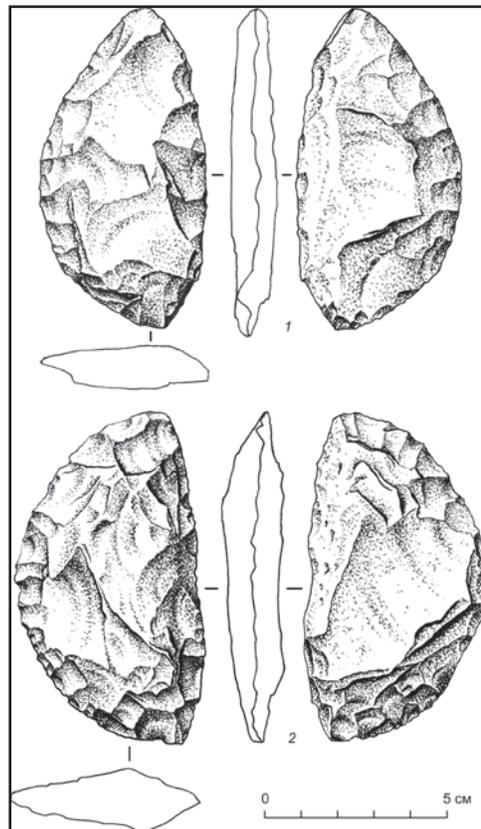
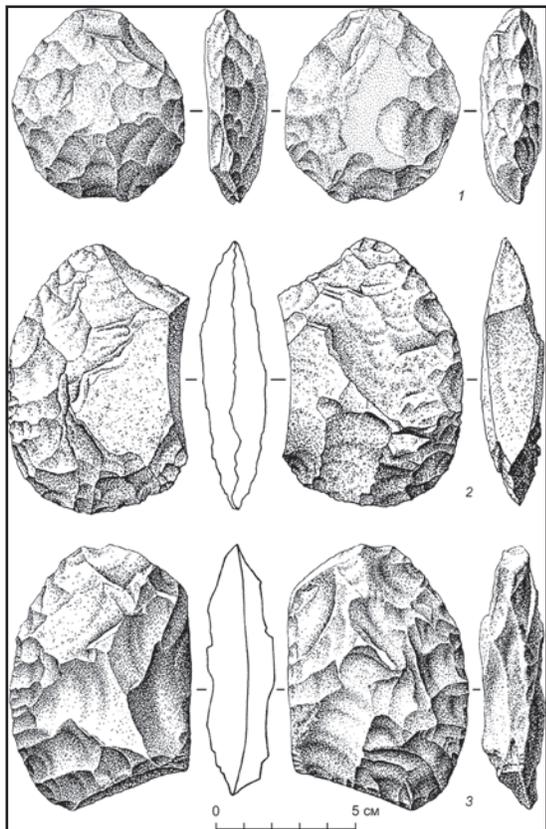


Plate 4. (Above Left) Kyzylsyр (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

Plate 5. (Above Right) Kyzylsyр (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

Plate 6. (Below Left) Kyzylsyр (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

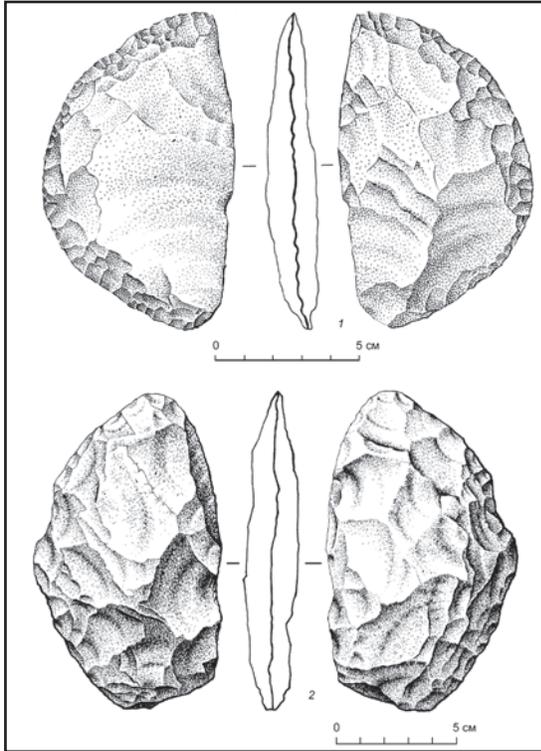


Plate 7. (Above Left) Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

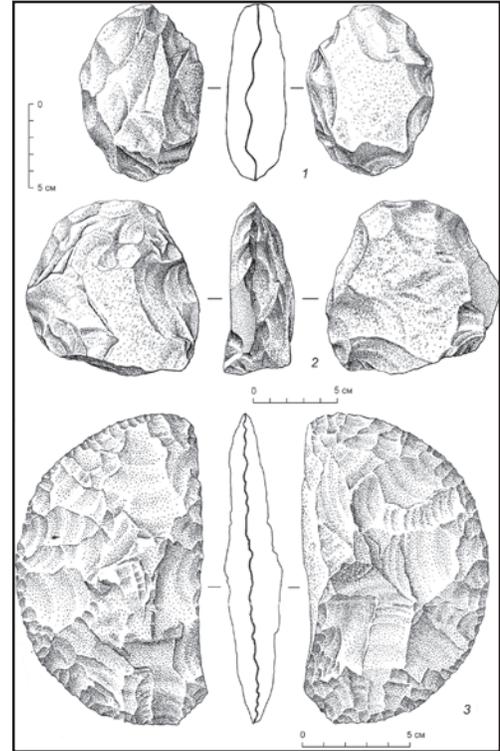


Plate 8. (Above Right) Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

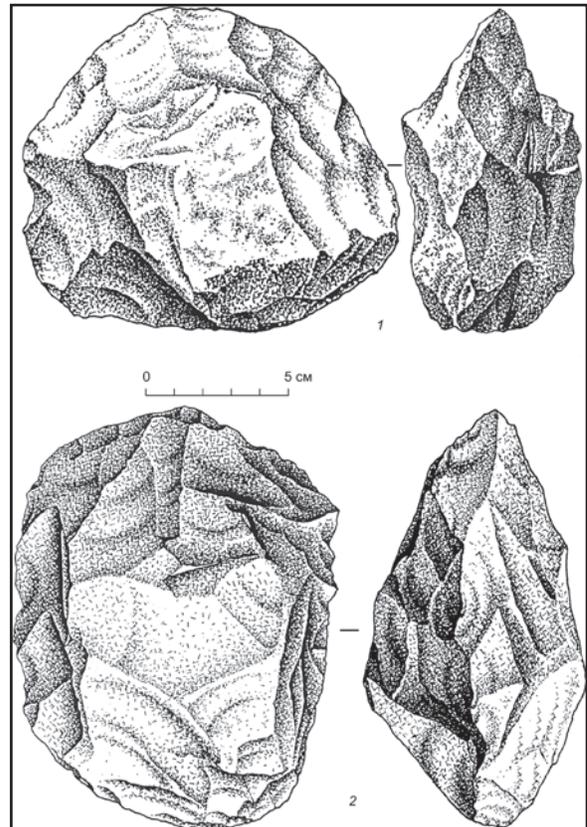


Plate 9. (Below Right) Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

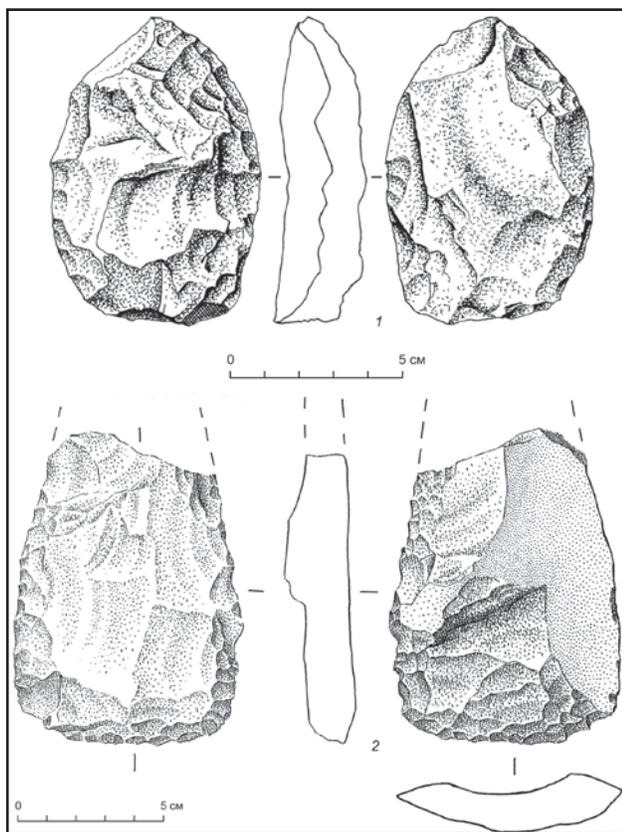
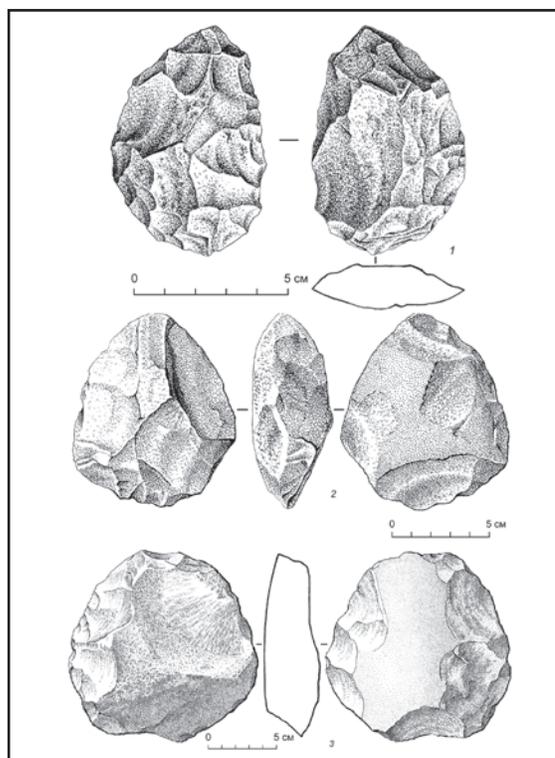
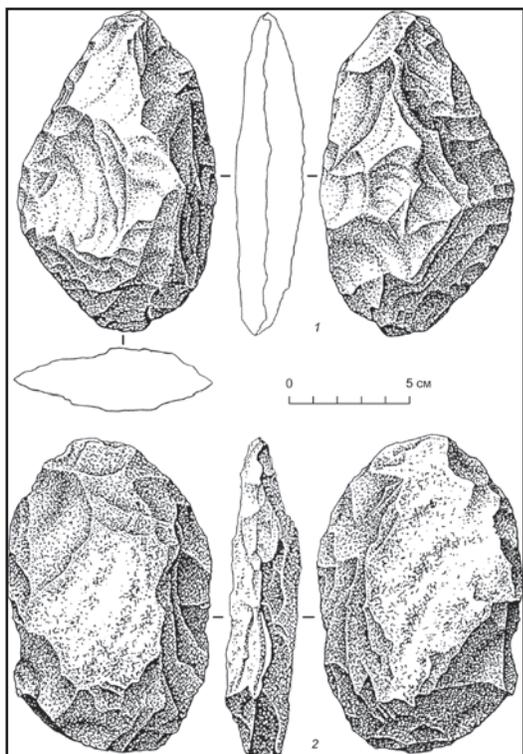


Plate 10. (Above Left)
Kyzylsyр (proto-Dyuktai)
culture. Middle Paleolithic.
Stone artifact. Mungkharyma
I site. Quartzite.

Plate 11. (Above Right)
Kyzylsyр (proto-Dyuktai)
culture. Middle Paleolithic.
Stone artifact. Mungkharyma
I site. Quartzite.

Plate 12. (Below Center)
Kyzylsyр (proto-Dyuktai)
culture. Middle Paleolithic.
Stone artifact. Mungkharyma
I site (Vilyui River).
Quartzite.

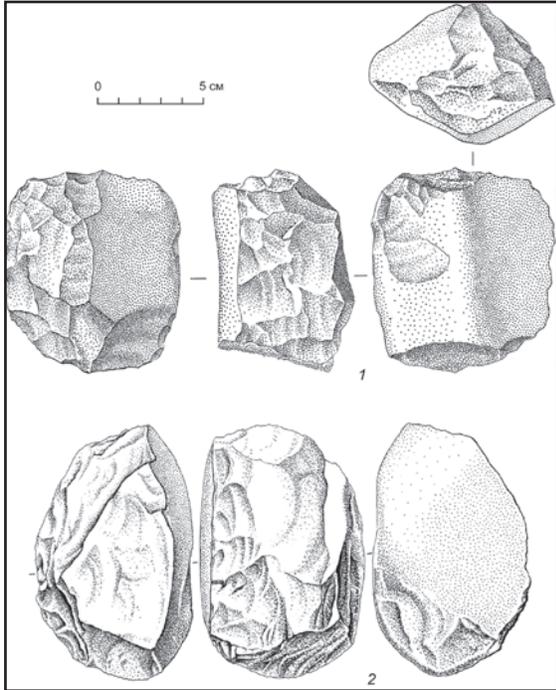


Plate 13. Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. Mungkharyma I site. Quartzite.

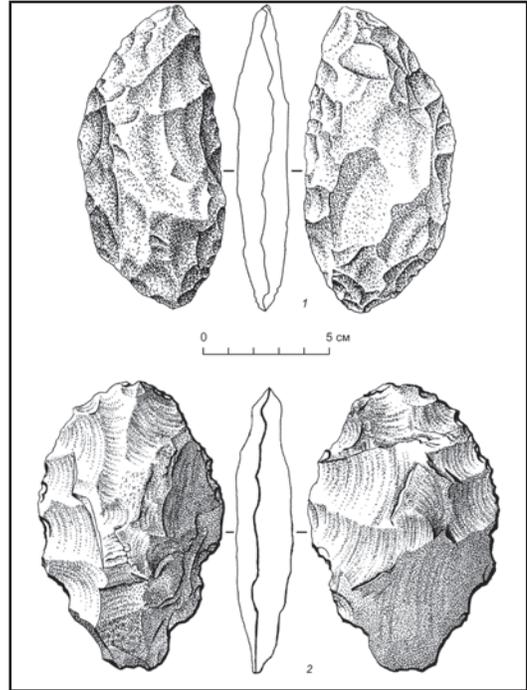


Plate 14. Kyzylsyr (proto-Dyuktai) culture. Middle Paleolithic. Stone artifact. 1—from the Mungkharyma I site, 2—from the Kyzyl-Syr VIII site (Peledui River). Quartzite.

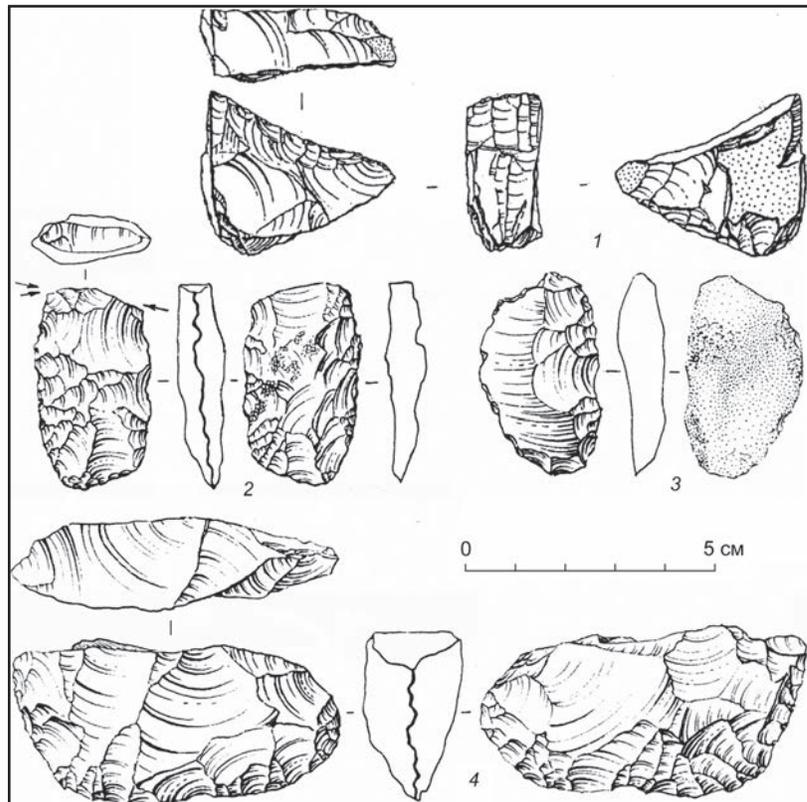


Plate 15. Flint artifacts of the Mungkharyma I site from different strata.

REFERENCES CITED

- Abramova, Z. A.
1992 "Rasprostranenie bifasial'noi tekhniki v paleolite Srednei Azii i Sibiri" [The Distribution of the Bifacial Technique in the Paleolithic of Central Asia and Siberia]. *Problemy arkheologii, istorii, kraevedeniya i etnografii Prieniseiskogo kraya* [Problems of Archaeology, History, Regional Studies, and Ethnography of the Yenisei Area]. Vol. I, pp. 38–41. Krasnoyarsk.
- Anderson, D. D.
1970 "Akmak. An Early Archaeological Assemblage from Onion Portage, North west Alaska." *Acta Arctica*. Fasc. XVI. Copenhagen, P. 80.
- Chard, C. S.
1959 "New World Origins: A Reappraisal." *Antiquity*, XXXIII:44–49.
1969 *Man in Prehistory*. McGraw–Hill Company, New York. P. 351.
- Debenath, A., and H. L. Dibble
1994 *Paleolithic Typology*. University of Pennsylvania Press, Philadelphia.
- Derevyanko, A. P., S. V. Markin, S. V. Nikolaev, and V. T. Petrin.
1990 "Rannepaleoliticheskii kompleks iz Kuzbassa" [The Early Paleolithic Complex from Kuzbass]. *Khronostratigrafiya paleolita Severnoi, Tsentral'noi i Vostochnoi Azii i Ameriki* [The Chronostratigraphy of the Paleolithic of Northern, Central, and Eastern Asia and America]. Pp. 147–160. Novosibirsk.
- Dolgikh, B. O.
1960 *Rodovoi i plemennoi sostav narodov Sibiri v XVII veke* (TIE, T. LV) [Clan and Tribal Composition of the Peoples of Siberia in the 17th Century (Works of the Institute of Ethnography, vol. LV)]. Moscow.
- Kolosov, Yu. G.
1986 *Akkaiskaya must'erskaya kul'tura* [The Akkayskaya Mousterian Culture]. Kiev.
- Medoev, A. G.
1964 "Kamennyi vek Sary-Arka v svete noveishikh issledovaniy" [The Stone Age of Sary-Arka in Light of the Most Recent Investigations]. *Izv. AN KazSSR. Ser. obshchestv. nauk* [Bulletin of the Academy of Sciences of the Kazakh Soviet Socialist Republic. Series of the Society of Sciences]. Issue 6. Pp. 90–98. Alma Ata.
- Mochanov, Yu. A.
1969a "Dyuktayskaya verkhnepaleoliticheskaya kul'tura i nekotorye aspekty ee genezisa" [The Dyuktai Upper Paleolithic Culture and Some Aspects of Its Genesis]. *Sov. arkheologiya* [Soviet Archaeology]. No. 4, pp. 235–239.

- 1969b “Drevneishie etapy zaseleniya Severo-Vostochnoi Azii i Alyaski (K voprosu o pervonachal’nykh migratsiyakh cheloveka v Ameriku)” [The Earliest Stages of Settlement of Northeast Asia and Alaska (On the Question of the Initial Migrations of Man to America)]. *Sov. Etnografiya* [Soviet Ethnography] 1:79–86.
- 1976 *Paleolit Sibiri (nekotorye itogi izucheniya)* [The Paleolithic of Siberia (Some Results of the Study)]. Pp. 540–563. Vladivostok.
- 1977 *Drevneishie etapy zaseleniya chelovekom Severo-Vostochnoi Azii* [The Most Ancient Stages of Settlement by Man of Northeast Asia]. Novosibirsk.
- 2007 *Dyuktaiskaya bifasial’naya traditsiya paleolita Severnoi Azii (Istoriya ee vydeleniya i izucheniya)* [The Dyuktai Bifacial Tradition of the Paleolithic of Northern Asia (The History of Its Isolation and Study)]. Yakutsk.
- Mochanov, Yu. A. and S. A. Fedoseeva
2008 *Archaeology, the Paleolithic of Northeast Asia, a Non-Tropical Origin for Humanity, and the Earliest Stages of the Settlement of America*. Canada.
- 2013 *Ocherki dopis’mennoi istorii Yakutii. Epokha kamnya* [Essays on the Preliterate History of Yakutia. The Stone Age]. Vol. 2. Yakutsk.
- Mochanov, Yu. A., S. A. Fedoseeva, I. V. Konstantinov, and others.
1991 *Arkheologicheskie pamyatniki Yakutii (Basseiny Vilyuya, Anabara i Oleneka)* [The Archaeological Sites of Yakutia (The Basins of the Vilyui, Anabar, and Olenek)]. Moscow: Nauka. P. 224.
- Movius, H. L.
1956 “New Palaeolithic Sites Near Ting-Ts’un in the Fen River. Shansi province, North China.” *Quaternaria*. № 3. Pp. 13–26. Roma.
- Okladnikov, A. P.
1966 “K voprosu o mezolite i epipaleolite v aziatskoi chasti SSSR” [On the Question of the Mesolithic and Epi-Paleolithic in the Asian Part of the USSR]. *U istokov drevnikh kul’tur. Epokha mezolita*. (MIA, No. 126) [At the Sources of Ancient Cultures. The Mesolithic Period. (Materials and Investigations in Archaeology, No. 126)]. Pp. 213–223. Moscow; Leningrad.
- 1979 “K voprosu o pervonachal’nom zaselenii chelovekom sovetskogo Dal’nego Vostoka i nakhodka ashel’skogo rubila v raione s. Bogorodskogo Khabarovskogo kraya” [On the Question of Initial Settlement by Man of the Soviet Far East and the Find of an Acheulean Axe in the region of Bogorodskoe Village, Khabarovsk District]. *Drevnie kul’tury Sibiri i Tikhookeanskogo basseina* [The Ancient Cultures of Siberia and the Pacific Basin]. Pp. 6–20. Novosibirsk.

Rogachev, A. N., and M. V. Anikovich

- 1982 “Kostenki 6 (Streletskaya)” [Kostenki 6 (Streletskaya)]. *Paleolit Kostenkovsko-Borshchevskogo raiona na Donu* [The Paleolithic of the Kostenkovsko-Borshchevsk Region on the Don]. Pp. 88–91. Leningrad.

Uoshborn, A. L.

- 1988 *Mir kholoda. Geokriologicheskie issledovaniya* [A World of Cold. Geocryological Investigations]. Moscow.

Wauchope, R.

- 1966 *Zatonuvshie materiki i tainy ischeznuvshikh plemen* [Sunken Continents and the Secrets of Vanished Tribes]. Moscow.

West, F.

- 1967 “The Donnelly Ridge Site and the Definition of an Early Core and Blade Complex in Central Alaska.” *American Antiquity*, 32(3):360–382.

Zadonin, O. V.

- 1996 “Paleoliticheskoe mestonakhozhdenie Alekseevsk-1” [The Paleolithic Site of Alekseevsk-1]. *Arkheologicheskoe nasledie Baikal'skoi Sibiri* [The Archaeological Heritage of the Baikal Area Siberia]. Pp. 23–27. Irkutsk.

Zamyatnin, S. N.

- 1951 “O vozniknovenii lokal'nykh razlichii v kul'ture paleoliticheskogo perioda” [On the Emergence of Local Difference in Culture of the Paleolithic Period]. *Proiskhozhdenie cheloveka i rasselenie chelovechestva* [The Origin of Man and Dispersal of Humanity]. Pp. 89–152. Moscow.

Commentary on Mochanov and Fedoseeva's Kyzylsyр Middle Paleolithic Culture of Northern Asia

Roy Carlson

Mochanov and Fedoseeva have spent their entire careers researching the archaeology and prehistory of Yakutia (now the Sakah Republic). Mochanov is best known among North American archaeologists for his excavations at Dyuktai Cave and related sites, and his definition of the Dyuktai Culture, and Fedoseeva for her work on the younger Ymiaktak Culture. Both are sound archaeologists and their fieldwork is impressive. This current article is an attempt to formulate a Middle Paleolithic Siberian culture ancestral to Dyuktai and comparable in scope to the Mousterian. This article is relevant to Northwestern American prehistory in that the early industries here are dominated by biface industries, and the question arises as to whether or not the earliest biface industries there are closely related to the biface industry of the Kyzylsyр Culture of Siberia. Other than with the simple foliate forms of bifaces found early on the Northwest Coast (Carlson and Magne 2008) before the arrival of microblade technologies, there are few specific similarities.

I think it is unlikely that the Kyzylsyр Culture will gain a strong foothold in studies of world prehistory. Much of this problem has less to do with the formulation itself than with Mochanov's interpretation of a different Siberian site, Diring Yuriakh, that has engendered considerable mirth among his Russian peers and skepticism elsewhere. This site is on a high terrace of the Lena River and contains an assemblage of flakes, unifacial choppers, and anvil stones in primary association that Mochanov considers to be a million or more years old, and comparable to Olduvai in being evidence of the origin of *Homo sapiens* as a response to the increasing cold of the Pleistocene (Mochanov 1993, Mochanov and Fedoseeva 2008). He disputes Water's (1997) not unreasonable thermoluminescence dates of about 360,000 years on the cultural layer at the site. This position has caused his Russian colleagues considerable mirth and to not take his work seriously. Both Bob Ackerman and I have been to the site and it is clear that these are real artifacts in what is probably a middle Pleistocene context (Ackerman and Carlson 1991, Carlson 2001). Mochanov's strongly held opinion on this topic should not be allowed to undermine the extensive contribution he and Fedoseeva have made to the prehistory of Siberia.

REFERENCES CITED

Ackerman, R. and R.L. Carlson

1991 Diring Gorge: An Early Paleolithic Site in Yakutia. In *Current Research in the Pleistocene*, 8:1–2.

Carlson, R.L.

2001 Diring Yuriakh: An Early Paleolithic Site on the Lena River. In *Indo-Pacific Prehistory: the Melaka Papers*, Vol. 5. pp. 132–137. Bulletin of the *Indo-Pacific Prehistory Association*, 21. Australian National University, Canberra.

Carlson, R. L. and M. P. R. Magne (Eds)

2008 *Projectile Point Sequences in Northwestern North America*. Archaeology Press, Simon Fraser University Burnaby, B.C.

Mochanov, Y. A.

1993 The Most Ancient Paleolithic of Diring and the Problem of the Neotropical Origin for Humanity. *Arctic Anthropology*, 30(1):22–53.

2009 *The Earliest Stages of Settlement by People of Northeast Asia*. Shared Beringian Heritage Program, National Park Service, Anchorage, Alaska.

Mochanov, Y. A. and S. A. Fedoseeva

2008 *Archaeology, the Paleolithic of Northeast Asia, a Non-Tropical Origin for Humanity, and the Earliest Stages of the Settlement of America*. Archaeology Press, Simon Fraser University, Burnaby, B.C.

2013 *Ocherki dopis'mennoi istorii Yakutii. Epokha kamnya* [Essays on the Preliterate History of Yakutia. The Stone Age]. Vol. 2. Yakutsk.

Turner, Christy

2008 Review of “Archaeology, the Paleolithic of Northeast Asia, A Non-Tropical Origin for Humanity, and the Earliest Stages of the Settlement of America.” *Canadian Journal of Archaeology*, 32:285–288.

Waters, M. R., S. L. Forman, and J. M. Pierson

1997 Diring Yuriakh: A Lower Paleolithic Site in Central Siberia. *Science*, 275:1281–1284.

Entering the American Continent: The Chehalis River Hypothesis

Dale R. Croes and Vic J. Kucera

Abstract *We start with a vignette describing the movement of Pacific Rim, continental shelf peoples along the glaciated Northwest Coast, probably for generations, never seeing to the east anything but towering sheets of ice. Moving along the Olympic Peninsula ice fields, all of a sudden, no ice to the southeast. We reflect on what might have happened next, as a new species, human beings, first enter and begin to occupy the Second Earth—the American Continent. Our specific entry hypothesis is relatively new, following author Croes’ remembering Northwest Archaeologist Alan Bryan, who suggested we look to the Chehalis River for evidence of first peoples. We also look at the still meager evidence of Clovis peoples movements into the Southern Salish Sea.*

Introduction

The history of the Chehalis River and the south Puget Sound area is deep, stretching back millennia. The current Native peoples, who are the original inhabitants of the area, know that their ancestors have lived here since time immemorial as a part of the lands and waters. Western science, however, seeks explanations of “when” and “how,” and presents history as a timeline of events to be laid out, debated, and discussed in turn.

As we all know, many theories have been thoughtfully voiced as to how, when, and where the first entry of humans into the North American continent took place. No matter the number of strongly-held theories, the single thing we can all agree on is that on an unknown day, long ago, entry did take place . . . somewhere . . . somehow.

This article entertains the idea of how the Chehalis River drainage and the southern Puget Sound area may have been first inhabited. Our story here adds to the developing ideas concerning the settling of the Americas, specifically along the coast (Figure 1). Using the modern tool of post-processual archaeology, we offer a description of what that day might have been like, at the most logical location of entry: today’s Chehalis River. This river mouth, now covered by seawater, was the first attractive inward path available to southward-traveling, marine-dependent migrants. For the first time in their lives, eastward travel was no longer blocked by ice walls and glaciers.

“Where’s the evidence?” That of course is the difficult part. Geologic and archaeological information, where available, is presented, as are gaps in the evidentiary record. Before presenting the scientific perspective, we begin with a “post-processual archaeology” vignette describing how a small band of people found their way to the Chehalis River mouth and discovered an entrance to an uninhabited continent. Join us on a skin boat ride during a windy afternoon, 15,000 to 16,000+ years ago, and consider the possibilities.

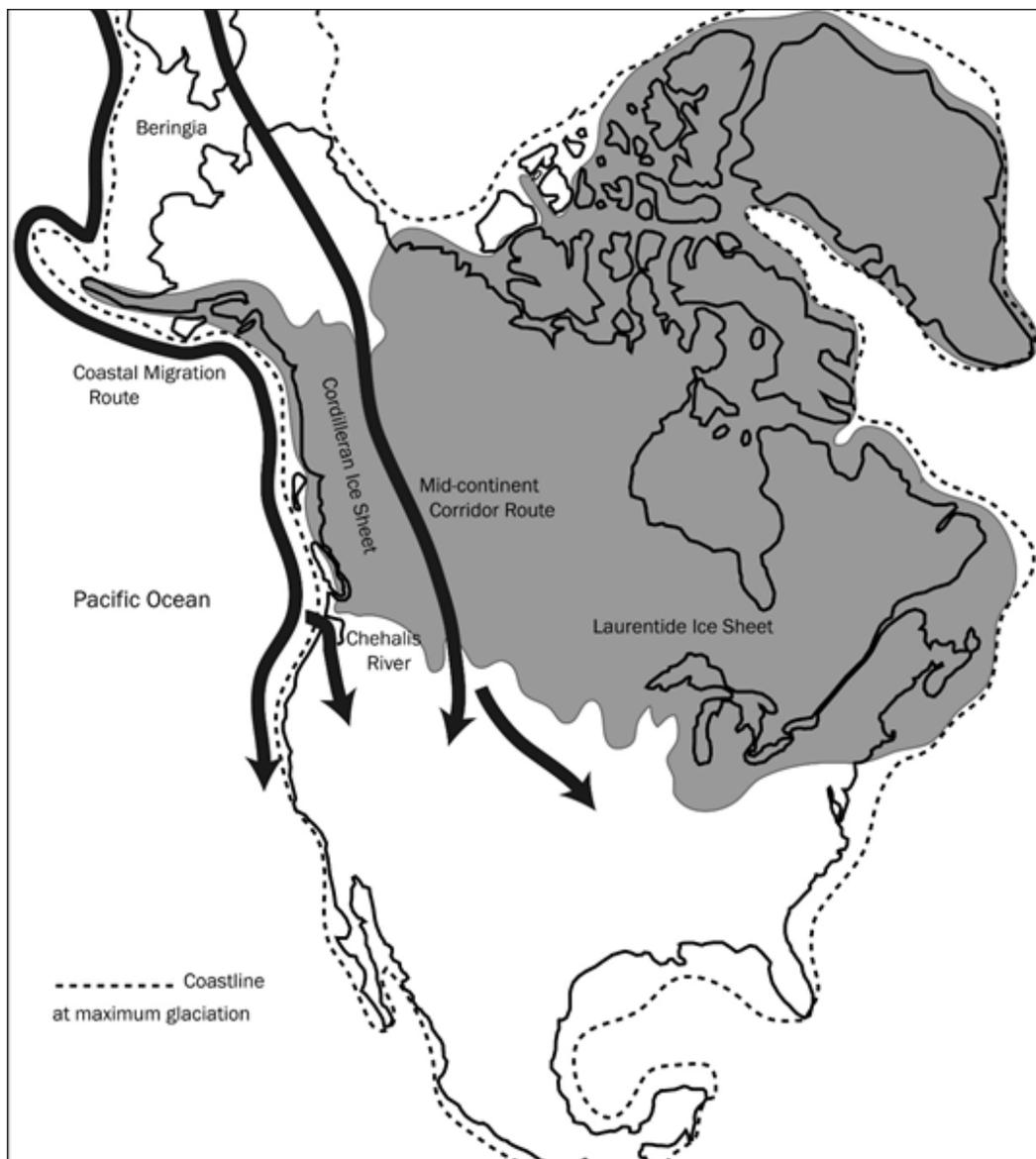


Figure 1. Coastal Migration Route, as discussed here, with an eventual and secondary mid-Continent Corridor Route opening up as the continental Cordilleran and Laurentide Ice Sheets slowly melted and receded.

Entering the Chehalis: A Post-Processual Vignette

It had been almost six months since the small band had left the southwest coast of today's "Vancouver Island" . . . at the ocean entrance of the present "Strait of Juan de Fuca." That entrance, a large glacial fjord at the time, was blocked by a high wall of calving ice at its eastern end, about where "Port Angeles" is now located. Watching huge blocks of ice fall into the sea was a sight to be enjoyed and never forgotten—but cautioned against by Elders who knew the danger of being too close when the tsunami-like waves sprang forward, more than able to roll an unsuspecting skin hulled-boat over on its side.

The band had stayed at a spacious harbor on the northwestern side of the fjord for five years, hunting the local game—bison, bear, and the rare mammoth or mastodon—and enjoying

catches, probably mostly through deep sea fishing with kelp tape fish lines. Fishing opportunities would have included salmon, cod, lingcod, halibut, and sea bass, supplemented by gathered shellfish, sea mammal hunting, and even salvage of the occasional beached whale. It had been a pleasant interlude, long enough for seven children to be born, an amazing four who survived, and three Elders to die. The discomfort of another, larger band of arriving travelers had finally influenced them to depart . . . the hunting and fishing territory now had to be shared. This was not a good idea. Too many hunters, too many hungry mouths to feed.

Now they were following a treeless coastline southward, along what is today Washington's Olympic Peninsula, looking for another large harbor, but instead finding bare cape after bare ocean cape. Sometimes they stayed several weeks in small protected coves, having good luck at hunting land animals (few animals had any idea how dangerous humans could be), while also taking time to air-dry halibut and other flounder, full of energy and vitamin D, critical for survival during the winter still to come.

On this bright day, not all of the band was riding in the boats. Some of the travelers were young men who no longer looked with complete favor on the skin boats of their parents and ancestors . . . maybe the boats made sense farther north on inside waters, in harbors where ocean swells and high waves were absent. Out here along the wide-open coast of what someday would be called the Olympic Peninsula, the young men had no desire to get soaked launching a boat over curling waves at the shoreline, nor did they relish the crowded and confining ride, not to mention unneeded advice from Elders. These young men would instead walk with freedom a mile and more from the ocean waves and enjoy exploration, the hunt, and comradeship. The transition from skin boats to interior habitats was already stirring in the minds of the young.

Far out in the water, well beyond the breakers, where the ocean swells were less steep, two paddlers in the lead boat suddenly had surprise written on their faces, as each stopped paddling, to stare at what lay before them. The water had instantly changed from a deep green to a very coarse, muddy brown. A small child wrapped in fur blankets, tucked securely into the middle of the boat's stores, stopped playing with her small ivory-carved toy seal as she heard her mother and the three men fall silent. Was there danger? A big, snorting whale? If so, she could not smell its putrid spray. Too bad. She would have enjoyed wrinkling her nose in a show of maximum displeasure.

The experienced boatmen knew they were not looking at just another stream runoff, spilling its dirt into the ocean. These brown waters were deep, far from shore, and stretched outward as far as they could see. Expert in the ways of boats and oceans, the men were instantly aware that this was the strong drainage from a large river, its current already quickly pushing the bluntly-shaped bow of their boat sideways. In front of them, nearly out of sight on the southern horizon, a prominent headland was in the distance. It loomed in the afternoon's surface haze at least three miles out into the ocean. To their left was a large inlet, which seemed to curve back a few miles to the east. Could this be the new harbor they were seeking?

The end of the inlet would probably offer good shelter from both northwest and southeast winds, which alternately had become so common in the warming climate. There was to be no crossing these current-filled waters, that was sure. Too dangerous in the afternoon winds. They would instead have to hug the shore to avoid the main river current, and paddle to the mouth of the river itself. A few hours later, the entire band arrived to stand next to the river's mouth, busily and noisily dumping its brown water into the ocean from a source they all knew—from years of experience—without doubt was a large glacier to the east. But where? For the first time in their lives a raging current of water was at their feet, with no glacier in sight. This was odd, to say the least.

These First People had discovered the mouth of a river which someday would be named "Chehalis."

It was the first ice-free corridor into the interior of the North American continent that had appeared during a two-thousand-mile-long coastal journey southward. None in the band could have told you that the journey had consumed twelve generations. They had always been mobile, their only goal to find food and good shelter. That was just how they lived. Their lives—and those of their ancestors—had more to do with moving toward the next good food opportunity than it did with "going on a journey." Why take a journey? Food and shelter was what was important.

The Chehalis River's mouth on that day was located some forty miles west of its modern mouth near the busy streets of present Aberdeen and Grays Harbor. Where the First People stood some 15,000 years ago is now covered by almost five hundred feet of salt water.

When the travelers reached the raging river's mouth, did they rest for a day or two? Did the young men excitedly and expectantly begin walking up the banks of this new, big river . . . to make an important discovery? After all, it was the largest river some may ever have seen. Surely they must have wondered if at the river's headwaters there could be a gateway to vast unknown, un-hunted lands. In this new land they were a new species, a truly formidable new predator, that none of the animals or plants had time to adapt to. Probably they were in a predator's paradise where animals, at first, would have no natural tendency to avoid the new species in their world. A world of easy pickings for some time . . .

The travelers had no idea a whole new "Second Earth"—the humanly uninhabited American Continent—unfolded to the east. The band's Elders would have blanched at the thought of having to march inland for several hundred miles. There were animals to be fearful of, not the least of which was the short-faced bear, which in that era stood at the shoulder taller than a moose . . . and whose cheetah-like legs could run much faster than any man. No thanks.

These were marine- and coastal-hunting-dependent people, whose technical tool kit did not include a completely freshwater- or dry-interior adaptation. Round holes, square pegs.

In fact, the first travelers to discover the Chehalis River could just as easily have decided the river was much too fast, much, much too full of glacial dirt and sand, and held nothing of interest for them . . . especially not fat salmon . . . and continued the next day on their slow journey southward.

*Coastal People: These First Peoples' preferred home was the coast, its quiet harbors and its wide and spacious lowlands, filled with plants, animals, and sometimes even megafauna. Huge *Bison antiquus* bison and mastodons were favorite meats, even if the latter were seldom found. The oil and blubber of beached whales and speared seals was a delicacy. Salmon, halibut, and clams were staples.*

When small fires were set on the nearly flat fields of large barnacles attached to intertidal rock beds, well, the cooked barnacles were eaten like candy. When eaten raw, the suction-like feet of certain chitons (mollusks collected from the lower portions of the inter-tidal zone) produced a pleasant, relaxed feeling, not unlike what Euro-Americans would someday experience after three glasses of good German beer.

Why leave this food cornucopia?

Who cared what was up this unknown, dirty river? Pass another chiton.

The Chehalis River Hypothesis

Whether an arrival south of the Puget Lobe happened as described above, or in some entirely different way, a traveling group would eventually have arrived at this river's ever-changing mouth, much further west of today's Pacific coastline, before melting glaciers caused sea levels to rise (Figure 2). These immigrants would have remained long enough that some band members—in a process perhaps taking as long as a generation or more—would have begun to split off from the band, gradually drifting inward along the someday Chehalis River. By about 13,200 years ago, the river would have carried substantially less sediment. Although several species of salmon survive very well in silt-filled waters, the clearing water would have boosted other salmon populations.

Long before a water entrance to Puget Sound began to intrude, when glaciers occupied that same space, it is highly unlikely first peoples would have traveled over and across expanses of glaciers. Doing so would have been difficult, even dangerous work—with nearly zero prospects of available foods. First peoples did not need to do that. There was a much easier entrance available.

The new arrivals were experienced in all manner of technical lifestyle skills. Principal among these was the personal attitude of human adaptation and survival, something never experienced by New World plants and animals. They would have

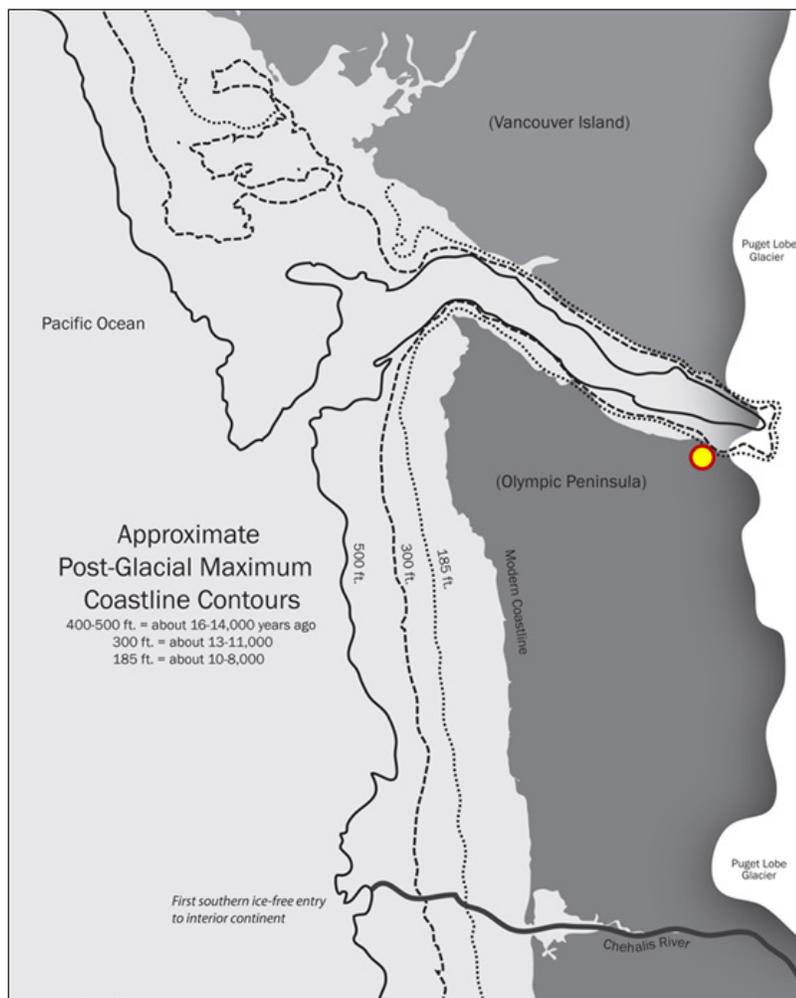


Figure 2. Post-glacial maximum coastlines showing the Chehalis River mouth, draining the melting Puget Lobe Glacier forming interior Lake Russell. The dot shows the location of the Manis mastodon site, dating the hunting of mastodons to 13,800 years ago. Contour locations are based on NOAA Chart 501, "West Coast North America, Mexican Border to Dixon Entrance." (13th Ed., Jun. 2009)

soon learned which hunting, fishing, and gathering techniques worked in the interior, and which did not. As the new colonists made the transition to an interior way of life along the upper reaches of the Chehalis River, they would find a hunter's and gatherer's paradise on immense unoccupied grasslands, with animals un-adapted to them as a truly alien species predator; truly a cornucopia never experienced by their Old World ancestors where they originally evolved with all other plants and animals. A find just as amazing would be that of an extensive glacier-fed freshwater lake covering today's Puget Sound—Lake Russell—which dumped enormous amounts of water through the Black Lake Spillway, into the Chehalis River (Figure 3).

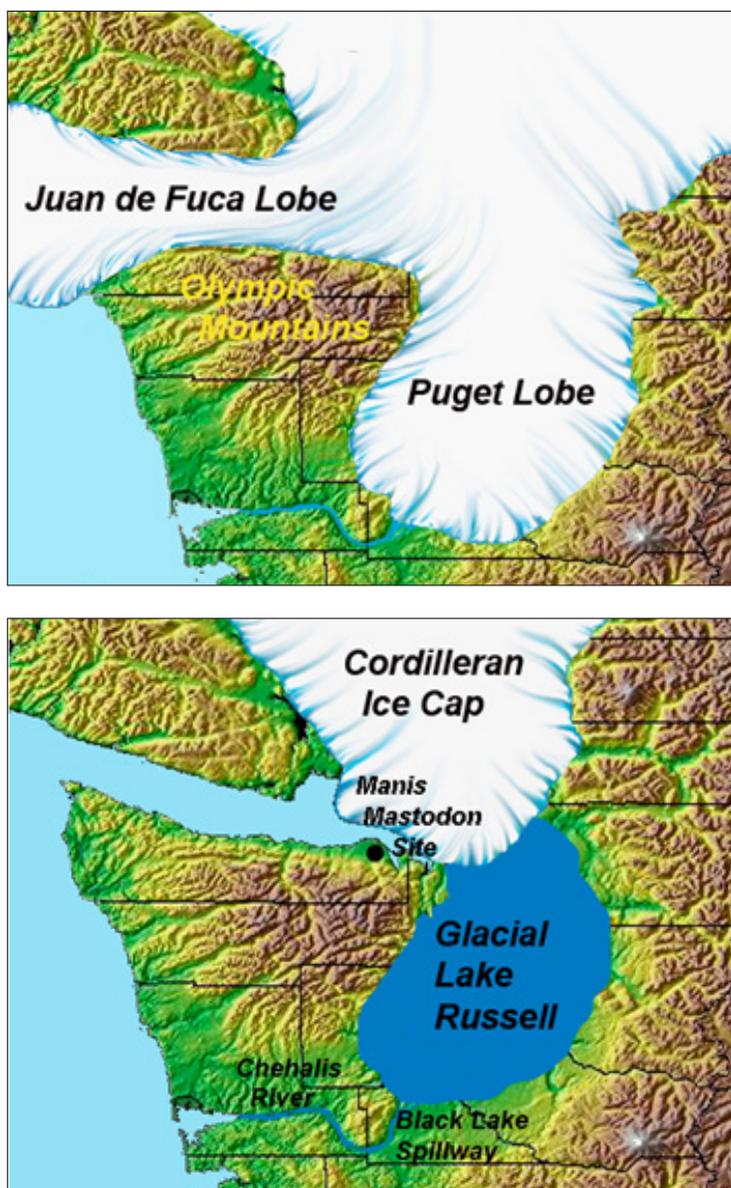


Figure 3. Generalized view of glacial maximum (upper; approximately 18,000-16,000 BP) and maximum extent of Lake Russell (lower; approximately 13,000 BP) showing the Black Lake Spillway into the Chehalis River drainage to the Pacific (Illustration from Figge 2009:282, 284). Manis mastodon site, dated to 13,800 BP, is shown on the eastern edge of a Pacific Ocean Inlet, now the Strait of Juan de Fuca.

The first human beings had arrived to populate what is today southwest Washington and beyond.

From places outside Washington, people entered the New World at least 15,000 years ago, traveling from northeast Asia and following the coast, the continental shelf of the Pacific Basin, with its rich natural resources. The earliest known archaeological site in Washington dates to 13,800 calendar years ago: the Manis mastodon site near Sequim, Washington, a wetland lying a relatively small distance west of the high glaciers that covered Puget Sound at the end of today's Strait of Juan de Fuca (Figures 2 and 3). At this site a hunter's bone spear point was found lodged in the rib of a mastodon skeleton (Waters et al. 2011). As first peoples edged southward along the coast, a huge inland freshwater lake had already formed beyond the tall glaciers to the east, where today is located the marine waters of Puget Sound. The lake had been created by melting water from gigantic surrounding glaciers atop the Cascade and Olympic Mountains, which also had dammed with ice the natural geologic channel of today's Strait of Juan de Fuca. Lake Russell was about 120 feet higher than sea level in today's Puget Sound. It drained to the Pacific Ocean through a spillway channel very near today's Olympia, exiting at the south end of Black Lake in Thurston County, then down a much larger Chehalis River to the Pacific Ocean (Figge 2009; Figures 3 and 4).

Within a thousand years after people hunted mastodons in Sequim, an amazing event was seen by those living near today's Port Townsend. First, the glacier that had dammed the Strait of Juan de Fuca had retreated, and melted and melted, enough that Lake Russell (and associated smaller lakes) finally burst through the final ice dam. The final break was very likely sudden but impressive, producing a flood much smaller than the huge Missoula floods which scoured to bare rock much of today's eastern Washington, and no doubt "cleaned the slate" of any earlier archaeological evidence. At least in our area the earliest archaeological evidence of first people should still be preserved in the high terraces of the Chehalis River, Black Lake Spillway, Lake Russell, and the northeast corner of the Olympic Peninsula.

After the major breaks, more melting took place, lowering the elevation of the former Lake Russell lakebed. Saltwater now entered from today's Strait of Juan de Fuca. "Puget Sound" had begun its existence, and people would have to adapt to these major drawdowns and tidal ocean waters. More and more melting of residual glaciers. More and more seawater. Finally, this truly big change—which could have taken considerable time to complete—shaped the edges and shores of what we see today.

We believe first peoples reached what is now the Chehalis River drainage and Lake Russell region long before the melting of glaciers had become substantial. They did so by working their way down the coast as a maritime-adapted culture, until they came to the mouth of the Chehalis River (Figures 1 and 2). There, the vast quantity of fresh water draining out of Lake Russell, as described in the reconstructed scenario above, would have created a river mouth unlike anything they had ever seen. They had arrived at the end of the vast continental glacier to the east and the north. The Chehalis River would have beckoned as a possibly easy highway. And that was so very unusual. Any exploration of the continental interior had previously been blocked by nearly impenetrable ice and mountains.

Eventually traveling up the ancient Chehalis River, these first peoples could have quickly put boats to use on Lake Russell and the vast, rich inland area around it

(Figures 3 and 4). Did they travel up the Chehalis River *with* their skin boats? Or did they build new ones? That is unknowable. Certainly it was possible to either string their light boats along the river's shoreline or even carry them, just as later Natives and French Canadian voyageurs would do in the very same areas, many thousands of years later.

The possibilities described above rest upon two archaeological concepts: the *Coastal Migration Theory* and the *Chehalis River Hypothesis*.

The gradual emigration down the Pacific coast is known as the widely-accepted *Coastal Migration Theory* (Erlandson 2002, 2010, 2011; Erlandson and Braje 2011; Erlandson et al. 2007, 2008; Figure 1). It postulates, based on a reasonable amount of evidence, that early people with complex marine technologies, including advanced watercraft, traveled along unglaciated coastal areas (called "refugia"), which contained ample marine food resources, including mammals, fish, shellfish, kelp, and seaweed (Dixon 1999, 2011; Fedje and Josenhans 2000; Fedje 2005; McLaren et al. 2014, 2015). They also could have hunted large game in the coastal refugia, such as bear, caribou, bison, and mastodons, as seen at the Manis mastodon site. During the past two decades, the *Coastal Migration Theory* concept has been propelled forward by a proliferation of new research methods, the discovery of very old sites like Manis, and compelling new geologic and biometric data demonstrating that a mid-continent ice-free corridor was almost certainly not the path of the very earliest arrivals.

Despite the presence of nearby glaciers on lands and mountains to the east, an ice-free *coastal* route held plentiful food and was dotted with many ice-free and

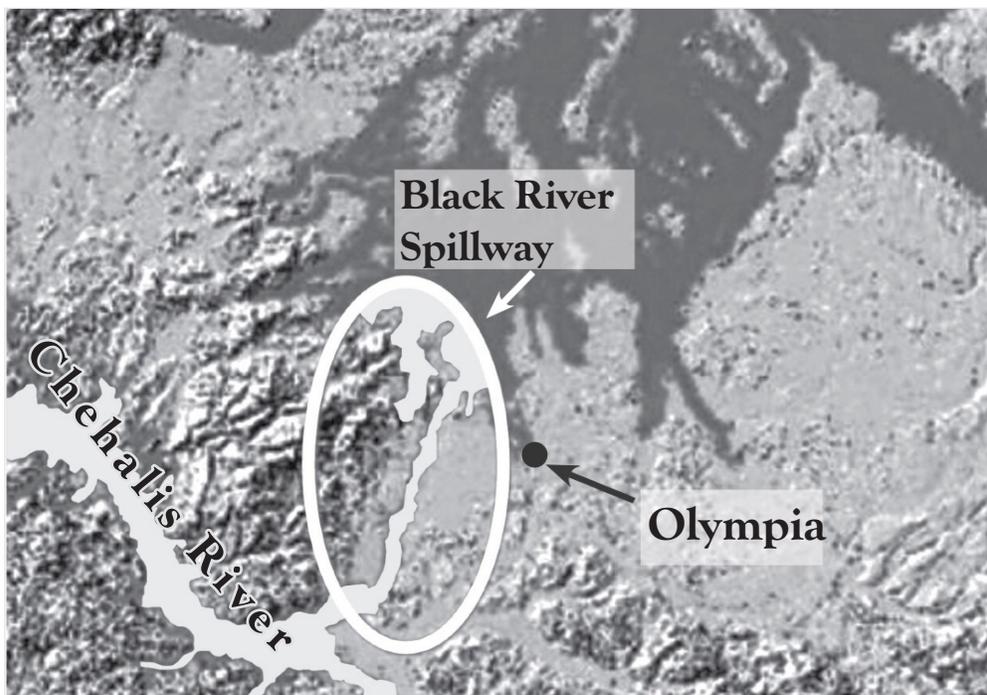


Figure 4. Lidar map showing the Black Lake Spillway, where Glacial Lake Russell drained to the Pacific Ocean down the Chehalis River. The first peoples to enter the American continent would likely make their way up these narrows and discover a rich fresh water lake, Lake Russell, which eventually broke through the northern Sound ice dams into the Straits of Juan de Fuca.

secure coves and harbors. The route would have been available to paddlers using skin boats as early as 16,000 years ago, who would have accessed a chain of islands that were never (or, in some cases, only partially) covered by ice. A second mainland-based route was later available for foot travelers as the ice cap further receded from the continental coastline.

It was not the majestic mountain journey you might see as a passenger on a cruise ship or ferry, plying the waters of today's Inside Passage. There was scarcely a tree to be seen even as late as 13,000 years ago. Instead, great expanses of dwarf shrubs and herbs stretched all the way from Alaska to today's Olympia Peninsula.

Scientists believe that a wide band of kelp was present along the coastline from today's Alaska all the way south, beyond today's California. This formed what is called by some archaeologists the "kelp highway" (Erlandson et al. 2007). Such a shoreline corridor was very important to the travelers' survival and acted as a convenient marine food and tackle store for deep sea fishing lines of kelp tapes. Kelp also was home to innumerable fish and aquatic mammals.

The coastal route is widely held to have been a major path of entry into the New World. At least during the extremes of the last ice age, it was probably the *only* path before the actual opening of the interior continental ice-free corridor, which did not occur until well after people had settled the New World (Figure 1).

Because the *Coastal Migration Theory* has such a strong claim to validity, the Chehalis River valley becomes a candidate to be one of the first—if not *the* first—paths of human entry into what was truly a Second Earth and New World—the American continents. The Chehalis River valley was the first ice-free corridor leading to the interior that coastal travelers would have found. At least for the earliest southward migrants, the still-extensive Puget Lobe glaciation would have completely blocked, or made very unattractive, any hope of entering the continent through today's Puget Sound regions. This theory is known as *The Chehalis River Hypothesis* (Croes et al. 1996; Croes et al. 2008; Croes 2015).

Today a modest, usually polite, Chehalis River flows through a very wide valley to its mouth at Grays Harbor. The reason the valley is so large is that it once was the drainage outlet for Lake Russell, an enormous inland freshwater glacial lake, which—circa 14,500–13,200 years ago—covered much of the present southern Puget Sound region (see Figures 3 and 4; Kruckeberg 1991:Table 3). Its waters, and those of tributaries such as today's Skookumchuck River, were created by the melting Puget Lobe glacier and runoffs from nearby mountain glaciers and snowfields. Geologists have determined that the lake drained primarily through today's Black Lake and Black River (called the Black Lake Spillway; Figures 3 and 4; Gendaszek 2011:8–9). When outflow volumes were high, a raging, boiling, scouring Chehalis River was the result. From time to time small ice dams blocked the outflow of the various lakes and spillways. When these dams burst, floods coursed rapidly through the Black and Chehalis River valleys, expanding their size. Today's Chehalis River is but a trickle in comparison to its predecessor's ancient floods and stream flows.

Those first humans who proceeded upriver would soon have discovered Lake Russell and the current, though flooded, land of today's southern Salish Sea. As the Puget Lobe continued to retreat northward, Lake Russell would grow about as far as Seattle, to become an exceedingly large freshwater lake covering the southern half of today's Puget Sound and its adjacent shores.

Generations of travelers may have remained in the vicinity of Lake Russell, islands therein, and on the expansive, easily-traveled plains of the Logan Hill Formation (and neighboring outwash formations and drifts), through which the Chehalis, Cowlitz, and Newaukum rivers flowed. There is every likelihood that the plains—now central Lewis County—would have been a hunter's and plant-gatherer's paradise. A full range of mammals, including mastodon and mammoth, was present, which had never experienced this highly capable new predator and alien species in their New World environments.

As discussed above, the freshwater in Lake Russell (and affiliated northern lakes) eventually burst through the last, melting ice dam, allowing sea water to invade what is today the marine Puget Sound. From that time onward, it is probable most immigrants to southwestern Washington traveled along the protected shores of Puget Sound, instead of along exposed ocean shores to the mouth of today's Chehalis River.

The Evidence

At its edges, the pursuit of the earliest Northwest archaeology has far more questions than answers. No archaeological sites in the Chehalis, Newaukum, and Cowlitz river valley systems have yet been discovered that support the *Chehalis River Hypothesis*, i.e., demonstrating that humans were present in southwest Washington 15,000 and more years ago.

This is partly due to the area's comparative remoteness. Unlike Puget Sound, whose ground has been more frequently disturbed and penetrated by a denser current human population, the watersheds of the Chehalis, Newaukum, and Cowlitz rivers still consist mostly of farms, suburban homes, and trees, dotted with much smaller communities than those in the megalopolis to the north. The successive scourings of the Chehalis and nearby rivers may have removed some evidence (but not as seriously as the Missoula Floods through the lower narrows of the Columbia River). As sea levels rose and the river valleys silted in, sites may have been buried under many tens of feet of silts and sands.

A formidable obstacle to the discovery of evidence is the flood-prone nature of the north and central Lewis County area. The laying down of Lake Russell sediments provided the first cloaking of the early Americans' activities. If since 15,000 years ago, only one flood took place annually involving the Chehalis, Newaukum, and Skookumchuck watersheds, some 15,000+ floods and their sediments have covered the land, creating a flat valley. Early archaeological sites would now be deeply buried under these flood deposits.

The Manis, Ayer Pond, and Paisley Sites

Food was the necessary ingredient for a southward migration and was often its main purpose. No food, no migration. Several kill sites of large animals, hunted by the earliest Americans have been found reasonably close to the Chehalis River.

The oldest and most convincing was found at the 13,800-year-old Manis mastodon site at Sequim, Washington, along the Straits of San Juan de Fuca, and about 75 miles north of the Chehalis River. Prior to 1979, numerous mastodon bones and skeletons had been found in various bogs near Sequim. In that year,

archaeologists unearthed a skeleton with a human-made bone projectile embedded in a mastodon's rib, demonstrating human involvement (Waters, et al. 2011). The coastal hunters of that day were not laid-back, retiring types . . . a mastodon was normally 9–10 feet tall, 16 feet in length, and weighed about eight tons—the equivalent of four Brahma bulls wrapped into one elephant skin. And angry.

At about the same time period—13,800 years ago—a bison was “boutique-butchered” (only its hindquarters were taken) by humans at Ayer Pond, on present San Juan Island (Schalk et al. 2007; Wilson et al. 2009; Wilson et al. 2010). Ayer Pond is about 45 miles northeast of the Manis site.

Bison antiquus was normally seven-foot tall, 15-foot long, and weighed 2,300 lbs. Truly jumbo-sized steaks. The discovery of its bones and tell-tale human cut marks in 2007 demonstrates humans and megafauna were present only 105 airline miles north of the Chehalis River. Clearly, both humans and food were present in the region at early dates, which would have supported human activity in the Chehalis River area.

Much farther away, some 325 miles, a cave at Paisley, Oregon, contained human feces (the polite term is “coprolites”) dated at 14,000+ years ago (Fagan 2005). Did the cave's occupants, or their ancestors, enter the continent through the Chehalis River, Puget Sound, the Columbia River . . . or?

Ancient Language Stocks

In addition to archaeological search and study of actual artifacts, similar efforts have been made to trace the migrations of coastal people through the study of language origins. In the many centuries following the first entry into the North American continent, a succession of different languages developed over time. At the time of European contact, some ten different major languages, in five major stocks, existed in western Washington alone (Thompson and Kinkade 1990:30–33). A great question for linguists: what do these languages have to say about past conditions or remote origins in Asia? Can they help define the time periods of arrival and local conditions encountered?

“Paleo-linguists” start their complicated research with one arm already tied behind their backs—many less-prevalent Native American dialects have completely disappeared. Even though a dialect has survived, and is believed to be ancient, it still cannot be placed under a microscope to be examined as if it were an artifact, nor does it have organic features, e.g., DNA, that can be chemically traced. The complicated study of Northwest linguistics instead focuses on both general features and minute markers within surviving dialects, then traces these back through associated other “daughter” dialects to a parent or “mother” language. Such comparisons can reveal what trees, plants, and animals lived in the region over time, as well as general features of kinship and community.

Today there is agreement that the Native American languages of North America can be traced to areas within Asia and suggest distinctly different major waves of migration by coastal peoples. There is considerable current interest by linguists in the languages that were brought to and developed in southwest Washington by migrants from the north. Today the current Wakashan, Salish, and Chemakuan language families cannot be easily associated with any of the languages in the rest of the Americas,

often their affiliation is considered “Undetermined” (Kopper 1986:58–59). Possibly these languages, all found in the Salish Sea, are just too ancient to relate to potentially later languages found throughout North (and South) America. Later language groups may have had to steer clear of these already well occupied and original peoples of the Americas.

Pre-4,000 B.P. Projectile Point Styles in the Puget Sound Region

Fluted and stemmed stone spear points, typical of early archaeological sites from the end of the last Ice Age in North America, are rare in the Puget Sound. Only eight fluted points are known from the region, four of which are from the area of south Puget Sound. None of these fluted points are from dated contexts. These points, along with those from the Manis mastodon site are the earliest evidence we have for the first peoples of the region and are briefly described below with their locations shown on Figure 5. Stemmed points are likewise not well-represented from dated sites in the Puget Sound, with the possible exception being the Bear Creek site (45-KI-839) in Redmond (Kopperl et al. 2015).

At the southern end of Puget Sound, a Clovis point was found “west of Olympia in the Chehalis River Valley” and another was found “in the Black Hills area west of Olympia” (Figure 5) by a man who was grubbing stumps (Osborne 1956:41–42). Avey (1992) reported two fluted point bases, one from a private collection in Pierce County that he believes was collected at either Hart’s Lake or Anderson Island, and another from a survey of the Pierce Community College campus (Figure 5; Avey and Starwich 1985; Avey 1992).

To the north, a Clovis point was found in a bog in 1983. That location (45-KI-215) was investigated by Meltzer and Dunnell (1987). Another Clovis point was found in a peat bog near Yukon Harbor; the location (45-KP-139) was investigated by the University of Washington (Figure 6). No other remains were found at either location. Farther north two Clovis points have been found, one in a garden on Whidbey Island (45-IS-112), and one of unknown provenience in the collections of Western Washington University (Avey 1992:13-16; Figure 5).

The cultural traditions that succeeded the fluted and stemmed technologies of the Paleoindian cultures in the Pacific Northwest are referred to by a variety of names depending on the researcher. Here, the term Olcott, which Carlson (1990:62) has noted is “conveniently vague” will be used for sites older than 4,000 years.

Sites from the Olcott period, with both large collections of projectile points and materials that can be directly dated, are not common in the Puget Sound area. Olcott tools are characterized by leaf-shaped bifaces that functioned as knives and spear points. These tools lack the flutes or stems of the earlier points, and are typically larger than the later smaller, stemmed and notched points meant for use on thrown darts and arrows. Due to the widespread acidic soils of the region, it is common to find sites containing limited numbers of lithic artifacts but few, if any, objects made from other materials. This severely limits the ability of archaeologists to understand much regarding the complex cultures that produced such sites and which certainly used a rich variety of bone, wood, and other organic materials. Such sites are often dated by means of stone tool types or their environmental context, such as when they occur on old river terraces. An example of this is a find near Olympia of a large, unusually

notched biface (Figure 6). The find, designated 45-TN-333, consisted of a single large biface made of weathered igneous rock, found at a depth of one meter below the existing ground surface during landscaping work. Limited testing at the site revealed the deposit to be poorly sorted glacial till materials on the edge of the Pleistocene spillway of Lake Russell through the Black River. With its unusual notching style and large size, the artifact is unique to the area. Unfortunately, while its environmental context suggests it is old, its date of origin is uncertain.

The available evidence suggests that a wide variety of projectile point types were used in the Puget Sound area from the early Holocene to the contact period. Archaeological collections frequently contain a wide variety of stemmed, notched, and leaf-shaped points, which appear to reflect different functional classes (e.g., dart points, thrusting/dispatching points). The frequency of tools made from fine-grained volcanic or metamorphic rock appears higher in the early and mid-Holocene periods than in the late Holocene (Croes et al. 2008). However, this conclusion is not certain and may in fact be influenced by sample size. The only definite change appears to be the addition of arrow points in the last 2,000 years (Daugherty et al. 1987).

Conclusions

“A deep funk”—that’s sometimes what archaeologists laughingly say they have fallen into when they contemplate deep time.

So why the deep funk? Archaeologists know that in the future, new tools and methods will unlock many of the secrets of the earliest residents of what is now the southern Salish Sea. Archaeologists currently hard at work will not be privileged to live long enough to hear the future answers to their questions and hypotheses. Future



Figure 6. A typical Clovis point (above), found at Site 45-KP-139. The large stone tool (below) is from Site 45-TN-333.

discoveries will undoubtedly enable those who read these same words in 2117 to know so very much more about the Chehalis drainage and south Salish Sea first residents.

Even with our limited understanding of deep time in the region, by using models such as the *Coastal Migration Theory* and the *Chehalis River Hypothesis* combined with what we know of Lake Russell, the Black River Spillway, the once-huge Chehalis River, and the open and mostly level grasslands stretching to the Cowlitz River where mastodons once roamed, we are getting more and more pieces of the puzzle to view. Right now, that puzzle is imperfectly seen, but with more research and more data it becomes clearer every year. What we can see points to the conclusion that the Chehalis River drainage and the southern Salish Sea were squarely at the crossroads of early entry into the Northwest and probably the entire “Second Earth,” the American continents.

But, archaeologists do not yield to temptation. Instead, they rely on highly peer-reviewed scientific facts. And so, the daily search goes on. The remaining pieces of the puzzle, from the rich heritage of early and later Chehalis River drainage and southern Salish Sea—with its unique deep time—will indeed be found, one by one.

REFERENCES CITED

- Adovasio, J. M.
2002 *The First Americans: In Pursuit of Archaeology's Greatest Mystery*. Random House, New York.
- Avey, M.
1992 Fluted Point Occurrences in Washington State. Ms. on file at Pierce College, Tacoma, WA.
- Avey, M. and C. Starwhich
1985 Pierce County Cultural Resource Survey, Phase I, Archaeology. Pierce County Planning Department, Tacoma. Ms. on file, Washington Department of Archaeology and Historic Preservation. Olympia, WA.
- Carlson, Roy L.
1990 Cultural antecedents. In *Northwest Coast*, edited by Wayne Suttles, pp. 60–69. Handbook of North American Indians, Vol. 7, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, D.C.
- Chatters, James C., Jason B. Cooper, Philippe D. LeTourneau, and Lara C. Rocke
2011 *Understanding Olcott: Data Recovery at 45SN28 and 45SN303*. Volume I Report for the Department of Public Works, Snohomish County, Washington.
- Croes, Dale R.
1995 *The Hoko River Archaeological Site Complex, The Wet/Dry Site (45CA213), 3,000–1,700 B.P.* Washington State University Press, Pullman.

- 2005 *The Hoko River Archaeological Site Complex, The Rockshelter (45CA21), 1,000–100 B.P.* Washington State University Press, Pullman.
- 2015 The Salish Sea: Using Wet and Dry Site Archaeology to Explore the Defining Temporal Characteristics of this Inland Sea. *Journal of Wetland Archaeology*, 15(1):72–108. Oxbow Books Ltd., Oxford, UK.
- Croes, Dale R. and Steven Hackenberger
1988 Hoko River Archaeological Complex: Modeling Prehistoric Northwest Coast Economic Evolution. In *Prehistoric Economies of the Pacific Northwest Coast*, edited by B.L. Isaac, pp. 19–85. *Research in Economic Anthropology Supplement 3*. JAI Press, Inc., Greenwich CT.
- Croes, D. R., J. Strong, and O. Newsome
1996 Proposal To Test The Chehalis River Hypothesis. South Puget Sound Community College Exceptional Faculty Funds Program.
- Croes, D. R., S. Williams, L. Ross, C. Dennler, and B. Vargo
2008 The Projectile Point Sequences in the Puget Sound Region. In *Projectile Point Sequences in Northwestern North America*, edited by R. Carlson and M. Magne, pp.105–130. Simon Fraser University, Burnaby, B.C.
- Croes, Dale R. with Rhonda Foster and Larry Ross (editors)
2013 Qwu?gwes—The Qwu?gwes Archaeological Site and Fish Trap (45TN240) and Tested Homestead (45TN396), *Eleven-Year South Puget Sound Community College Summer Field School Investigation with the Squaxin Island Tribe—Final Report*. On file and online with the Washington Department of Archaeology and Historic Preservation (WDAHP), Olympia, WA.
- Daugherty, R., J. Flenniken, and J. Welch
1987 A Data Recovery Study of Judd Peak Rockshelters (45-LE-222) in Lewis County, Washington. *Studies in Cultural Resources Management No. 8*. USDA Forest Service, Pacific Northwest Region, Portland, OR.
- Dixon, James E.
1992 *Quest for the Origins of the First Americans*. University of New Mexico Press, Albuquerque.
- 1999 *Bones, Boats, & Bison: Archaeology and the First Colonization of Western North America*. University of New Mexico Press, Albuquerque.
- 2011 Pleistocene Colonization of North America from Northeast Asia: New Insights from Large Scale Paleographic Reconstructions. *Quaternary International*, XXX:1–11.

- Erlandson, Jon M.
2002 Anatomically Modern Humans, Maritime Voyaging, and the Pleistocene Colonization of the Americas. In *The First Americans*, edited by N. G. Jablonski, pp. 59–92. University of California Press, Berkeley.
- 2010 Neptune’s Children: the Evolution of Human Seafaring. In *The Global Origins (and Development) of Seafaring*, edited by Atholl Anderson, pp. 19–27. McDonald Institute for Archaeological Research, Cambridge, MA.
- 2011 A Deep History for the Pacific: Where Past, Present, and Future Meet. *Journal of Pacific Archaeology*, 1(2):111–114.
- Erlandson, Jon M., Madonna L. Moss, and Matthew Des Lauriers
2008 Life on the Edge: Early Maritime Cultures of the Pacific Coast of North America. *Quaternary Science Reviews*, 27:2232–2245.
- Erlandson, Jon, Michael H. Graham, Bruce J. Bourque, Debra Corbett, James A. Estes, and Robert S. Steneck
2007 The Kelp Highway Hypothesis: Marine Ecology, the Coastal Migration Theory, and the Peopling of the Americas. *Journal of Island & Coastal Archaeology*, 2:161–174.
- Erlandson, Jon M. and Todd J. Braje
2011 From Asia to the Americas by boat? Paleogeography, Paleoecology, and Stemmed Points of the Northwest Pacific. *Quaternary International*, 239:28–37.
- Fagan, Brian M.
2005 *Ancient North America*. Thames & Hudson, London.
- Fagan, Brian M.
2011 *The First North Americans*. Thames & Hudson, London.
- Fedje, Daryl W. (Editor).
2005 *Haida Gwaii: Human History and Environment from the Time of Loon to the Time of the Iron People*. UBC Press, Vancouver, B.C.
- Fedje, Daryl W. and Heiner Josenhans
2000 Drowned Forests and Archaeology on the Continent Shelf of British Columbia, Canada. *Geology*, 28(2):100.
- Figge, J.
2009 *An Introduction to the Historical Geology of Washington State and Southern British Columbia*. Website of the Northwest Geological Institute:
<http://www.northwestgeology.com/>

Fladmark, Knut R.

1979 Routes: Alternate Migration Corridors For Early Man in North America. *American Antiquity*, 44(1):55–69.

1983 Times and Places: Environmental Correlates of Mid-to-Late Wisconsinan Human Population Expansion in North America. In *Early Man in the New World*, edited by R. Shutler, Jr., pp. 13–43. Sage Publications, Beverly Hills, CA.

1986 *British Columbia Prehistory*. The Runge Press, Ottawa, ON.

1986 Getting One's Berings. *Natural History*, 95(11):8–19.

Gendaszek, A. S.

2011 Hydro-geologic Framework and Groundwater Surface-water Interactions of the Chehalis River Basin, *U.S. Geological Survey, Scientific Investigations Report*, #5160, Washington, D.C.

James, T., E. J. Gowan, I. Hutchinson, J. J. Clague, J. V. Barrie, and K. W. Conway
2009 Sea-level Change and Paleogeographic Reconstructions, Southern Vancouver Island, British Columbia, Canada. *Quaternary Science Reviews*, 28 (13–14):1200–1216

Kenady, S. M., M. C. Wilson, R. F. Schalk, and R. R. Mierendorf

2010 Late Pleistocene Butchered *Bison antiquus* from Ayer Pond, Orcas Island, Pacific Northwest: Age Confirmation and Taphonomy, *Quaternary International*, 233(2):130–141.

Kopper, Philip

1986 *The Smithsonian Book of North American Indians, Before the Coming of Europeans*. Smithsonian Books, Washington D.C.

Kopperl, Robert E., Amanda K. Taylor, Christian J. Miss, Kenneth M. Ames, and Charles M. Hodges

2015 The Bear Creek Site (45K1839), a Late Pleistocene-Holocene Transition Occupation in the Puget Sound Lowland, King County, Washington. *Anthropology Faculty Publications and Presentations*, Portland State University PDXScholar.

Krantz, Grover S.

1981 *The Process of Human Evolution*. Schenkman Publishing Company, Cambridge, MA.

Kruckeberg, Arthur R.

1991 *The Natural History of the Puget Sound Country*. University of Washington Press, Seattle.

- Kucera, Victor J.
2012 *Alpha, The Classic Hills of Alpha Prairie, Washington*. Pacific Star Press, Ketchikan, Alaska.
- Madsen, David B.
2004 Colonization of the Americas before the Last Glacial Maximum, In *Entering America: Northeast Asia and Beringia Before the Last Glacial Maximum* edited by David B. Madsen, pg. 3. University of Utah Press, Salt Lake City.
- McLaren, Duncan, Daryl Fedje, Murray B. Hays, Quentin Mackie, and Christina Neudorf
2014 A Post-glacial Sea Level Hinge on the Central Pacific Coast of Canada, *Quaternary Science Reviews*, 97:148–169.
- McLaren, Duncan, Farid Rahemtulla, Gitla (Elroy White), and Daryl Fedje
2015 Prerogatives, Sea Level, and the Strength of Persistent Places: Archaeological Evidence for Long-term Occupation of the Central Coast of British Columbia, *BC Studies*, 187:155–191.
- Meltzer, David and Robert Dunnell
1985 Fluted Points from the Pacific Northwest. *Current Research in the Pleistocene*, 4:64–67.
- Schalk, Randall F., Stephen M. Kenady, and Michael C. Wilson
2007 Early Post-glacial Ungulates on the Northwest Coast: Implications for Hunter-Gatherer Ecological Niches, *Current Research in the Pleistocene*, 24:183–185.
- Thompson, Laurence C., and M. Dale Kinkade
1990 Languages. In *Northwest Coast*, edited by Wayne Suttles, pp. 30–33. Hand-book of North American Indians, Vol. 7, William C. Sturtevant, general editor, Smithsonian Institution Press, Washington, D.C.
- Waitt, R. B. Jr. and R. M. Thorson
1983 The Cordilleran Ice Sheet in Washington, Idaho, and Montana: In *Late-Quaternary Environments of the United States, Volume 1: The Late Pleistocene* edited by H.E. Wright, Jr. and S. C. Porter, Chapter 3, pp.53–70. University of Minnesota Press, Minneapolis.
- Waters, Michael R., Thomas W. Stafford Jr., H. Gregory McDonald, Carl Gutafson, Morten Rasmussen, Enrico Cappellini, Jesper V. Olsen, Damian Szklarczyk, Lars Juhl Jensen, M. Thomas P. Gilbert, and Eske Willerslev
2011 Pre-Clovis Mastodon Hunting 13,800 Years Ago at the Manis Site, Washington. *Science*, 334–351.
- Wilson, Michael C., Stephen M. Kenady, and Randall F. Schalk
2009 Late Pleistocene *Bison antiquus* from Orcas Island, Washington, and the

Biogeographic Importance of an Early Postglacial Land Mammal Dispersal Corridor from the Mainland to Vancouver Island. *Quaternary Research*, 71:49–61.

Wilson, Michael C., Stephen M. Kenady, Randall F. Schalk, and Robert F. Mierendorf

2010 Late Pleistocene butchered *Bison antiquus* from Ayers Pond, Orcas Island, Pacific Northwest. *Quaternary International*, XXX:1–12.

ABOUT THE AUTHORS

Dale R. Croes received his B.A. in anthropology from the University of Washington (UW) and his M.A. and Ph.D. in anthropology at Washington State University. He did his Ph.D. dissertation research on basketry and cordage artifacts from the Ozette Village wet site; conducted post-doctoral research with the Makah Tribal Nation at the Hoko River wet site and Hoko Rockshelter shell midden; directed first-ever archaeological excavations at the National Historic Landmark wet site of Sunken Village with the Confederated Tribes of Siletz Indians, Confederated Tribes of Grand Ronde and the Confederated Tribes of the Warm Springs Indians; and co-directed excavations of the Qwu?gwes wet and dry site with the Squaxin Island Tribe. He is currently working with Ed Carriere, Suquamish Elder and Master Basketmaker in writing *Memoir 15* for JONA, highlighting their work to analyze and replicate 2,000 year old Biderbost wet site basketry housed at the UW Burke Museum. They call their work *Generational-ly-Linked Archaeology* and their memoirs should be out the first of 2018.

Adjunct Professor, Anthropology, Washington State University
Director, Pacific Northwest Archaeological Society and Services
Email: dcroes444@gmail.com

Vic Kucera received a B.S. in journalism and an M.B.A. in business administration from the University of Oregon. Following a 30-year career in public relations and government affairs, he became an historian and heritage enthusiast of the early Native American, fur trade and Euro-American settlements of southwest Washington, producing two books, *Onalaska* and *Alpha*. Kucera was a founding member with Dale Croes of the Pacific Northwest Archaeological Society. During his retirement, he spent some 13 years piloting a trawler annually between Washington and Alaska. The many miles traveled in coastal waters honed an interest in writing about how “first arrival” may have taken place. Kucera is currently researching and writing a book which traces the development of “theatre” in a frontier community, from Native American times to modern Internet presentations.

Email: vickucera@gmail.com

Treaties, Coast Salish Literacy, and Thomas G. Bishop: A Republication of *An Appeal to the Government to Fulfill Sacred Promises Made 61 Years Ago*

Robert E. Walls

Abstract In 1916, a founding member of the Northwestern Federation of American Indians, Thomas G. Bishop, published one of the first books authored by a Native person in the Pacific Northwest. Bishop used the book, titled “An Appeal to the Government to Fulfill Sacred Promises Made 61 Years Ago,” to address the unfulfilled promises of regional treaties, particularly the Treaty of Point No Point. In its written representation of elders’ memories of the treaty agreement, the book was an early attempt to bridge oral and print cultures for political advocacy. As such, it provides the basis for further research into the significance of indigenous engagements with alphabetic literacy. Bishop’s book has remained exceptionally rare, and is reprinted here for the first time.

Introduction

Suquamish elder Lawrence Webster once noted: “History could have died if Tommy Bishop did [not] start asking questions” (Harmon 1998:182). Webster’s comment is an important reminder of the historical significance of Thomas G. Bishop (Snohomish), a founding member of the Northwestern Federation of American Indians (NFAI), who devoted the last decade of his life to advocating for the treaty rights of Native peoples, in Washington State and beyond. Yet scholarly recognition of Bishop’s contributions has been slow to emerge, in part because of a scant and scattered paper trail. This trail includes his authorship of one of the first books written by a Native person in the Pacific Northwest, a slim volume of 42 pages titled *An Appeal to the Government to Fulfill Sacred Promises Made 61 Years Ago* (1916). With only three known copies in public institutions, Bishop’s work is rarely cited, yet Native scholars familiar with it have praised its status as foundational to treaty challenges in the twentieth century (Bishop and Hansen 1978). The book’s republication, therefore, is long overdue; it is provided following this introductory essay, courtesy of the Northwest Room collections in the Tacoma Public Library.

Treaty Talk and Native Literacies

Most anthropologists and ethnohistorians of the Northwest are keenly aware of regional treaties and their profound impact on the lives of indigenous communities. Also acknowledged is the fact that treaties—as texts—have long intersected with a range of other texts, oral and written, produced in private

and public spheres in reaction to the original legal documents. From spoken commentaries at longhouse events, statements at federal hearings, and letters to local newspapers, Native people have remembered, deliberated, and contested the intent and consequences of treaties. Ethnohistorians, especially, have provided insightful studies of the evolving Native engagement with treaties through time. Alexandra Harmon (1998) has discussed how treaties contributed to the formation of wider regional ethnic relations and identities, Andrew Fisher (1999) has outlined how historians might regard oral traditions and elders' memories of treaties as legitimate sources of historical evidence, and Chris Friday (2008) has demonstrated how ritual performances of treaty remembrances, such as Treaty Day celebrations, have served to publicly articulate and revitalize indigenous perspectives across generations for a variety of audiences, including non-Indians. With such a variety of texts, and textual communities, we can readily appreciate Harmon's (2005) apt description of treaty history as "a subject for agile minds."

However, whether it is because of the rarity of early Native written texts, or the tendency to highlight spoken testimony as more "authentic" and authoritative, scholars in the Northwest have been slow to consider the impact of alphabetic literacy on this process (cf. Carlson 2011). How has a lettered life, and the inclination to publish Native viewpoints for an audience of intercultural readers, influenced regional understandings of treaties? Did Bishop's book matter? One can argue that it is certainly time to begin valuing what early Native activists in the region put on paper for public consumption.

Over the past twenty years, research in both anthropology and indigenous studies has generated a rich body of studies that examine the historical legacy of documents written by indigenous people, in North America and beyond. Recent scholarship has demonstrated how alphabetic literacy, the technology of writing, and the engagement of a wider audience through publication—from Africa, to the Andes, to New England—have been a crucial means to expand the boundaries of oppositional discourse in colonial contexts (e.g., Barber 2007, Salomon and Niño-Murcia 2011, Bragdon 2002). By adopting the literary conventions and accepted authority of Western print culture—in ways that supplemented but did not replace the importance and integrity of traditional orality—Native writers such as William Apess, Sarah Winnemucca Hopkins, George Copway, and Zitkála-Šá (Gertrude Simmons Bonnin), to name but a few, were able to challenge federal policies, assert rights, and negotiate the politics of citizenship and belonging, while simultaneously establishing valuable connections between indigenous activists and reformers (e.g., Brooks 2008, Konkle 2004, Vigil 2015). It is within this context of vital scholarship that we should examine the writing of early Native authors such as Thomas Bishop and his short but significant contribution to law, literature, and history in the Pacific Northwest.

Thomas G. Bishop

Thomas Godfrey Bishop (1859–1923) (Figure 1) was the first-born child of William Bishop Sr. (1833–1906), a British seaman turned dairy farmer in the Chimacum Valley of Washington State, and his first wife, "Lag-wah," Sally Klasitook Bishop (1840–1916). Russel Barsh (2017a, 2017b) has provided helpful

biographical portraits of the Bishops, particularly Sally, a Snohomish woman who was the daughter of S'lootsloot, a high-status man originally from Hibulb, the palisaded village and trading center that once existed on what is now the southern edge of the Tulalip Reservation. Together, William and Sally had two more children: a daughter, Elizabeth, and a son, William Jr. (1861–1934), who became a well-known Republican state legislator, serving from 1898 until his death. When Thomas was but 10, his parents separated, and his father married a woman born in Scotland, Hannah Hutchinson, while his mother, Sally, later married Charles Williams, a Finnish neighbor at Chimacum. Thomas and his siblings were raised by his father, mother, and then stepmother on their relatively prosperous farm, located on ancestral Chemakum land. The farm included acreage for hops and an orchard used seasonally for intertribal encampments, favored by Native families traveling to and from the Puget Sound area's hop fields.



Figure 1. Portrait of Thomas G. Bishop. Courtesy of Cornell University.

After graduating from the local “common school,” Thomas worked on the farm until he was about twenty-five when he married a Swedish immigrant, Inger Carlson, and worked as a butcher in Port Townsend. A few years later, they moved to Tacoma and shared a home with their six children and his mother-in-law. His occupations included stevedore, butcher, and proprietor of a cigar and tobacco store. An injury on the docks restricted his physical abilities, and he eventually became a notary public, a position requiring familiarity with affidavits, power of attorney forms, and other legal paperwork that, no doubt, helped him later with the bureaucratic mass of documents encountered in his work for the NFAI.

Sometime before 1913, Bishop became passionately involved in the struggle for Native rights, inspired by the issues facing local Coast Salish, and perhaps also the general radical sentiments that characterized the workers’ movement in western Washington at the time. In February of 1913, he helped establish the NFAI in Tacoma, becoming its first president and, indeed, its true “architect” (Harmon 1998:178). He advocated tirelessly for landless Indians and tribes, such as the Duwamish (cf. Miller 2015:29–34), gathering reams of letters and affidavits documenting the tribal status of applicants for allotments, used primarily for

Roblin's roll of unattached Indians. He also lobbied for a bill to fund purchase of land and the construction of buildings to shelter infirm and helpless elders.

In 1919, Bishop entered the national arena and wider struggle for Native rights, becoming the secretary-treasurer for the Society of American Indians, working often in Washington, D.C., while maintaining a home in Tacoma. His tenure was not uncontroversial, as he was compelled to pick sides in the factious climate of the organization as it began to fail in the early 1920s. What does survive of his official correspondence, however, indicates that he continued to advocate for Northwest Native interests, even as he worked alongside such luminaries as Charles Eastman, Zitkála-Šá, Henry Roe Cloud, Carlos Montezuma, and Arthur C. Parker. By 1922, though, Bishop had become quite ill and sufficiently destitute that an administrator for the American Indian Arts and Crafts Foundation—where he was affectionately called “Daddy Bishop”—wrote to his brother, William, requesting funds for “a decent suit of clothes” and a ticket home for Thomas (McDaniel 2004:89). On May 5, 1923, Thomas Bishop passed away in Washington, D.C., failing to receive much public acknowledgment of his efforts for Northwest tribes or witness the citizenship granted all Native people a year later. Bishop was buried close to his family home, in Chimacum.

While there is virtually nothing to indicate what Thomas Bishop wrote prior to 1916, he did publish quite a bit afterward. His letters and speeches were reprinted in newspapers and magazines from western Washington to Muskogee, Oklahoma, and White Earth, Minnesota (Walls n.d.). There are indications that he was inspired, in part, by his colleague at the NFAI, its secretary, Philip Hugh Howell (S'Klallam), a charismatic orator who would soon become a prolific author and editor of the *Real American* (1922–1927), the longest running Native newspaper in the Northwest before the 1960s. Bishop's publishing aspirations continued with his work for the Society of American Indians, where he pushed Arthur C. Parker to revive and enhance the organization's magazine for better “publicity.” As Bishop once explained to L. V. McWhorter in 1921:

We need every size, form and ‘make-up’ of Magazine and paper of whatever nature may be brought out—to fight the present inaugurated Bureau System. We need the mild, the radical and the medium, so that we may reach all. Writings, like medicines, what is medicine for some,--might be poison for others. (Bishop 1921)

Clearly, Bishop was acutely aware of diverse audiences, and the need to be both artful and strategic when employing the power of publishing.

Bishop's Book

Thomas Bishop's book—or booklet, if length is the defining attribute—was simply and inexpensively manufactured, and “published” either in the final days of 1915 or, more likely, the first days of 1916 when its printing was announced in the January 2nd issue of the Tacoma *Daily Ledger*. Its 42 pages are framed by a dark orange cover of approximately 110-lb cardstock, measuring 4 ½ inches wide by 7 1/8 inches in height. An unknown number of copies were printed by D. W. Cooper [Daniel W. Cooper], a small union shop in Tacoma, which also printed

Uncle Ezra's Short Stories for Children, by Ezra Meeker (1915), using (for at least one edition) the same orange cardstock cover. While the title page identifies Bishop as President of the NFAI, there is no evidence of whether or not the organization paid for the printing or endorsed its contents.

In the print record, there was little immediate acknowledgment of the booklet by Native people. While Bishop was frequently identified in the press as a leader of the NFAI from 1913 to 1919, his publication was rarely mentioned. There is no reference to it in transcripts of early federal hearings. Of its reception by the non-Indian community, we can say a bit more. A brief article, titled "Appeal of Indians Put in Cold Print," in the *Daily Ledger* (January 2, 1916) reported that "a neat little pamphlet" had "just come off the press," and was being sent by Bishop "to all his friends and the friends of the Indians whose support is asked . . ." The article also stated:

For the first time in the history of the Pacific Northwest Indians, so far as known, their appeals to the government for fulfillment of old treaty rights and promises have been prepared in printed pamphlet form for presentation to proper authorities.

Despite this auspicious beginning, the booklet then seems to disappear with few references to it by historians, anthropologists, or the press until the 1970s, when it is cited in various petitions for the federal recognition of the Snohomish Tribe of Indians, the Duwamish, the Steilacoom, and the Cowlitz. There are no copies of the volume in the extensive papers of Melville Jacobs, Erna Gunther, Edmond Meany, or Clarence Bagley. The only regional institution that has a copy is the Tacoma Public Library, which has two copies, obtained in 1916. (The Huntington Library in California has one copy.) It would seem likely that a dearth of funds limited the printing and circulation of Bishop's treatise. However, one might also speculate that the "colonial archives," broadly conceived—which house the wealth of paperwork underlying the dispossession of Native tribes, and whose originators suffered from an epistemic anxiety over materials that contradicted the mission of colonial governance—simply failed to procure and preserve this important expression of indigenous knowledge (e.g., Stoler 2009). This omission helped hide the existence of an early Native voice in print that articulated resistance to dispossession.

The reader is invited to inspect the contents of Bishop's book, provided following the conclusion of this essay, and make their own assessment of its significance. However, some observations can be made.

1. The frontispiece is a remarkable way to begin the book. Featuring a photograph of Mt. Rainier, and a small illustration of an iconic Indian warrior, signaling defiance, the poem that follows draws upon the contemporary controversy over re-naming the state's largest peak, in which the Lushootseed word for permanently snow-covered mountain (təq^wúbə?) was promoted as an alternative. The NFAI favored renaming the mountain, as did some prominent non-Indians, mostly concerned citizens and boosters, some of whom crafted their own verse to express their sentiments in magazines and local newspapers. One must assume

the poem was authored by Bishop; there is no evidence to the contrary. Using poetry in this context and manner, in the book's opening, was a canny rhetorical gesture that drew on the naming controversy to establish a mood in which readers could contemplate the issue of fairness in general. In the booming years of the early twentieth century, Bishop's poem urged the non-Native reader to accept a reorientation in perspective. Instead of regarding the Puget Sound country as simply a region to promote for future economic interests, it was equally important to remember the area's past, as an ancient and sacred landscape that once sustained its first inhabitants, who had been respectful of its natural beauty and abundance, but were now dispossessed of both territory and culture. As with many poems, the final line, or even word, can be the most meaningful, especially if any ambiguity in language makes one pause and think. Here, the last word, "fair," could speak to either beauty or, more likely, to impartiality or equity. It was only "fair" to call the mountain "*aright* 'Ta-co-bet'" as a measure of respect for Native people—and by extension to what follows in the book, it was only right to give them what they justly deserved, the things treaties promised.

2. Similarly, the Introduction is a succinct statement of the book's political and moral intent: to draw the government's attention to the "truth," so that it can right a wrong that has caused "sufferings." The date of the Introduction, Christmas Eve, reminds the reader of the title, urging a reflection on "sacred" obligations, moral choices, and even Christian brotherhood.
3. The verbatim reprinting of the Point No Point Treaty, with signatures, would have been a necessary inclusion given the relative inaccessibility of the treaty text in print to most readers, Native or not. Even today, online or in publications, many tribes reprint the text of treaties and their essential details that impact their actions as sovereign nations. On the one hand, X-mark signatures indicated the coercion underlying the original agreement, and resulting acquiescence to the authority of the settler state and Euro-American modernity (Lyons 2010). On the other hand, reprinting signatures asserted the continuing importance of ancestral names, and likely reinforced a sense of hereditary responsibility to protect treaty rights among descendants.
4. Bishop's letter to Commissioner Cato Sells, on page 14, is particularly noteworthy, not only for its passion, but its presentation of evidence, the result of Bishop's own research and intimate comprehension of diverse issues. He notes his inspection of treaty and census documents, his collection of information from signatories "personally interviewed," and his understanding of the complex linguistic context in which treaties were negotiated, complicated by varying literacies and multiple languages, including the use of Chinook jargon as wholly inadequate to express "finer shades of meaning" (1916:16).

Bishop's reliance on the biography of Isaac Ingalls Stevens, authored by the Governor's son, Hazard, is revealing. The primary intent of the

Native activist's book was to represent indigenous knowledge of treaty agreements, usually conveyed through oral histories, in a manner that conformed to Western legal and literary conventions. However, he knew that oral traditions were all too easily dismissed, and existing written statements in English—documents valued legally as the highest form of proof—constituted the official historical account of what was said by Native and white participants in the negotiations. It would be strategically valuable for him to read and exploit this accepted print record, looking for evidence that might confirm and enhance the value of his oral testimonies. By drawing upon a written biography, itself a popular genre read widely by non-Native elites, and benefiting from its imprimatur as an account of negotiation proceedings, Bishop appropriated the Governor's past statements to argue his own case, repeatedly citing page numbers and quoting Stevens' promises. Moreover, Bishop's pointed and repeated references (1916: 17, 20, 23) to an intergenerational transmission of history, father to son, would have resonated with both Indian and white readers.

Bishop also extended his concerns beyond land and allotments, and writes of hunting and fishing, and the unfairness of new Washington State laws, enforced outside of treaty agreements, that interrupt the ancient ecology of foodways and distribution of rights, preventing elders on the shoreline of Puget Sound from legally obtaining and consuming water fowl that agree with traditional tastes. His plea (1916:25) for a "humane and obviously logical interpretation of article 4" highlights the issue of "usual and accustomed grounds and stations" that has been central to treaty discussions for the past century and a half.

5. In representing memories of treaty agreements, and the broader geographic consequences of broken promises, Bishop chooses to co-author his treatise with elders and fellow activists. He integrates a "report" by another NFAI member, Henry Fitzgerald—son of a white farmer at Sequim and a S'Klallam mother, Cecelia (T'alth-te-atsa)—to give official voice to the concerns of S'Klallam members. The memories of yet others, landless tribes well beyond the coverage of the Point No Point agreement, are also reproduced: first, as sworn testimony in the affidavits of three Duwamish elders and, second, a well-written letter by J. B. Sareault, who was President of the Cowlitz Tribe up to his death in 1937.

There is no attempt by Bishop to use any Native language or place names that might introduce confusion for non-Indian readers. Neither is there any effort to introduce a map for geographic illustration that might indelibly fix boundaries that were, in fact, contested. Instead, Bishop relies strictly on words and narratives, both legally affirmed or creatively reproduced. He is strategically inclusive, eschewing a single narrative voice; instead, he incorporates a wide-ranging interplay of voices and genres. Bishop deftly combines his own knowledgeable perspective with the words of multiple narrators—the oral and written testimony of elders and peers, from the area impacted by the Treaty of Point No Point and beyond—reproduced

through affidavits and treaty signatures, a letter and a report, a poem and an anecdote. Indeed, the book's conclusion is telling. Bishop quotes a darkly humorous reflection by George Charlie (Charley), a Chinook leader from the Washington State's southwest coast, who wryly commented on the malfeasance of deceptive and greedy Indian Agents with "magnetized" hands "the size of a washtub," ready to steal valuable coins from innocent Indians. Such an allusion to the qualities of tricksters from oral tradition only reinforces the intercultural character and creative energy underlying Bishop's production of this unique written protest of broken promises.

Discussion

This introduction to the republication of Thomas Bishop's book is, in part, an effort to address written texts—authored and published by early northwest Native writers—to see what they might tell us about the communities from which they originated, and consider how such texts were constituted and what effect they might have had on the community, individuals within it, and even the culture itself. Bishop's text raises many questions that can't be answered here. Was alphabetic literacy and publication seen as a threat to the primacy and integrity of Coast Salish orality and tradition? What role did early Coast Salish literacies, authors, and documents play in community understandings of treaty agreements, especially when the oral testimonies of elders remained vital to community memory? What influence did publications have in shaping emergent identities and political relations as Native men and women increasingly began to challenge the social and legal constraints on their lives?

At the very least, we can respect Bishop's writing as a kind of literary experiment. He effectively mobilized historical knowledge, gathering written representations of Coast Salish elders' memories of treaty agreements and their consequences, to produce a new kind of text for new audiences. It was an early attempt to bridge oral and print cultures for political advocacy. He also creatively combined indigenous tradition with an astute reading of the established written record to reinforce his critique of the settler state's failure to fulfill promises. Bishop took advantage of the rhetorical sovereignty of the printed page, and self-publication, to generate a countervailing force against public representations of Native voice and experience that still were often horribly biased. After all, in 1916, print representations of northwest Native narratives often were, at best, selectively framed by the commentary and interests of newspaper editors, missionaries, and anthropologists. At worst, white writers and publishers distorted Native speech and presented it as "Tonto-talk," in an era when the label "Siwash" remained common. Bishop's imaginative writing project represented, for Native people in the Northwest, a new kind of autonomous voice altogether.

Of course, it is important to recognize that Bishop was hardly alone in his literary experimentation. As early as 1875, Native writers in the Northwest were submitting letters to newspapers for publication, and shortly after the turn of the century they were editorializing on fishing rights or the Indian Shaker Church. By the end of the First World War, Myrtle JohnsonWoodcock (Chinook) was publishing poetry derived from tribal oral traditions in local newspapers and a

chapbook, and by 1928 William Shelton (Snohomish) avoided potential appropriation by anthropologists and published his own booklets of oral literature, and even had one submitted creation story published in a Canadian astronomy journal (Shelton 1928; Walls n.d.). Bishop's book was likely the first lengthy politically oriented publication to challenge the dominance of the settler colonial state; however, his text was just one example of an interconnected web of publications that regional Native authors were beginning to construct. Bishop had plenty of company from other men and women who were engaging the wider intercultural public to promote various indigenous interests or preserve threatened cultures.

Thomas Bishop's work and his *An Appeal to the Government to Fulfill Sacred Promises Made 61 Years Ago* continue to be valued today by the Snohomish Tribe of Indians (McDaniel 2004), and by those who follow in his footsteps fighting for the fulfillment of treaty obligations. It seems time to give Bishop his due as an indigenous intellectual, political strategist, and literary innovator who put the power of "red ink" on paper. As his colleague Arthur C. Parker (Seneca)—archaeologist, museum director, and author—wrote in 1913, "We are red men still, even though we have plucked the feathers from our war bonnets and are using them for pens. The battle scene has shifted and the contest becomes one of brains and wit" (Maddox 2005:48).

ACKNOWLEDGMENTS

The author acknowledges the kind assistance and comments from Darby Stapp, Jay Miller, and Brian Kamens of the Tacoma Public Library. He also is grateful for the inspiration provided by the late Roderick Sprague on all things anthropological.

REFERENCES CITED

Barber, Karin

2007 *The Anthropology of Texts, Persons and Publics: Oral and Written Culture in Africa and Beyond*. Cambridge University Press, Cambridge, UK.

Barsh, Russel

2017a Bishop, Thomas G. (1859–1923) and William Bishop Jr. (1861–1934): Native American Political Leaders. www.historylink.org Online Encyclopedia of Washington State History (Accessed October 10, 2017).

2017b Bishop, William Sr. (1833–1906) and Sally Bishop Williams (1840–1916): Re-peopling the Chimakum Valley. www.historylink.org Online Encyclopedia of Washington State History (Accessed October 10, 2017).

Bishop, Kathleen and Kenneth C. Hansen

1978 The Landless Tribes of Western Washington. *American Indian Journal*, 4 (5):20–31.

Bishop, Thomas G.

1916 *An Appeal to the Government to Fulfill Sacred Promises Made 61 Years Ago*. The Author, Tacoma, WA.

1921 Letter to L. V. McWhorter. January 6, 1921. Papers of the Society of American Indians. Reel 9. Scholarly Resources, Wilmington, DE.

Bragdon, Kathleen J.

2002 The Interstices of Literacy: Books and Writings and Their Use in Native American Southern New England. In “Anthropology, History and American Indians: Essays in Honor of William Curtis Sturtevant.” *Smithsonian Contributions to Anthropology*, 44:121–130.

Brooks, Lisa

2008 *The Common Pot: The Recovery of Native Space in the Northeast*. University of Minnesota Press, Minneapolis.

Carlson, Keith Thor

2011 Orality About Literacy: The “Black and White” of Salish History. In *Orality and Literacy: Reflections Across Disciplines*, edited by Keith Thor Carlson, Kristina Fagan, and Natalia Khaneko-Friesen, pp. 43–69. University of Toronto Press, Toronto, ON.

Fisher, Andrew H.

1999 “This I Know From the Old People”: Yakama Indian Treaty Rights as Oral Tradition. *Montana: The Magazine of Western History*, 49 (1):2–17.

Friday, Chris

- 2008 *Performing Treaties: The Culture and Politics of Treaty Remembrance and Celebration*. In *The Power of Promises: Rethinking Indian Treaties in the Pacific Northwest*, edited by Alexandra Harmon, pp. 157–185. University of Washington Press, Seattle.

Harmon, Alexandra

- 1998 *Indians in the Making: Ethnic Relations and Indian Identities Around Puget Sound*. University of California Press, Berkeley.

- 2005 *Indian Treaty History: A Subject for Agile Minds*. *Oregon Historical Quarterly*, 106 (3):358–373.

Harmon, Alexandra (editor)

- 2008 *The Power of Promises: Rethinking Indian Treaties in the Pacific Northwest*. University of Washington Press, Seattle.

Konkle, Maureen

- 2004 *Writing Indian Nations: Native Intellectuals and the Politics of Historiography, 1827–1863*. University of North Carolina Press, Chapel Hill.

Lyons, Scott Richard

- 2010 *X-Marks: Native Signatures of Assent*. University of Minnesota Press, Minneapolis.

Maddox, Lucy

- 2005 *Citizen Indians: Native American Intellectuals, Race, and Reform*. Cornell University Press, Ithaca, NY.

McDaniel, Nancy L.

- 2004 *The Snohomish Tribe of Indians: Our Heritage . . . Our People*. The Author, np.

Miller, Jay (editor)

- 2015 *Elder's Dialog: Ed Davis and Vi Hilbert Discuss Native Puget Sound Language, Culture, and Heritage*. Lushootseed Press, Seattle.

Salomon, Frank and Mercedes Niño-Murcia

- 2011 *The Lettered Mountain: A Peruvian Village's Way With Writing*. Duke University Press, Durham, NC.

Shelton, William

- 1928 *Doh-Kwi-Buhch, (The Creator)*. *Journal of the Royal Astronomical Society of Canada*, 22(2):192–93.

Stevens, Hazard

- 1900 *The Life of Isaac Ingalls Stevens*. Houghton Mifflin, Boston, MA.

Stoler, Ann Laura

2009 *Along the Archival Grain: Epistemic Anxieties and Colonial Common Sense*.
Princeton University Press, Princeton, NJ.

Vigil, Kiara M.

2015 *Indigenous Intellectuals: Sovereignty, Citizenship, and the American
Imagination, 1880-1930*. Cambridge University Press, NY.

Walls, Robert E.

N.d. Early Native Literacies, Authors, and Print Culture for Coast Salish and
Neighboring Peoples. Ms.

ABOUT THE AUTHOR

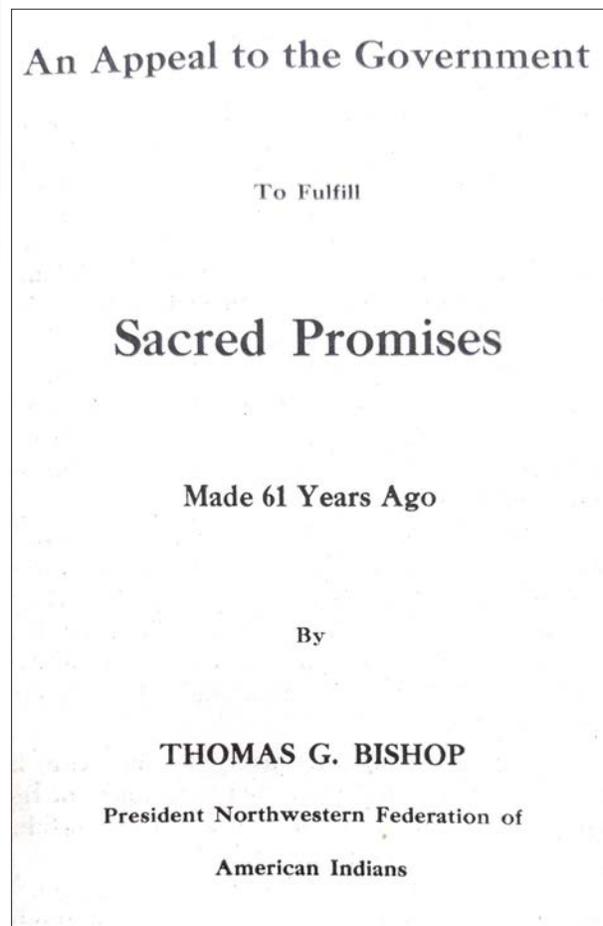
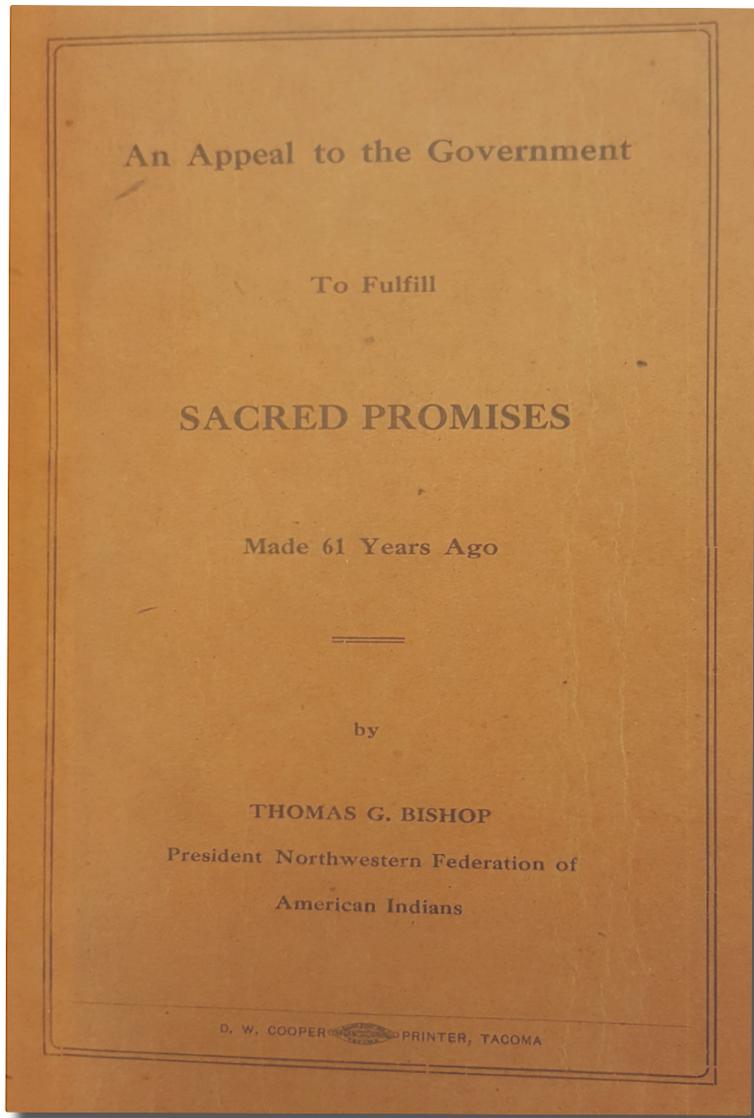
Robert E. Walls received his Ph.D. from Indiana University. He is an Assistant Professional Specialist, Teaching Professor of Native American Studies, in the Department of American Studies, University of Notre Dame, where he is also Concurrent in the Department of Anthropology. He acknowledges that Notre Dame is on the traditional territory of the Pokagon Potawatomi, who have been using the land for education for thousands of years, and continue to do so. This essay is part of a larger project documenting the earliest written literature by Native peoples in the Pacific Northwest.

Robert E. Walls

Department of American Studies University of Notre Dame

Notre Dame, IN 46556

Contact Information: rwalls@nd.edu





“TA-CO-BET”

(God's Mountain)



Handed down through dim-lit ages, a Redman's legend to us came,
That Ta-man-a-wis, the Great Spirit, raised this Mount to bear His name.
Redmen called it 'Ta-co-bet, others pronounced it Tacoma or Rainier,
Its true meaning is God's Mountain, which they worshiped most sincere.

To its snow-line they would venture, but no farther durst they go,
Lest the foot of man unholy, should contaminate the snow,
All this snow the hills should water, making trees and herbage grow,
Food for deer and elk, called elwahs, and to make clear rivers flow.

Pure cold water from its glaciers God intended man should drink,
And to cause it a pollution was a crime from which they'd shrink,
Thus the happy Redman pondered in his breast, his God he knew,
Until white men came usurping, and his worship overthrew.

Drove him from his habitation and his hunting places too,
Taught him every shameful habit, taught him how to speak untrue,
Now he comes a man of sorrows and acquainted well with grief,
To his honored Great White Father asking for a small relief,

That the Mount on which his fathers gazed with fond, adoring eyes,
Might be called *aright* "Ta-co-bet" ere his dwindling family dies.
Wilt thou not, oh Great White Father, hear thy humblest children's prayer

Let this Mountain be their Totem, change its name to be so fair?

INTRODUCTION

In drawing the attention of the government of the United States to the sufferings of some of its wards, the Indians, because of the non-fulfillment of the promises made to them by the government so long since, and which for some reason do not appear any nearer being met than they did 61 years ago, we do not speak in anger or even in ridicule, but in truth, in order to bring to notice an existing condition which, possibly, is not known or has been overlooked by the government, and for the purpose of righting a wrong which, if allowed to go on, will cause more untold hardships and death to the original native American people than it has already accomplished.

In the almost compulsory trading of lands owned by the redmen for the government's word to give them other lands and to see they lacked for nothing in privileges and desires, and the non-fulfillment of any of these promises, causing misery and even death to many of the signers of the treaty, is pathetic to say the least.

The contents of this pamphlet are true in every respect and will enlighten the officers of the government as to the condition of things pertaining to the most unhappy redmen.

December 24, 1915

THOMAS G. BISHOP.
Tacoma, Wash.

SACRED PROMISES MADE THESE CHILDREN OF THE FOREST AND STREAM 61 YEARS AGO

Following is a copy of the Treaty Agreement taken from Senate Documents, Vol. 39.

No. 319 Indian Affairs, Laws and Treaties, Second Edition.

Vol. 2, 58th Congress, 2nd Session, 1903-1904:

Treaty with the S'Kallam, 1856. Jan. 26, 1855.

Articles of agreement and convention made and concluded at Hahdskus or Point No Point, Squamish Head, in the Territory of Washington, this twenty-sixth day of January, eighteen hundred and fifty-five, by Isaac I. Stevens, Governor and Superintendent of Indian affairs for the said Territory, on the part of the United States, and the undersigned Chiefs, Headmen, and Delegates of the different villages of the S'Klallams, viz: Kah-ti, Squah-Quaiht Teh-queen, Ste-tehtlum, Tsohkw, Yennis, Elh-wa, Pishtst, Hunnint, Klat-la-wash, and Oke-ho, and also of the Sko-ko-mish, To-an-hooch, and Chem-a-kum tribes, occupying certain lands on the Straits of Fuca and Hoods Canal, in the Territory of Washington, on behalf of said tribes, and duly authorized by them.

Article I. The said tribes and bands of Indians hereby cede, relinquish and convey to the United States all their right, title and interest in and to the lands and country occupied by them, bounded and described as follows, viz: Commencing at the mouth of the Okeho river, on the Strait of Fuca; thence southeastwardly along the westerly line of territory claimed by the Makah tribe of Indians to

the summit of the Cascade mountain range; thence still southeastwardly and southerly along said summit to the head of the west branch of the Satsop river, down that branch of the main fork; thence eastwardly and following the line of lands heretofore ceded to the United States by the Nisqually and other tribes and bands of Indians, to the summit of the Black Hills, and northeastwardly to the portage known as Wilkes portage; thence northeastwardly, and following the line of lands heretofore ceded to the United States by the Duamish, Suquamish, and other tribes and bands of Indians, to Suquamish Head; thence northerly through Admiralty Inlet to the Straits of Fuca; thence westwardly through the straits to the place of beginning; including all the right, title and interest of the said tribes and bands to any lands in the Territory of Washington.

Article 2. There is, however, reserved for the present use and occupation of said tribes and bands the following tract of land, viz.: The amount of six sections, or three thousand eight hundred and forty acres, situated at the head of Hoods Canal, to be hereafter set apart, and so far as necessary surveyed and marked out for their exclusive use; nor shall any white man be permitted to reside upon the same without permission of said tribes and bands, and of the superintendent or agent; but, if necessary for the public convenience, roads may be run through the said reservation, the Indians being compensated for any damage thereby done them. It is, however, understood that should the president of the United States hereafter see fit to place upon said reservation any other friendly tribe or band, to occupy the same in common with those above mentioned, he shall be at liberty to do so.

6

Article 3. The said tribes and bands agree to remove to and settle upon said reservation within one year after the ratification of this treaty, or sooner if the means are furnished them. In the meantime it shall be lawful for them to reside upon any lands not in the actual claim or occupation of any citizen of the United States, and upon any lands claimed or occupied, if with the permission of the owner.

Article 4. The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians, in common with all citizens of the United States; and the erecting of temporary houses for the purpose of curing; together with the privilege of hunting and gathering berries, roots on open and unclaimed lands. Provided, however, that they shall not take shell fish from any beds staked or cultivated by citizens.

Article 5. In consideration of the above cession the United States agree to pay to the said tribes and bands the sum of sixty thousand dollars, in the following manner, that is to say: During the first year after the ratification hereof, six thousand dollars; for the next two years, five thousand dollars each year; for the next three years, four thousand dollars each year; for the next four years three thousand dollars each year; for the next five years one thousand six hundred dollars each year. All which said sums of money shall be applied to the use and benefit of said Indians under the direction of the President of the United States, who may from time to time determine at his discretion upon what beneficial objects to expend the same. And the superintendent of Indian affairs, or other proper officer, shall each year inform the President of the wishes of said Indians in respect thereto.

7

Article 6. To enable the said Indians to remove to and settle upon their aforesaid reservations, and to clear, fence and break up a sufficient quantity of land for cultivation, the United States further agree to pay the sum of six thousand dollars to be laid out and expended under the direction of the President, and in such manner as he shall approve.

Article 7. The President may hereafter, when in his opinion the interests of the Territory shall require, and the welfare of said Indians be promoted, remove them from said reservation to such other suitable place or places within said Territory as he may deem fit, on remunerating them for their improvements and the expense of their removal; or may consolidate them with other friendly tribes or bands. And he may further, at his discretion, cause the whole or any portion of the lands hereby reserved, or of such other lands as may be selected in lieu thereof, to be surveyed into lots, and assign the same to such individuals or families as are willing to avail themselves of the privilege, and will locate thereon as a permanent home, on the same terms and subject to the same regulations as are provided in the sixth article of the treaty with the Omahas, so far as the same may be applicable. Any substantial improvements heretofore made by any Indian, and which he shall be compelled to abandon in consequence of this treaty, shall be valued under the direction of the President, and payment made therefor accordingly.

Article 8. The annuities of the aforesaid tribes and bands shall not be taken to pay the debts of individuals.

Article 9. The said tribes and bands acknowledge their dependence on the government of the

8

United States, and promise to be friendly with all citizens thereof; and they pledge themselves to commit no depredations on the property of such citizens. And should any one or more of them violate the pledge, and the fact be satisfactorily proven before the agent, the property taken shall be returned, or in default thereof, or if injured or destroyed, compensation may be made by the government out of the annuities. Nor will they make war on any other tribes, except in self-defence, but will submit all matters of difference between them and other Indians to the government of the United States, or its agent, for decision and abide thereby. And if any of the said Indians commit any depredations on any other Indians within the Territory, the same rule shall prevail as that prescribed in this article in cases of depredations against citizens. And the said tribes agree not to shelter or conceal offenders against the United States, but to deliver them up for trial by the authorities.

Article 10. The above tribes and bands are desirous to exclude from their reservation the use of ardent spirits, and to prevent their people from drinking the same, and therefore it is provided that any Indian belonging thereto who shall be guilty of bringing liquor into said reservation, or who drinks liquor, may have his or her proportion of the annuities withheld from him or her for such time as the President may determine.

Article 11. The United States further agrees to establish at the general agency for the district of Puget Sound, within one year from the ratification hereof, and to support for the period of twenty years, an agricultural and industrial school, to be free to children of the said tribes and bands in common with those of the other tribes of said dis-

9

trict, and to provide a smithy and carpenters' shop, and furnish them with the necessary tools, and employ a blacksmith, carpenter, and farmer for the term of twenty years, to instruct the Indians in their respective occupations. And the United States further agrees to employ a physician to reside at the central agency, who shall furnish medicine and advice to the sick, and shall vaccinate them; the expense of the said school, shops, persons, and medical attendance to be defrayed by the United States, and not deducted from the annuities.

Article 12. The said tribes and bands agree to free all slaves now held by them, and not to purchase or acquire others hereafter.

Article 13. The said tribes and bands finally agree not to trade at Vancouver's Island, or elsewhere out of the dominions of the United States, nor shall foreign Indians be permitted in their reservations without consent of the superintendent or agent.

Article 14. This treaty shall be obligatory on the contracting parties as soon as the same shall be ratified by the President of the United States.

In testimony whereof, the said Isaac I. Stevens, governor and superintendent of Indian affairs, and the undersigned chiefs, headmen, and delegates of the aforesaid tribes and bands of Indians, have hereunto set their hands and seals at the place and on the day hereinbefore written.

Isaac I. Stevens, Governor and Superintendent.

Chits-a-man-han, the Duke of York, Chief of the S'Kallams, his X mark. (L. S.)

Dah-whil-luk, Chief of Sko-ko-mish, his mark. (L. S.)

Kul-kah-han, or General Pierce, Chief of the Chim-

a-kum, his X mark. (L. S.)
 Hool-hole-tan, or Jim, Sko-ko-mish, Sub-Chief, his X mark. (L. S.)
 Sai-a-kade, or Frank, Sko-ko-mish, Sub-Chief, his X mark. (L. S.)
 Loo-gweh-oos, or George, Skokomish, Sub-Chief, his X mark. (L. S.)
 E-dagh-tan, or Tom, Skokomish, Sub-Chief, his X mark. (L. S.)
 Kai-a-han, or Daniel Webster, Chem-a-kum, Sub-Chief, his X mark. (L. S.)
 Ets-sah-quat, Chem-a-kum, Sub-Chief, his X mark. (L. S.)
 Kleh-a-kunst, Chem-a-kum, Sub-Chief, his X mark. (L. S.)
 He-atl, Duke of Clarence, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Lach-ka-nam, or Lord Nelson, S'Kallam, Sub-Chief, his mark. (L. S.)
 Tch-o-test, S'Kallam, Sub-Chief, his mark. (L. S.)
 Hoot-ote St, or General Lane, S'Kallam, Sub-Chief, his mark. (L. S.)
 To-totes, S'Kallam, Sub-Chief, his mark. (L. S.)
 Hah-kwia-mihl, S'Kallam, Sub-Chief, his mark. (L. S.)
 Skai-se-ee, or Mr. Newman, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Kahs-sahs-a-malt, S'Kallam, Sub-Chief, his mark. (L. S.)
 S'hote-ch-stan, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Lah-st, or Tom, S'Kallam, Sub-Chief, his mark. (L. S.)
 Tuls-met-tum, or Lord Jim, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Yaht-le-min, or General Taylor, S'Kallam, Sub-

Chief, his X mark. (L. S.)
 Kla-koisht, or Captain, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Sna-tale, or General Scott, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Tsena-take, or Tom Benton, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Yah-kwi-e-nook, or General Gaines, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Kai-at-lah, or General Lane, Jr., S'Kallam, Sub-Chief, his X mark. (L. S.)
 Captain Jack, S'Kallam, Sub-Chief, his X mark. (L. S.)
 He-ach-katé, S'Kallam, Sub-Chief, his X mark. (L. S.)
 T'soh-as-hau, or General Harrison, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Kwah-nalt-sote, S'Kallam, Sub-Chief, his X mark. (L. S.)
 S'hoke-tan, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Paitl, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Wen-a-hap, S'Kallam, Sub-Chief, his X mark. (L. S.)
 Klew-sum-ah, S'Kallam, Sub-Chief, his X mark. (L. S.)

Tsat-sat-hoot, member of S'Kallam tribe.

Pe-an-ho,	Hai-ahts, or John,
Yi-ah-hum,	Seh-win-num,
Ti-itch-stan,	Yai-tst, or George,
Soo-yahnteh,	He-pait, or John,
Ttseh-atake, or General	Slimm, or John,
Pierce,	T'klait-soot, or Jack,
He-ats-at-soot,	S'tai-tan, or Sam,
Tsheh-han,	Huh-tets,oot,
Kwin-nas-sum, or	How-a-owl,
George,	

12

Executed in the presence of us:

M. T. Simmons,	B. J. Madson,
C. H. Mason, Secretary	F. A. Rowe,
Washington Territory,	Jas. M. Hunt,
Benj. F. Shaw, inter-	George Gibbs, Secretary,
preter,	John J. Reilly,
John H. Seranton,	Robt. Davis,
Josiah P. Keller,	S. S. Ford, r.,
C. M. Hitchcock, M. D.,	H. D. Cook,
A. B. Gove,	Orrington Cushman,
H. A. Goldsborough,	J. Conklin.

13

Honorable Cato Sells,
Commissioner of Indian Affairs,
Washington, D. C.

Sir: I respectfully direct your attention to the treaty entered into between Isaac I. Stevens, as governor of the Territory of Washington and superintendent of Indian affairs for the territory, and the headmen, chiefs and delegates of the S'Kallams, Kah-ti, Squah-quaiht, Teh-queen, Ste-tehtlum, Tschka, Yennes, Ehl-wa, Pishtst, Hunnint, Hlat-la-wash, and Oke-ho and also the Sko-ko-mish, To-an-hooch, and Chem-a-kum tribes of Indians, who were then occupying certain lands on the Straits of Fuca and Hoods Canal in the Territory of Washington.

This treaty was concluded on January 26th, 1855, and may be found in Senate Document, Vol. 39, No. 319, Indian Affairs and Treaties, second edition, Vol. 2, 58th Congress, 2nd Session, 1903-1904.

By referring to the Census Report of 1910, it will be found that in the drafting of this treaty agreement, the Governor was treating with two distinctly different linguistic families; a part of the Salishan and about half of the Chimakuam stock.

The Salishan stock as a whole covered that part of the territory known as Northern and Western Washington, Northern Idaho, and the northwestern corner of Oregon, Northern Idaho, and extending a considerable distance north of the international boundary line in British Columbia. Of which there was and is to this date thirty-five distinct and different tribes, and as enumerated in 1910 there was 7,833 members of which should be added about 1,000 who were without distinction of tribe among

14

the general population of the State of Washington. Then the report says:

Clallam: "A tribe belonging to the Lummi group of stock and occupying, since first known to Europeans, the south side of Juan de Fuca, Washington, except the region around Cape Flattery, which was occupied by the Makah. They have never been located on a reservation. The number enumerated in 1870 was 630, and the number in 1910 is 316."

We will now refer to the "Chimakum Stock." "A small tribe occupying, when first known to Europeans, the peninsular between Hoods Canal and Port Townsend, Washington. The tribe has been supposed to be extinct. Three males, however, were enumerated in Washington in 1910, one of full tribal blood, and one mixed tribal blood, and one white and Indian half-breed."

In this communication, it is my purpose to call attention to a condition which exists among the Indians in this Puget Sound country, which deserves immediate and prompt correction. It arises out of the interpretation, or misinterpretation of article four (4) of the treaty above referred to. This article reads as follows:

"The right of taking fish at usual and accustomed grounds and stations is further secured to said Indians, in common with all citizens of the United States, and the erecting of temporary houses for the purpose of curing, together with the privilege of hunting and gathering berries and roots on open and unclaimed lands. Provided, however, that they shall not take shell fish from any beds staked or cultivated by citizens."

The legislature of the State of Washington has,

15

during the past few years, enacted laws which have seriously curtailed the hunting and fishing privileges of the Indians affected by this treaty, that the situation calls for official interference by your department.

I have personally interviewed the few remaining Indians who were present at the signing of this treaty agreement, and they are a unit in declaring that it was solemnly represented to them, that by this agreement they were to retain the right to fish and hunt on the same territory they had formerly hunted and fished over.

From an inspection of this treaty, it will be apparent to you that the Indians relinquished all rights in a tract embracing hundreds of thousands of acres of what is now the most valuable land in Washington. None of those Indians were able to read or write English. You will notice that all of them signed by making a mark. It is not the fault of the Indians that article four (4) of the treaty is possibly open to the criticism of ambiguity. The Indians begged for an interpreter to interpret from English into their own tongue so that they might fully understand the tenor and purport of the treaty agreement, but Governor Stevens had his own interpreter and "Chinook" jargon was used as a medium. For your information, I will say that the "Chinook" jargon is a conversational medium (long since gone into total disuse) of so few words that any attempt to express finer shades of meaning, or to even carry on an intelligent conversation, was simply impossible. It is my belief that not more than fifty words used in this treaty agreement could be translated from English into the "Chinook" jargon. There can be no question that the Indian sig-

16

natories to this treaty had but a vague and very limited translation of the whole treaty and particularly of article four.

Treaty agreements of this period were usually drawn ahead of time and presented to the Indians by smooth, oily-tongued "delate klosh tillacooms" (real good friends), with great promises of what was to come.

In the making of this treaty agreement, as was true of all other agreements with the Indians in this district, it was necessary to deal with two or more linguistic families, and in order to treat with these Indians, resort was had to the hopelessly inadequate Chinook jargon, as a linguistic exchange medium, instead of using an interpreter who might have made absolutely clear to the Indians, the purport of the treaty. These interpreters employed by Governor Stevens would invariably represent to the Indians that large numbers of presents, blankets, bright calicos, gaudy handkerchiefs, beads, molasses, hard-tack, etc., etc., (all dear to the Indian heart), were to be distributed by the representatives of the "Great White Father" as soon as the treaty was signed. This is made evident by reading the "Life of General Isaac I. Stevens," by his son, Hazard Stevens. On page 457, referring to the Point No Point treaty, he says (quoting General Stevens), "—and the Great Father wishes you to learn to farm, and your children to go to a good school; and he now wants me to make a bargain with you, in which you will sell your lands, and in return be provided with all these things. You will have certain lands set apart for your homes and receive yearly payments in blankets, axes, etc. All this is written down in this paper which will be read to you." These simple children of the forest and stream lent

17

a credulous ear to the specious promises of the white man's interpreters and placed their mark on the white man's paper, only to discover later that they had been deceived. In place of the generous supplies promised, they received a few cheaply made blankets, two or three yards of bright calico for the women, a few handkerchiefs, about one quart of flour and one cup of thick black molasses and some hard-tack for each member of the tribe.

For all of the vast territory ceded to the government by the Indians, they received six sections of land at the head of Hoods Canal, then a part of the land occupied by the Skokomish tribe of Indians. This was later increased to about five thousand acres (in 1874.) When the allotments (ten acres of agricultural land to each Indian) were finally made, the Skokomish Indians were apparently taken care of first. As a result, the Skokomish tribe received all of the land, only one tract of six and one-half acres remaining for the entire thirteen bands of Indians belonging to the S'Kallam tribe, who signed this treaty agreement. The only member of these thirteen remaining tribes or bands who received an allotment was "Clallam Pete." Yet there were 1,200 members in this S'Kallam tribe, effected by this treaty agreement, none of whom were ever taken care of by the government. To this day, none of these thirteen bands or tribal groups above mentioned, belonging to this Clallam tribe have received allotments of land or shared in the distribution of any money.

The Puget Mill Company at Port Gamble and Port Ludlow, Washington, have suffered a few of these unallotted Indians who have worked at their mills, to live on lands owned by the company, but

18

in hundreds of cases known to me, the old Indians who were living at the time of the signing of the treaty, or their children, have been driven from their little shanty-homes on some piece of the public domain, or on some sand spit on Puget Sound, by white settlers who claimed the land under the homestead act. Many of these white claimants had only taken out their first citizenship papers, yet their claim as a settler made them master of the land. This is not said in criticism or disparagement of the homestead act, but rather to show how the influx of white settlers together with the shameful negligence of the government in failing to provide land for the members of the tribes who were not given a tract of land under the "Skokomish" allotment, has worked a terrible hardship on these unfortunate Indians.

Failing to get the promised piece of land on or near the Hoods Canal, they became wanderers, driven from place to place by the encroachments of white settlers.

Let it be understood that the Indians or groups here involved, are of the Salishan and Chimakum, or salt water (fish eating) family, and naturally remained on the shores of Puget Sound where they might be near their fishing grounds. Repeatedly, their little shacks have been burned by white claimants of shore lands, and the poor Indian and his family told to "move on." Yet where was he to go! Two little bands of Indians living on Dungeness Spit and at Port Townsend were summarily seized, their little homes burned to the ground, and they were transported by force and arms to the Skokomish reservation, and here, they were not given definite tracts of lands, but were huddled to-

19

gether and compelled to shift for themselves on pieces of land that were far from "agricultural land."

Promises were made to protect their burial grounds wherein were interred the ashes of their forefathers, but these places have been subject to ruthless spoliation. The bones of Indians from those burying grounds have been frequently exhibited as interesting relics.

During the Indian wars of 1855-58, members of the S'Kallam tribe acted as scouts and guides for the government, suffering the hardships of those campaigns along with the white soldiers. Some of these were my own flesh and blood and served this country in this capacity, only to be repaid by contempt, indifference and open derision. The S'Kallams were loyal, yet the Indians who fought the white settlers were rewarded, while my people were forgotten or ignored. With the lone exception of "Clallam Pete," before referred to, not one member of the thirteen tribes and bands whose leaders signed that treaty agreement at Point No Point on January 26th, 1855, ever received an allotment of land from the United States government in exchange for the vast tract of land ceded to the government. The Skokomish tribe alone, was fairly dealt with in that respect. The story is not a pleasant one, and reflects on the good faith of the government.

It must be borne in mind that Governor Stevens was a soldier, with a soldier's idea of discipline, and in dealing with these Indians, while he may have wanted to be absolutely honest, he was nevertheless undoubtedly influenced by a desire to make a most creditable showing to his superiors. In the life of General Stevens, by his son (page 454), he says:

20

"It is proposed," reported the governor, "to remove all the Indians on the east side of the Sound as far as the Snohomish, as also the Klallams, to Hoods Canal, and generally to admit **as few reservations** as possible, with a view of finally concentrating them in one."

The desire to drive a hard bargain with the Indians is here made manifest. The iron hand of the professional soldier is seen.

I believe the government spent the sixty thousand dollars provided in article five (5) of the treaty, but its expenditure did not change the unhappy status of the thirteen tribes of the Klallam group who signed that treaty agreement. None of the tribes aside from the Skokomish derived any benefits from the provisions of articles 6, 7, 8 and 9, although in all respects article 9 was fully and completely observed. The older members of these tribes were law-abiding people, the younger element are now respected and honored citizens of Clallam, Jefferson, San Juan, Kitsap and Mason counties; they are poor and in most instances landless, but are hopeful and progressive withal. Eighty-three per cent of the Indians of this State pay taxes, which indicates that they are thrifty to a marked degree.

With reference to article 10, I can honestly say that in my opinion not more than one in ten of the Clallams ever uses intoxicants. The government has fully and completely complied with article 11 of the treaty. The trade schools at Cushman and at Tulalip are a credit to the government and an inspiration to the Indians of this district. We regard them as an asset of the highest value. We have lived up to the requirements of articles 12, 13 and 14. No charge of failure so to do will lie against us.

Coming now to one of the chief causes of com-

21

plaint, I beg to direct your attention to the hunting and fishing laws of the State of Washington. These laws were passed without regard to the treaty agreements of the government. Indians were prohibited from fishing in streams running through their own reservation; from fishing in the waters of Puget Sound bordering on their reservations; from killing the Scotter, Velvet, Grebe or the Coot ducks (all "fish ducks"), in certain seasons of the year, when this right was given to the owners of oyster and clam beds. These above named ducks live on clams, fish and oysters. The Indian could not even have one of these ducks in his possession after an oyster man had killed it. Under our State laws, an owner of any oyster bed may kill these ducks to protect his beds, but not to use the ducks for food.

These ducks (never eaten by whites because of their strong fish and clam flavor), are highly prized by the older Indians as a rare dish. The younger Indians never eat them. The older Indians (living along the shores of the Sound) do not under any circumstances eat fresh-water fowls nor birds of the forest. The tribes here referred to are what might be called "canoe Indians," and have for countless generations lived on fish, clams and salt-water birds.

From my conversation with many old Indians who were present at the signing of the treaty, I am convinced that it was solemnly represented to them that their fishing and hunting rights were not to be impaired. That a clearer and more definite statement of their exact rights in this regard, was not substituted for the somewhat vague provision of article 4, is only to be explained by the fact that not an Indian who signed that treaty could read a word of its contents. Their hunting and fishing rights were their dearest possessions. Of worldly

22

wealth, they hold little or none. The right of access to nature's unlimited food supply was all they asked. And the solemn statement of these old men is that Governor Stevens "told them that they were to hunt and fish as they always did." And in the light of the conditions of their existence, this statement bears the stamp of absolute truth, since to them, food was life and anything that threatened a curtailment of their food supply, was a menace to life itself.

This is made apparent by an inspection of the life of General Stevens to which reference has heretofore been made.

On page 463, referring to certain rights to be reserved and which were discussed at the Point Elliott treaty, Governor Stevens is reported by his son to have said:

"We want to place you in homes where you can cultivate the soil, raising potatoes and other articles of food, and where you may pass over the Sound (waters) to catch fish, and back to the mountains to get roots and berries. He (Great Father) is willing you should catch fish in the waters, and get roots and berries back in the mountains."

What could the reference to fishing privileges mean unless it meant that the Indians were to enjoy the rights they formerly possessed? One conclusion only can be reached, and that is that the Indians firmly believed, and were led to believe, the privileges would not be curtailed.

On page 465, referring to the Point No Point treaty, the biography says:

"Che-lan-teh-tat, an old Skokomish, then arose and said: 'I wish to speak my mind

23

as to selling the land. Great Chief, what shall we eat if we do so? Our only food is berries, deer and salmon. Where, then shall we find these? I don't want to sign away my land. Take half of it and let us keep the rest. I am afraid that I shall become destitute and perish for want of food. I don't like the place you have chosen for us to live on. I am not ready to sign the paper.'"

Permit me to direct your attention to the allusions in this old chief's talk, to the mode of getting a living then in vogue among Indians. "Our only food is berries, deer and salmon."

No cultivation of the land is here implied. The Indians hunted and fished for a living, and that is why he wanted these privileges secured to him by his treaty agreement.

The last legislative session in this state made an effort to correct some of these wrongs. Dr. Buchanan of the Tulalip reservation appeared before the last legislature in this behalf.

The old Indians should be allowed to take fish and ducks as promised by the treaty. The older Indian does not have the commercial spirit and he takes ducks and fish for the use of his own family, only. To this day he holds to the sacred "Tamanamas" belief, to kill neither fish, bird nor animal, save for one's own use or needs. The Indian should be accorded the fullest religious freedom. If he chooses to return to the belief of his fathers—to the creed of the "Ta-mana-whas" or to the Great Spirit, it should be his sacred privilege.

I would like to have your department investigate the situation fully, with two things clearly in

24

view. First, to secure through the courts a humane and obviously logical interpretation of article 4 of this treaty, before all the witnesses are dead, so that our fishing and hunting rights may be definitely determined, and the unhappy conditions that now exist, brought to an end.

Second, to provide some small tracts of agricultural lands for the unallotted Indians of this district, who are now wanderers on the face of the earth, and whose economic conditions are pitiable indeed. This land should be so located at some point where they could have access to the waters of the Sound out of which they can help make their living.

I want to thank the department for the assistance it has been giving the unallotted Indians during the last year or two, in the way of rations and supplies. It has been most gratifying that it has meant re-life from the pressing physical needs. We feel that the government has not entirely forgotten us even though the treaty promises have been ignored to a great extent.

In conclusion I want to say that more than a year ago I petitioned your department, urging the creation of a commission of three men, two to be members of your department in this district, and one a resident of this district. In this connection, I offered my services as a member of such a commission and agreed to serve without pay. In this way the only expenses would have been that of a secretary, and the traveling expenses. Such a body could hear the grievances of the Sound Indians or others, if necessary, and, being familiar with local conditions, could make intelligent recommendations direct to the department.

Without disparaging the efforts of Special Agent

25

L. A. Dorrington, and Supervisor C. E. McChesney, to adjust some of the differences, I am firmly of the belief that after they have completed their labors there will yet remain overlooked and unsolved many vexing problems that will be a fruitful source of trouble and misunderstanding.

Next to the adjustment of the hunting and fishing rights of the Indians, the allotting of tracts of lands to unallotted Indians is a problem that presses for solution.

Many hundreds of these Indians petitioned the government for their allotments as long as ten years ago. Their applications were invariably "placed on file," and in this indirect manner, permanently side-tracked. Agents of the department told these Indians that they were to receive allotments of land. Indian reservations have been thrown open for settlement, but the Indian, who should have "first call" on the government, has been forgotten, and his white brother given the lands over which he once exercised sovereignty. One million acres of the Colville reservation, recently thrown open to settlement, would have offered an opportunity to settle this vexed problem. The unallotted Puget Sound Indian should have been allowed first chance to settle on this land on the same terms as other white settlers. In my best judgment, there yet remains about two thousand Indians who are landless, who would, if given an opportunity, settle upon these lands and improve them for stock raising and farming as other settlers do. Hundreds of these Indians have leased tracts of lands pending an allotment and are industrious farmers in the Sound district. While it is true that many of the other Indians on the reservations do not improve their lands as do other citizens, it must be remem-

bered that in many cases they are not allowed as free a hand in improving as they should be given. The rules frequently discourage rather than encourage them. Many of them have told me that they have applied for the privilege of clearing a few acres of land and that two or three years would elapse before they received permission from the department. Some had money to their credit, but should they need it to buy stock or to make needed farm improvements, a special permit from the department was required, which might take two years to secure. Such cumbersome rules may be necessary to safeguard the Indian, but it makes him utterly helpless and dependent at times. Opportunities to buy stock at bargain prices have been denied them because the rules were enforced.

In this statement I have confined myself principally to the S'Kallams, but there are other tribal groups in the Sound country who are victims of mischance and of the neglect of the government. Of these I would speak briefly:

The first of these groups is the San Juan Indians. San Juan County comprises several islands at the mouth of the Sound, and where today there are many Indians of the full-blood, members of several different tribes from the upper Sound country. Several of these have moved there owing to the scarcity of fish in the upper Sound district, and, owing to not being able to cope with the white man's deep-sea fishing methods, have had to content themselves with their fish-line and trolling methods.

The conditions of these older Indians who live in San Juan, Whatcom and Skagit Counties, who years ago "followed their fishing grounds," as they often termed it, in moving down the Sound, and

who are living or existing there now, certainly need correction.

There are many who for reasons best known to themselves, have wandered, till they can go no farther. Many of them have families through marriage to white settlers, and have located on or acquired lands, some of which are very poor for agricultural purposes.

Many of these are descendants of tribal Indians affected by the Point No Point treaty, and are anxious for lands on some reservation or on some public domain where they may be able to farm on lands of their own. They are honest, industrious, and law-abiding and trying to eke out a living at farming on rocky uplands. Some are living there so that their parents may be near the salt water where fish are easily procured. There are now about three hundred families in these counties who are asking the fulfillment of these treaty agreements, and the recognition of rights justly due them and their forefathers. Owing to scarcity of government lands they have not availed themselves of any of the homestead rights and are anxious for allotment rights due them.

These Indians habitat principally on the shores of Mitchell Harbor on San Juan Island, and Deer Harbor, on Orcas Island. These Indians, and as well their descendants, are well respected by their white neighbors; they are all a tax-paying people, and a very small percentage use intoxicants in any form.

**REPORT OF HENRY FITZGERALD, MEMBER
OF BOARD OF MANAGEMENT**

Delivered June 15, 1914.

Mr. President:

Pursuant to authority and responsibility vested in me as a member of the Board of Managers, selected to represent the Clallam tribe of Indians, I have the honor to state that I attended a meeting of members of that tribe held at Jamestown, Clallam County, on May 12, 1914, and herewith report what was done at that time.

Dr. McChesney made a speech in which he said that the timber on the Quinaielt reservation would be cruised, appraised and sold, and the money resulting from such sale would be held for the benefit of the Quinaielt Indians and not be distributed outside that tribe; and that after the timber was removed the land would be allotted to the Clallams and others entitled to it, on condition that each allottee should reside on the land so allotted.

The Clallams held a conference among themselves, and delegated Peter Jackson to speak for them. Jackson said that the Clallams would not accept enrollment on the Quinaielt reservation on the existing conditions and under the requirements outlined. He said that they not only were unwilling to go to that reservation to live on logged off land and start anew to make homes for themselves, but that they did not want to leave their small homes they had accumulated and worked hard to get. Although these homes were small, they were dear to the owners; and that to leave such homes and go to a wilderness of stumps and begin over again would put them back 50 years. They did not

want that. They wanted to advance and have something to live on. That the government had not kept its part of the treaty with them.

Charles Fitzgerald spoke along the same lines, with the addition of the experience that he had when he went to Washington. He told how the officials sent him from one to another and promised him a decision in a week or ten days. In the meantime his money gave out and he was obliged to leave for home before he could accomplish anything. He said he knew that a big logging company was trying to get the timber, and by getting it in a big lump from the government they would get it cheaper than they could if it were bought from individuals. Another Indian from Jamestown, by the name of William Hall, also spoke. He said that under the treaty negotiated at Point No Point, in which the Clallams participated, the Skokomish reservation was set aside for the benefit of the Clallam tribes; and that it was such a small lot of land that when the Skokomish Indians got their allotments there was nothing left for the Clallams; also, that when the money was distributed that was coming under the treaty it was all given to the Skokomish Indians, and the Clallams did not get any share at all, which by rights they should have had. That under the treaty the Clallam tribe had given up lands from Neah Bay on the west to the vicinity of Port Blakeley, containing a shore line of about 300 miles, and from the salt water to the Olympic mountains in width, an area that is now nearly all settled up. There are no more natural resources left for these people. The game they used to have has gone. They cannot go on their old hunting grounds, for these are all taken up and settled on. There are a few of these Indians gathered at James-

30

town, settled on small holdings which they bought with their own money—land aggregating 200 or 250 acres.

The U. S. government allows foreigners to come in and become citizens after three or five years, and they can each take a homestead of 160 acres of land. They have not given up anything for this. Now, you allow us Indians 80 acres each for the amount of lands we have turned over to you. Is this right and fair?

It would seem that the Clallam Indians have been treated most shabbily by the government. They have always been peaceable, never troublesome. They are without exception law-abiding, and are not mendicants nor public charges. In this respect they furnish a wholesome example to some of the whites. The government at Washington owes them at least decent treatment—not the stingy, neglectful, unjust treatment that has been meted out to them thus far.

I will ask the honorable commissioner to consider the wants of my people, viewed from the standpoint of the obligations of the United States government, its treaty obligations, supposed to be sacred and binding, the lack of good faith in dealing with these wards of the government, and the actual conditions as they exist today. Many efforts have been made to rectify these wrongs.

DUWAMISH AND ALLIED TRIBES

On January 22nd, 1855, Governor Stevens, for the United States government, and Chief Seattle, Chief Skagett, with eighty-one sub-chiefs of the Duwamish, Samahmish, Skagett, Snohomish and seventeen other bands and tribes, entered into an agreement at Point No Point. Of these twenty-one tribes and bands but two small reservations, the

31

Tulalip and the Lummi, was provided, and later by executive order, the Port Madison reservation was set aside. These reservations proved inadequate to the extreme, as hundreds of these Indians and their descendants have suffered through neglect on the part of the government, in the non-fulfillment of its part of this treaty agreement.

The Tulalip and Lummi tribes have been very fortunate in having been well cared for through a good agent and sub-agent, sometimes referred to as "farmer-in-charge." The Duwamish Indians, however, have been sadly neglected. The pleas of several of the older members of the Duwamish band during the last three years, for consideration of their just rights in fulfillment of promises made them, have been heart-breaking. I enclose a copy of an affidavit taken by me from three different members of that tribe, and ask your consideration of the conditions therein revealed. I know these conditions exist. I am well acquainted with all of the parties, and know that they are telling the truth. James Moses, one of the parties giving an affidavit here attached, has since passed away and the other two are very old men. A small money allowance would be of great benefit to them, but land allotments would not now be of any use.

STATE OF WASHINGTON, }
County of Pierce, }ss.

Charles Satiacum, being first duly sworn and under oath says: That he is a member of the Duwamish tribe of Indians which formerly lived in the territory extending from north of Ballard on Puget Sound, running thence back beyond Lake Washington to the hills and southward including Renton

and crossing the valley near the present site of Orillia, and over to the Sound at Point Pulley.

That I am the Charley Satiacum who, on or about the 18th day of November last, gave an affidavit in support of the treatment of the remnant members of the said Duwamish tribe of Indians, and that I, Charles Satiacum, now wish to reiterate and endorse that affidavit in its entirety, and I now wish to add these few paragraphs:

That I am getting to be a very old man, and that I would like to see and have my people who are now living get their just dues in regard to allotments of lands; have some lands somewhere near the waters of Puget Sound. Governor Stevens promised me on his word of honor and as governor of Washington Territory and as agent of the Indians of this district, that the government would certainly give to our tribe two buckets of gold and lands for every Indian belonging to the Duwamish tribe; but that now more than sixty years have passed and not one Indian other than myself has had their allotment of land, although they have repeatedly asked for the same; and I was not given the land promised. I was voted the land by my friends in the Puyallup Indian reservation. I would like to have some kind of a settlement for my people before I pass on to the "Happy Hunting Grounds."

I will forget the **lies** the government has told to me many times if the government will only now settle with the younger members of my race and of my tribe; there are yet quite a few old members of my tribe who have not yet been settled with and they need some land to live on; the government promised it—why don't they give some of it at least?

I want the treaty agreement remembered in regards to the fishing rights and the rights for hunting game; we want some fish and some game; I am too old now to fish and hunt, but I want my people to bring me some sometimes.

Governor Stevens told us that the white man's government was honest; now let the white man's government prove it; they promised us lands, give us some land; don't give all of the land to people from other countries; they do not farm their lands either; they just buy and hold the lands—they get the lands—lots given to them—why not give the Indians some of the lands that Governor Stevens promised them when he made little reservations? I don't like to have my people all of them driven from one place to another and then told them that they don't own the land, and must move off. Give them a place where they can live and fish or hunt a little; that is the old Indians—the young Indians—let them live like white people; let them go to the public schools and learn the ways of the white men; and learn the laws of the white man—so that we know where we belong; so that we know what is right and what is not right; we want to learn our children what is right.

Where Renton now stands, the white people put us off because coal was found there and they told us that the land was too good for coal for us to have; when the government gave us the land we know that the coal was there—but we did not know it was so valuable, and gave it back to the government when they told us that we would have other lands better for the purposes of fishing and hunting. Now why don't the government give us some land somewhere. I want to know this.

We knew that the coal was there—but we did

not know how to work it; we just used a little for our own use; because it made a good fire. If we had had some one to show us we could have and would have mined the coal; but we did not know how to mine it.

Of about twelve hundred Indians that once belonged to the Duwamish tribe at one time about fifty or sixty years ago, there are now about three hundred and twenty all told; among one of the treaty makers or who was there at the time that Governor Stevens was agent of the Indians of this district, was one that died a few days ago. His name was James Moses, and he with many others attempted many times to make a settlement with Governor Stevens at the request of the Indians at Renton. James Moses was sent to Olympia and he had with others at that time been promised land settlement, or that the Indians of the Duwamish tribe would at a very near date be given land on account of so many of the Duwamish Indians helping said Governor Stevens at many times as guide and guard for the said Governor Stevens; this was in and during the years 1855 and 1859. James Moses died a few days ago and hundreds of other Indians of the Duwamish tribe have died waiting for their land promised them by Governor Stevens, and the land has not yet been given them. Many of them (the Indians) wander about from one place to another—when they get drove off from one place they go to another—and all are yet waiting for their allotments, somewhere.

I, Charley Satiacum, would die happy if I had the pleasure of seeing my people of the Duwamish tribe allotted some land; my heart aches every day thinking about the way my people are treated by the government—the great government of the white

Witness to the signature of Chief William Rogers, George Young.

I certify that the above is a correct copy of the original affidavit taken on date as above mentioned.
T. G. BISHOP.

STATE OF WASHINGTON, }
 }ss.
County of Pierce, }

James Moses being first duly sworn, on oath deposes and says that he is a resident of Renton, King County, Washington, and that he remembers when a delegation of members of the tribe went to Olympia to demand of Governor Stevens that they be allotted the smaller reservation which deponent had been informed by his father and other members of the tribe had been promised them by Governor Stevens.

That the members of the said delegation reported, on their return, that Governor Stevens would at once have their reservation surveyed and secured to them, and for several years afterwards, and after the death of said Stevens, the members sought to secure title to said promised lands, but have never been given any such title or any title or any consideration whatever for the cession of all the large area of land which affiant says his associates and members of said tribe insisted had been promised them by said Stevens in consideration for the cession of said lands.

Affiant further says that he has never received any allotment of land nor any consideration whatever of any kind or character to which he is entitled by reason of said agreement made by said tribe with Governor Stevens.

Affiant further says that at about the time said

delegation went to Olympia, about the year of 1858 or 1859, there were about one thousand heads of families in the various bands of Indians making up the said Duwamish tribe, and that there are now about three hundred and twenty-four (324) members of said tribe, heirs and descendants of the said tribe, and that no part of the considerations which affiant was told had been promised by Governor Stevens has ever been received by any of the said heirs or their predecessors, and no consideration has been paid by the United States to the said Indians or anyone for them.

JAMES MOSES.

His thumb mark.

Subscribed to and sworn to before me, a notary public, this 18th day of November, A. D. 1914.

T. G. BISHOP.

Witness to the signature of James Moses,

P. J. James, George Young.

I certify that the above is a correct copy of the original affidavit given by the above named James Moses, on this 18th day of November, A. D. 1914.

T. G. BISHOP.

COWLETZ TRIBE

The Cowletz tribe of Indians, numbering about four hundred souls, occupied that portion of the territory known as Cowletz River. In length it was about eighty miles and extended about twenty miles on either side of the river. The upper Cowletz Indians were known as the Satishan stock; and the Lower Cowletz was of the Chinook stock, though classed as Cowletz Indians, having lived along the shores of that river. The Upper Cowletz Indians were what is commonly known as the "Prairie Indians," or "Horse Indians."

These Indians ceded to the government, without

any treaty agreement of any kind, three hundred and twenty square miles, comprising some of the best prairie lands in the State of Washington, and in support of my contentions for the need of a settlement of some kind with these people, I will here quote from a letter recently received from Mr. J. B. Sareault of Winlock, Washington. He says:

"I was born here on the home of my grandfather, who was Simon Plomondan, at one time, in 1855-57, Indian agent, appointed to that position by Governor Isaac I. Stevens, and which he held till his death. And, by the way, the United States government has not yet settled the claim of my grandfather, Simon Plomondan, to this day. The government owes him or his heirs in the neighborhood of seven thousand dollars (\$7,000), and an unsettled book account of several hundred dollars. Our contentions are backed by vouchers duly signed by Isaac I Stevens as Governor of Washington Territory, and are now held by us for settlement. I was born and have lived here continuously since 1857. My grandfather, Simon Plomondon, came here in 1810, and died while in the service as Indian agent in 1856 or 1857, I think. I have lived here all my life and know that the Cowlitz Indians were never treated with, though they were pushed off and off until today there remains not one Indian on tribal lands or lands that once belonged to these Cowlitz Indians—the homes of their forefathers. In this domain was about twenty sections of prairie lands worth now about one million dollars, burned over timber lands valued now about one-quarter of a million of dollars, and timbered lands now valued in the neighborhood of one hundred and twenty million dollars. While it was true there was a mission established here on this Cowlitz river district,

40

lands for which I understand was given the missionaries possibly for school purposes, I well know that not one Indian ever got a dollar's worth of settlement from the government for the ceding of this vast tract of land, and there are now about four hundred of us yet unsettled with. While many are farming on leased and some on acquired lands, many are working in logging camps and at other occupations; they are all law-abiding and industrious and all desiring a settlement before all of the older members pass off.

The Cowlitz Indians to my knowledge never received any money from the sale of these mission lands, though much of these lands are sold off. The Indians never thought that they had any interest in the lands given the mission, and never expected any rights from them, and that is the only lands that I ever knew about set aside for the benefit of the Cowlitz Indians. I would like to see a settlement of some kind made, as our people are scattered about all over the state and might be called wanderers."

QUILIEUTE BAND INDIANS

These Indians now numbering 272 souls, of the full-blood, applied for their allotments some ten years ago, on the Quinaielt reservation, where by treaty agreement of January 25th, 1855, with the Quinaielt, Quillieute, Hoe and other "fish-eating Indians," they signed as other Indians did, in such treaty agreements. The Quinaielt Indians have been well cared for, but these, the Quilieute band, have been neglected as to their allotments. These Indians have to my knowledge made several appeals for their rights for allotments due them, and should

41

be treated with. In their case as with many of the unallotted Indians now residing on several of the reservations in this district, and who are yet unallotted through no fault of theirs, reminds me of a recent interview with George Charlie of Tokeland, in which he said:

"It is surprising to me how blind some of these old Indians are. Why, some of them could not see those great big hands held out about a yard long and the size of a wash tub, behind some of these old-time agents when they would be walking about their office and appearing very busy too, and the agent would be telling them how much it cost them privately of their own money in trying to get the department to allot them in this particular case. Why, don't you know that them hands were magnetized and if a twenty or two was thrown anywhere near them it was a goner." He then said: "Why, it's the Indians' own fault for being blind."

The foregoing statement is respectfully submitted with the hope that your department may be induced to take steps that will remedy some of the most glaring injustices of the past.

Most respectfully yours,
THOMAS G. BISHOP,
President, Northwestern Federation of American
Indians.

Owyhee Canyonlands and the Shoshone-Paiute Tribes

Ted Howard

“Indian people do not go out to the Canyonlands to play. When we visit our sacred grounds, it’s for a reason. There are prayers and ceremony before we go. It’s a spiritual place for our people and we visit the area with respect to the spirits of our ancestors that reside there.”

– Ted Howard

The Owyhee Canyonlands have always been an important place for the Shoshone, Paiute, and Bannock people. The Owyhee Canyons (east fork, south fork, north fork, and its tributaries), Little Jacks, Big Jacks, Sheep Creek, Bruneau Canyon, and Jarbidge Canyon, have provided resources the tribes needed to survive since time immemorial. The salmon used to migrate through these areas to their spawning beds in tributaries; ceremonies were performed to welcome the fish when they arrived. The people fished to eat, and then preserved most of the catch through smoking or drying for later consumption.

The rivers still provide important resources for the people and habitat for the birds and animals. There are plants for food, medicine, and shelter. There are waterfowl, beaver, muskrats, mink, otter, and big game along the canyons—bighorn sheep, deer, elk and antelope. There are also bob cat, mountain lion, and coyotes.

In the mid 1800s, immigrants arrived in southern Idaho. They started taking the best parts of our homelands for themselves, including the water sources. When precious metals were discovered in the Boise Basin and Silver City (1860s), they wanted the Indians out of the area. Indian people were killed at random. Our people fought as best they could. There were bounties placed on Indian scalps: \$100 for men, \$50 for women, and \$25 for children—this is documented. If someone wanted to go Indian hunting and needed supplies, supplies were provided and the cost was deducted from the payment made when they returned with Indian scalps. Our people had to take refuge in the canyons to survive. Their goal was to exterminate our people, but they failed to achieve their goal because it was nearly impossible to catch our people in the rough terrain of the Canyonlands. There were many battles throughout the Owyhee

This statement was prepared by the author, Cultural Resources Director, Shoshone-Paiute Tribes, in June 2015 for an environmental group that requested information concerning the importance of the Canyonlands to the Tribes. The request was related to an ongoing debate concerning a proposal to designate 2.5 million acres of the Canyonlands as a National Monument. No action to create the monument has occurred to date.

Mountains, South Mountain, and Juniper Mountain area and the canyons of southern Idaho, southeastern Oregon and northern Nevada.

Tribal history is tied to the environment. There are stories that connect the tribes to these places and we still visit these locations to take care of our traditional needs. There are countless burials and sites throughout the area. The entire Canyonlands are sacred to our people.

Sandra Zellmer writes, "American Indian religious beliefs, unlike western religious traditions, are often site-specific in nature and intimately associated with the land and its natural features." She also notes that land is seen as a "sacred living being" that shares its divinity with "everything that is part of nature, including human beings, animals, plants and rocks."

She quotes Chief Seattle's speech upon signing the Treaty of Medicine Creek in 1854, in which he distinguishes between Euro-American and tribal views of the land:

"How can one buy or sell the air, the warmth of the land? ...Each pine tree shining in the sun, each sandy beach...each humming bee is holy in the thoughts and memory of my people...we are a part of the earth and the earth is a part of us...so when the Great Chief in Washington sends word that he wants to buy our land, he asks a great deal of us. The earth is not his brother but his enemy and when he has conquered it he moves on."

Native American sites are referred to as "prehistoric." This is not a term that we appreciate. Indian people are not extinct—we are still here. Tribes don't have a prehistory; we have one continuous history that goes back for thousands of years. Contemporary tribes are living cultures; we still practice our traditions, we still visit our homelands and our sites, and we still use the resources on our homelands. These sites are contemporary sites. We do not appreciate anyone advertising our sites or the Canyonlands. In the last two to three decades, we have seen many articles in magazines, newspapers, and television programs about the Canyonlands. Some offer services of various kinds to take people out there for their own financial gain or they invite others to visit the area. The tribes do not appreciate this publicity. As recent as the late 1970s, we saw very few people out there, besides the ranchers. One could be out for days and never see anyone else. Now there are people out there all of the time, some digging up our sites and stealing the contents to sell, shooting everything that moves, stealing from the line camps used by ranchers and tribes. Nothing good has come from the discovery of our sacred grounds. The environment is suffering, animal numbers have declined, and some are nearly gone. In the late 1990s, the Idaho Training Range was established and now there is always aircraft noise, sonic booms, and chaff being dropped onto the environment. Chaff is not biodegradable.

Most environmentalists/conservationists claim they want to protect the area. They want cattle grazing gone and more people visiting the area to recreate. The tribes would rather everyone leave it alone. We need our space to survive as Indian people, the same as the natural inhabitants the way the creator intended things to be. If you want to visit the area, come and visit, don't publicize anything; enjoy and keep it to yourself.

I speak for those that cannot speak for themselves: the environment, the mountains, the animals, the birds, the plants, the water. It is our duty as contemporary

Indian people to protect and preserve the resources for the coming generations. The BLM developed a Resource Management Plan for the area. My comment to them was “we need a People Management Plan, the resources will do fine on their own. It’s when people show up with their 4 Wheel Drives and ATVs that everything begins to decline, new roads are created, erosion worsens, cultural resources are stolen, and the natural inhabitants suffer.”

The U.S. Senate never ratified the treaties for southwestern Idaho, so there was never a transfer of land title to the U.S. Government. The tribes still maintain Indian title to southern Idaho. (Note: Indian title is “the right of occupancy granted by the federal government to an American Indian tribe based on the tribe’s immemorial possession of the area.” – uslegal.com)

Ted Howard
Cultural Resources Director, Shoshone-Paiute Tribes
howard.ted@shopai.org

Remembering David L. Cole (1928–2017): A Transitional Figure in Oregon Archaeology

Rick Minor and John L. Fagan

Abstract *David L. Cole, a former University of Oregon archaeologist, passed away in Eugene on 28 January 2017, according to the death record in the 2 February 2017 edition of “The Register-Guard” newspaper. Beginning as an undergraduate student working with Luther S. Cressman, and later serving as the University of Oregon’s principal archaeologist during the early years of Contract Archaeology, the forerunner of today’s Cultural Resource Management (CRM), Dave was a transitional figure in Oregon archaeology. This remembrance is inspired by the authors’ experiences working on archaeological projects directed by Dave while in the Ph.D. program in Anthropology at the University of Oregon.*

After serving in the Navy at the end of World War II, David L. Cole enrolled at the University of Oregon in 1946. He began his career in archaeology working on Luther S. Cressman’s crews in the Klamath Basin, where excavations were conducted from 1947 through 1951 (with the exception of 1950). These excavations formed the basis for Cressman’s reconstruction of prehistoric lifeways attributed to the Klamath peoples and their ancestors extending back to before 7,000 years ago, based on the recovery of artifacts below ash from Mount Mazama at present-day Crater Lake at Medicine Rock Cave. At the Kawumkan Springs Midden, housepits were excavated in 1949, and Cressman acknowledged Cole’s contribution in the Preface to *Klamath Prehistory*: “Most of the photography of the excavations of the Kawumkan Springs Midden was done by Mr. David L. Cole, student member of the party” (Cressman 1956:375). Dave received his Bachelor of Science in Anthropology in June 1952, and entered the graduate program in Anthropology in the fall of 1952; he was awarded a Master’s of Science (M.S.) in Anthropology in June 1954.

Dave continued working with Cressman during excavations in the 1950s at sites on the Oregon shore of the Columbia River threatened by inundation behind The Dalles Dam. During the second season’s work in 1954, Dave was identified as the “field foreman” and as “field director” during the 1956 excavations (Cressman et al. 1960:4). Dave is also credited with making “the initial classification of artifacts based on the 1953 and 1954 excavations” (Cressman et al. 1960:5). Dave’s work in the field and classification of artifacts from WS-4 and WS-1 provided the basis for his M.S. thesis in Anthropology titled “A Contribution to the Archaeology of The Dalles Region, Oregon” (Cole 1954).

Much of the information in Dave’s thesis was then included in the published report on the University of Oregon’s work at The Dalles. While Cressman was the

REMEMBERING DAVID L. COLE

primary author, the publication *Cultural Sequences at The Dalles, Oregon* was prepared "In Collaboration with" David L. Cole, Wilbur A. Davis, Thomas M. Newman, and Daniel J. Scheans (Cressman et al. 1960). Included in this publication was a photograph (Figure 1) with the caption "Indians fishing at Celilo Falls. Photo by D. L. Cole" (Cressman et al. 1960:84, Figure 35).



Figure 1. "Indians fishing at Celilo Falls. Photo by D.L. Cole" (from Cressman et al. 1960:84, Figure 35).

After completing his Master's thesis, Dave used training received in a human osteology class to obtain employment through the civil service as a civilian for Graves Registration in southern Japan, working with bodies in the aftermath of the Korean War, matching human remains to records of missing servicemen. Based on this experience in identifying human remains, Dave "represented the National Park Service at the removal of the bodies from Grave Island preparatory to raising the water in the reservoir of The Dalles Dam" (Cressman et al. 1960:34, 70). Among his other later activities at the University of Oregon, Dave continued acting as a physical anthropologist, often called in to assist law enforcement agencies when human remains were discovered, during his later years at the Museum of Natural History.

In 1957, Dave re-entered the graduate program in Anthropology with the intent of pursuing a Ph.D. in Anthropology, and obtained a graduate assistantship in the Museum of Natural History. During the summer of 1957, Dave and Thomas M. Newman from the University of Oregon carried out a resurvey (updating a 1950 survey), under contract with the National Park Service, of the shores of the Columbia River threatened with inundation behind the John Day Dam. From 1958 to 1968, the National Park Service sponsored a series of investigations by the University of Oregon around the proposed reservoir that ultimately included excavations at 37

sites. Although nominally under Cressman's direction, Dave was actually in charge of directing the fieldwork throughout the project's 11 field seasons. Cole and Cressman are listed as co-authors (in that order) of the interim reports for the first three seasons from 1959 to 1961. The order of authors was reversed (Cressman and Cole) for the report on the fourth field season (1962) as Cressman became more and more involved in preparations for his own retirement the next year in 1963. Thereafter, Cole was listed as sole author in the project's reports, with the exception of the 1963 field season where the report consisted of two parts: one by Cole and the second by Cole and Frank C. Leonhardy, a student assistant.

The results of each season's investigations were presented in a series of interim reports. Dave was first identified as "Curator, Museum of Natural History, University of Oregon," in the interim reports on the 1961–1962 and 1962–1963 field seasons (Cressman and Cole 1962; Cole 1963). Beginning with the next interim report, he was identified as "Curator of Anthropology, Museum of Natural History, University of Oregon" (Cole 1964). Dave envisioned that the archaeological work in the John Day Reservoir would form the basis of his doctoral dissertation. However, as the project expanded to include 11 seasons of fieldwork, and he nevertheless continued to take on other assignments, he was unable to carve out a dissertation or complete a final report on the archaeological research in the John Day Dam Reservoir area. To date, the Wildcat Canyon Site (Figure 2) is the only one of the 37 sites investigated that has been reported in detail (Dumond and Minor 1983).



Figure 2. David L. Cole (far left) supervising excavations during the 1966 field season in Area 5 at the Wildcat Canyon Site (photograph courtesy of John L. Fagan).

During the John Day Dam Project, Dave and the crew of mostly University of Oregon students camped out in tents along the river. Dave's wife, Shirley, is remembered as an excellent cook for the crew. High temperatures during the summer months along the Columbia River frequently exceeded 100 degrees, making for long days working in the hot sun. John L. Fagan, who as a graduate student worked on many projects directed by Dave, recalls a favorite anecdote repeated by a number of former members of Dave's field crews. The crew members practiced a particular technique for extending breaks on particularly hot days in which they took turns in asking questions just about five minutes before the end of each break. The topics could be on a wide range of subjects, and Dave would provide extensive information about the requested topic, often resulting in a much extended break. However, as he thinks about it now and compares notes with other archaeologists from other crews and other times, John suggests that the joke may have been on the crew. It was likely Dave's way of justifying extended breaks for himself. We will never know.

After working on field projects and in the lab as a graduate student and then receiving a Ph.D. in Anthropology, John was employed as Assistant Curator of Anthropology at the University of Oregon Museum of Natural History from 1972 to 1974. He considers Dave to have been an excellent field archaeologist and very knowledgeable about the archaeology of the region. John learned a lot about field techniques for exposing features and sampling sites, and his time in the lab gave him an opportunity to learn a lot about analysis and the processing of samples collected in the field. John remembers Dave as having an excellent memory and as someone who could recall the names of all of the former crew members, details about the archaeological sites that he tested, the types of features and associated artifacts at each site, details about stratigraphy, and so on. Dave was an inspiration to John in many ways, and was one of Dr. Cressman's students in the era when an archaeologist was a self-contained expert in every aspect of field and laboratory work.

At its founding in the 1930s, one section of the Museum of Natural History had been formally designated by the Oregon legislature as repository for any archaeological collections entering possession of the State, and this included records of archaeological sites discovered on State property. In his position as Curator of Anthropology at the Museum of Natural History, Dave was responsible for maintenance of the archaeological site record files, a duty the Museum retained until the late 1970s, when the State Historic Preservation Office (SHPO) came into being. With this, Dave was the face of Contract Archaeology in Oregon in the 1960s and 1970s.

An indication of the extent of Dave's activities during this time span can be gained from listings in the Archaeological Reports Database maintained by SHPO. The database contains references to 136 reports listing David L. Cole as the senior author, but this is not a complete inventory of his writings. Dave's entries in SHPO's Archaeological Reports Database reflect the growth of archaeological research in Oregon during this period.

Aside from interim reports on fieldwork in the John Day Dam Reservoir Area, Dave wrote reports on ten other substantial projects during the 1960s, almost all of which were surveys in proposed reservoir areas throughout the state. Four surveys were conducted for the National Park Service, two for the Bureau of Reclamation, and two for the Army Corps of Engineers. One more survey was conducted in the proposed (privately sponsored) Coffeepot Dam reservoir area and another survey was in Collier

State Park. Dave also directed excavations during four sessions from 1965 through 1968 at the Mack Canyon Site, a 2,000 year-old housepit village on the Deschutes River in Sherman County. He noted that “this project is probably one of the first encounters with archaeological work for many of the Bureau of Land Management personnel involved with this project” (Cole 1967:1).

At the end of that decade, Dave co-authored *A Bibliographic Guide to the Archaeology of Oregon and Adjacent Regions*, a Special Publication of the Museum of Natural History at the University of Oregon (Johnson and Cole 1969; updated in 1972). Approximately half the entries pertain to archaeology in Oregon, with the other half referring to archaeology in adjacent regions. This bibliography was the first attempt to gather references to Oregon archaeology in one source document. The Museum did not become an actual repository for archaeological literature, however. The vitally important function of serving as a library for archaeological reports in the state would eventually be assumed by SHPO after its founding in the late 1970s.

The first few years of the 1970s continued the pattern of reservoir surveys, with Dave preparing reports on surveys and testing in the Bonneville Dam (Figure 3) and Catherine Creek reservoir areas for the National Park Service, and in the Foster Dam reservoir for the Army Corps of Engineers. Dave was the first archaeologist to call attention to the existence of Native American vision quest sites, preparing a memorandum containing recommendations for protection and interpretation of the vision quest mounds near Susan Creek Falls on the North Umpqua River that he had first visited in 1962 (Cole 1971).



Figure 3. David L. Cole (left) during excavations in 1972 at the Bad Place Site near The Dalles on the Columbia River (photographs courtesy of John L. Fagan).

In July and August 1973, Dave directed excavations at Dirty Shame Rockshelter in the far southeastern corner of Oregon, which proved to contain evidence of occupation between 9500 and 400 B.P. This work was funded by a grant from the National Science Foundation, with C. Melvin Aikens and David L. Cole as Co-Principal Investigators. Dave was included as a co-author on the lead article in a series of papers published on the results of these investigations, with basketry, sandal, and projectile point types interpreted as reflecting cultural relationships with ancient peoples in the Northern Great Basin (Aikens, Cole, and Stuckenrath 1977).

In 1975–1976, the Oregon State Department of Transportation (ODOT) began contracting for archaeological services with the Museum of Natural History at the University of Oregon. Initially, Dave performed surveys under this contract, but beginning in 1976 and 1977 reports of this work were most frequently co-authored with Richard M. Pettigrew, after the latter's appointment as the state's first Highway Archaeologist. Dave conducted eight projects for ODOT between 1977 and 1979, but most of his work was for a variety of other clients, including Portland General Electric (Carty and Pebble Springs reservoir areas), the Army Corps of Engineers (Cottage Grove Reservoir), a land exchange at Sunriver for the Deschutes National Forest, and various municipal projects in The Dalles, Hood River, Cottage Grove, Lowell, and Eugene.

With the end of the 1970s came stringent measures as the University of Oregon struggled against steep budget cuts, and as a result Dave's position at the Museum of Natural History was unfortunately eliminated. According to listings in the SHPO Archaeological Reports Database, offshoots of the records maintained until then by the Museum, after his departure from the University of Oregon Dave conducted two projects in Linn County in 1982 and two projects in The Dalles in 1989. His last project report on file at SHPO was for a survey for the expansion of the Joseph State Airport in Wallowa County in 1993.

Dave's primary activity during his last years at the University of Oregon was as the Principal Investigator for archaeological surveys carried out for the Pacific Power and Light Company (PPL). The SHPO Archaeological Reports Database contains 23 reports prepared by Dave between 1978 and 1980 in connection with construction of PPL's 500-KV powerline in Lake, Harney, and Malheur counties and between Medford and Klamath Falls in Jackson and Klamath counties. These surveys involved working in two-person teams that leap-frogged each other while walking along the proposed alignment and access roads in search of archaeological sites. Rick Minor and Kathryn Toepel were fortunate to work with Dave on some of these surveys (e.g., Cole et al. 1979). Walking the powerline route cross-country over the steep and forested Klamath Mountains and then across the flat sandy desert of southeastern Oregon to the Idaho border was an epic experience that will always be remembered.

Dave was an inveterate storyteller, with his stories often based on his long experience directing archaeological field projects in Oregon. One story that stands out in Rick Minor's recollections was about an exchange student from India who applied to work on one of the Museum's summer projects. Although his slight physique did not inspire confidence that he could hold up under harsh working conditions in the field, the young man assured Dave that he could handle it as he had considerable experience working on construction projects in India. As the story goes, once in the field the young man quickly wilted under the summer heat and had to take an

unscheduled rest. When Dave reminded him that he claimed to have worked on construction in India, the young man replied: *I did work on construction projects in India. My job was carrying the paper roll of construction plans for the engineer.*

The many surveys Dave conducted often provided the first looks at archaeological resources in remote areas of Oregon. He worked at a time before many of the archaeological sites known today had been recorded. As Rick Minor and Kathryn Toepel discovered during the PPL powerline surveys, Dave never grappled with the definition of an archaeological “site”—a good archaeologist simply knew one when they saw one. During the 1950s and 1960s, Dave directed excavations at a substantial number of archaeological sites around the state. However, with the exception of his Master’s thesis, his reports on these excavations were always “preliminary” and he never really indulged in in-depth analysis. He was not one to be fulfilled by seeing his name on publications. Dave produced few impactful writings; only three reports with Cole as the lead author are referenced in the recent book *Oregon Archaeology* (Aikens, Connolly, and Jenkins 2011:430).

The field notes and collections from Dave’s many projects are important sources of data for later archaeologists, but inevitably something is lost when the original field director does not expound in more detail on field investigations, recovered cultural materials, and interpret their meaning. To date, only a few of Dave’s excavations and recovered collections have been analyzed and/or incorporated into later studies. His unreported 1965 excavations in a pithouse in Collier State Park were written up by Cheatham (1990). His unreported excavations in 1961 at a late prehistoric pithouse at the Tututni village of *Chetlessenten* on the southern Oregon coast were summarized and radiocarbon dated by Erlandson, Tveskov, and Moss (1997). The field notes and artifact collection recovered in 1972 from 35-WS-14 on the Columbia River at The Dalles (Cole 1974) were reanalyzed and reinterpreted by Minor (1994). A radiocarbon date based on a sample from a pithouse at 35-CU-62 on the southern Oregon coast briefly examined by Cole in 1961 was more fully interpreted by Minor, Tasa, and Wasson (2001).

Deward E Walker, Jr., founder and co-editor of the *Journal of Northwest Anthropology*, cited another important contribution Dave made to Northwest Anthropology—his training of a large number of graduate students in various locations on the Columbia River system. Deward commented:

Personally, I was involved in the Blalock Island project and conducted excavations on the John Day River under Dave’s leadership where we excavated historic housepits that appeared to have been fishing camps. He was easygoing and, at the time I worked with him, his wife was a great asset to us in our summer field school at Blalock Island when we were excavating before construction of hydroelectric developments. I liked Dave personally and believe he was extremely important in helping realize Luther Cressman’s grand plan for Oregon archaeology. (Walker 2017)

Among the individuals who worked for multiple seasons with Dave Cole on the Columbia River and who went on to careers in archaeology were David H. Chance, Frank Leonhardy, Harvey S. “Pete” Rice, Michael D. Southward, and W. Raymond Wood.

Dave was one of the last of the early generation of University of Oregon students who got their start in archaeology working with Luther Cressman, the “father of Oregon archaeology.” With a career spanning the 1950s through the early 1990s, Dave represents a transitional figure in the history of Oregon archaeology. His legacy is primarily as a collector of archaeological data during the 1950s, 1960s, and 1970s, often from archaeological sites that have since disappeared. One of the reasons that museums exist is to hold archaeological collections and field notes for analysis and restudy by later generations of scholars. In this respect, Dave Cole made a positive contribution to Oregon archaeology in that his field notes and collections will be the subject of studies by archaeologists for many generations to come.

ACKNOWLEDGMENTS

We thank Don E. Dumond, Professor Emeritus in Anthropology at the University of Oregon, for sharing his knowledge about Dave Cole’s life and professional experience; Kathryn A. Toepel for sharing her memories of working with Dave as well as for editorial suggestions; and Deward E. Walker, Jr., for his contribution to this remembrance.

REFERENCES CITED

- Aikens, C. Melvin, David L. Cole, and Robert Stuckenrath
1977 Excavations at Dirty Shame Rockshelter, Southeastern Oregon. *Tebiwa: Miscellaneous Papers of the Idaho State University Museum of Natural History*, No. 4. Pocatello.
- Aikens, C. Melvin, Thomas J. Connolly, and Dennis L. Jenkins
2011 *Oregon Archaeology*. Oregon State University Press, Corvallis.
- Cheatham, Richard D.
1990 Archaeological Investigations in Collier State Park. *Current Archaeological Happenings in Oregon (CAHO)*, 15(2):7–11.
- Cole, David L.
1954 A Contribution to the Archaeology of The Dalles Region, Oregon. Unpublished Master’s thesis, University of Oregon, Eugene.
- 1963 Interim Report 1962–1963. Report of the University of Oregon to the National Park Service, Region 4, under Contract No. 14-10-0434-859 (John Day Reservoir—FY 1962). Eugene.
- 1964 Excavations at Wildcat Canyon, Site 35GM9, Area 5, Interim Report 1963–64, John Day Dam Reservoir Project. Report of the University of Oregon to the National Park Service, under Contract No. 14-10-0434-930 (John Day Reservoir—FY 1963). Eugene.

- 1967 Archaeological Research of Site 35SH23, The Mack Canyon Site: Interim Report 1965–1966. Report of the University of Oregon to the Bureau of Land Management. Eugene.
- 1971 Protection and Enhancement of the Cultural Environment Susan Creek Indian Mounds. Memorandum of the University of Oregon to the Bureau of Land Management, Roseburg District. Eugene.
- 1974 Archaeological Research in the Bonneville Dam Pool Area. Report of the Museum of Natural History, University of Oregon, to the National Park Service. Eugene.
- Cole, David L., Rick Minor, and Kathryn Anne Toepel
1979 Report on a Cultural Resources Survey of the Pacific Power and Light Company's 500KV Powerline Project between Medford and Klamath Falls. Report of the Oregon State Museum of Anthropology, University of Oregon, to the Pacific Power and Light Company. Eugene.
- Cressman, Luther S.
1956 Klamath Prehistory: The Prehistory of the Culture of the Klamath Lake Area, Oregon. *Transactions of the American Philosophical Society*, 46(4). Philadelphia, PA.
- Cressman, L. S. and David L. Cole
1962 Interim Report 1961–1962. Report of the University of Oregon to the National Park Service, Region 4, under Contract No. 14-10-0434-481 (John Day Reservoir – FY 1961). Eugene.
- Cressman, Luther S., in collaboration with David L. Cole, Wilbur A. Davis, Thomas M. Newman, and Daniel J. Scheans
1960 Cultural Sequences at The Dalles, Oregon. A Contribution to Pacific Northwest Prehistory. *Transactions of the American Philosophical Society*, 50(10). Philadelphia, PA.
- Dumond, Don E. and Rick Minor
1983 The Wildcat Canyon Site (35GM9): Archaeology in the John Day Reservoir. *University of Oregon Anthropological Papers*, No. 30. Eugene.
- Erlandson, Jon M., Mark A. Tveskov, and Madonna L. Moss
1997 Return to Chetlessenten: The Antiquity and Architecture of an Athapaskan Village on the Southern Northwest Coast. *Journal of California and Great Basin Anthropology*, 19(2):226–240.
- Johnson, LeRoy, Jr. and David L. Cole
1969 *A Bibliographic Guide to the Archaeology of Oregon and Adjacent Regions*. Special Publication of the Museum of Natural History, University of Oregon, Eugene. (Second printing with supplement published November 1972).

Minor, Rick

- 1994 The Dynamics of Archaeological Significance: A Case Study from The Dalles Area of the Pacific Northwest. In *Contributions to the Archaeology of Oregon, 1989–1994*, edited by Paul W. Baxter, pp. 119–145. *Association of Oregon Archaeologists Occasional Papers*, No. 5. Eugene.

Minor, Rick, Guy L. Tasa, and George B. Wasson, Jr.

- 2001 The Raymond's Dune Site and Its Place in the History of Southern Northwest Coast Archaeology. *Journal of California and Great Basin Anthropology*, 23(1):77–92.

Walker, Deward E., Jr.

- 2017 David L. Cole Remembrance. Email to Darby C. Stapp, September 25, 2017.

ABOUT THE AUTHORS

Rick Minor received his Ph.D. in Anthropology from the University of Oregon in 1983. He was a co-founder in 1980, along with Kathryn A. Toepel, of Heritage Research Associates in Eugene, Oregon, where he has served as Senior Archaeologist since that time. Since 2009 he has also served as an Instructor in the University of Oregon's Historic Preservation Program. His research interests span prehistoric and historical archaeology in the Pacific Northwest, with an emphasis in recent years on Industrial Archaeology.

John L. Fagan received his Ph.D. in Anthropology from the University of Oregon in 1973. He served as the Portland District Archaeologist for the Army Corps of Engineers from 1974 to 1989. In 1989 he co-founded Archaeological Investigations Northwest, Inc. (AINW), with Jo Reese. He has served as AINW President for the last 28 years. His research interests include prehistoric archaeology with a focus on lithic technology and protein residue analysis of stone tools.

Metric Analysis of Chipped Cobble Net Weights on the Lower Spokane River (Spokane Arm of Lake Roosevelt)

Christopher M. Casserino

Abstract *Indigenous people of the Inland Northwest subsisted for millennia on protein sources extracted from the Spokane River (now the Spokane Arm of Lake Roosevelt) and other inland waterways. The cobble net/line weight is one of the few pieces of indigenous fishing technology that is preserved in the archaeological record. Net weights from seven archaeological sites on the lower Spokane River were measured to determine if any of the three dimensions was more influential in raw material selection. It is demonstrated that oblong cobbles dominated the sample, that thickness was the most influential factor in material selection, and that there was no significant difference between sites.*

Introduction

The indigenous people of the Spokane area in eastern Washington State relied heavily on protein sources extracted from the area's rivers, most notably migrating salmon during the Middle Archaic (approximately 5,000 years BP to 2,000 years BP) onward (Ames et al. 1998). In addition, other riverine sources such as trout (*Oncorhynchus* spp.), freshwater mussel (*Margaritifera falcata*), and crayfish (*Pacifastacus leniusculus*) were exploited. A sophisticated toolkit was developed for harvesting riverine resources, enabling the people to enjoy a rich and diverse diet (Ross 2011:376–400).

According to Ross (2011), the ancestors of the Spokane Tribe constructed fishing traps and weirs in moving bodies of water as a means of harvesting fish in great numbers. These structures were held in place by large anchor stones that could weigh up to 30 kg (Ross 2011:226). Seine nets were weighted with groups of much smaller stones, which were expediently modified, used, and left behind for future re-use (Ross 2011:226). Chipped cobble line/net weights are one of the few pieces of fishing tackle that preserve well archaeologically. These artifacts, also known as line or net sinkers, are commonly found on the shores of the lower Spokane River and other inland waterways, especially on rocky floodplains and terraces bordering rivers (Casserino 2015). All cobble weights are referred to here as “net weights” for the sake of simplicity. Net weights mark areas of fishing activity and their presence and abundance can inform about the intensity of fishing activity. These artifacts survive better in the archaeological record than organic components such as fish remains, cordage, or nets. Their discovery in conjunction with dateable organic material can indicate the time period that aquatic resources were exploited.

Cobble net weights are produced by making notches, grooves, or holes in stones so another object such as a line, net, or basket may be attached (Figure 1). These



Figure 1. Side-notched quartzite (L) and four-notched quartzite net weight (R).

modifications are accomplished through percussion flaking or pecking to produce notches, or by drilling, grinding, or rubbing to perforate or groove (Nadel and Zaidner 2002:51; Stewart 1982:30). Notching is found predominantly along the lengths of oblong net sinkers, although end notching or multiple notching patterns are found on rare occasion (Prowse 2010:78).

After years of casually observing these artifacts in the field, the author noted a trend toward oblong-shaped net weights and was curious as to whether a preference had developed for size, shape, and material type. A search of the literature turned up no studies concerning systematic measurement of these artifacts in the study area. This is in stark contrast to the volumes of work that describe the size, shape, weight, and flaking patterns of projectile points. The purpose of this study is to characterize by size, notch characteristics, and material types, chipped cobble net weights found on the lower Spokane River/Spokane Arm of Lake Roosevelt in eastern Washington State. Study of these characteristics will aid in identification of these artifacts, and may provide insight into the selection criteria of size, shape, and raw material type when producing these implements. It is hoped that the increased collection of metric and qualitative data from net weights will stimulate future researchers to answer a greater number of questions related to aquatic resource utilization.

History and Previous Research

Cobble net weights appear in the archaeological record at Kettle Falls, Washington before 6,800 years BP (Carlson 2011:225) and are documented in the southern Columbia Plateau before 5,000 years BP (Ames 1985:172–173). Their presence is firmly established in the Middle Archaic (Andrefsky 2004:30–31), a time of increased sedentism and reliance on salmon in many of the region's rivers (Ames et al. 1998:112; Chatters and Pokotylo 1998:76). They are widespread by the time

of European contact (Ames et al. 1998:111). Despite their ubiquity, little in-depth analysis has been published about these artifacts; typically, only a notation of their presence and sometimes material type are recorded.

Three sites located on the middle section of the Spokane River (45SP214, 45SP215, and 45SP238), and one (45SA11) located on the Columbia River above Bonneville Dam (Draper and Olson 1991; Minor et al. 1989) serve as background examples of the underutilization of net weight data. Four net weights were recovered from 45SP214, one from 45SP215, and sixteen from 45SP238 (Draper and Olson 1991). All three sites appeared to be short-term campsites that had fire-modified rock, lithic debitage, mammalian and fish bone, and some freshwater mussel shell associated with the net weights. Neither metrics nor notch location of the net weights was recorded, but material type was noted for those recovered at 45SP215 and 45SP238. The lone net weight at 45SP215 was made of quartzite, whereas the collection from 45SP238 consisted of nine made of mudstone, six of quartzite, and one of an unidentified material type. This suggests that mudstone was a common material that occurred in the area of 45SP238 and was likely chosen for its softer nature, which made for easier modification.

Site 45SA11 in the Columbia River gorge, which dates to the fifteenth through early nineteenth centuries A.D., produced 303 net weights (Minor et al. 1989). These were found in association with 1390 fish remains, which constituted 5.3% of the total faunal assemblage (Minor et al. 1989:188). Again, the artifacts were not measured, but they were characterized by material type and alteration. Basalt accounted for 96% of the material represented, with minor amounts of quartzite (1%); other materials (3%) were of miscellaneous/unknown material (Minor et al. 1989:129). About 65% of the net weights were either fully or partially grooved, 33% were perforated, and 1% was notched (Minor et al. 1989:129). In all of these reports, aside from listing of material type and occasional mention of type of modification and notch placement, no mention was made as to size, shape, and thickness of these artifacts.

Methods

The study area encompassed the Spokane Arm of Lake Roosevelt, which stretches from Two Rivers to Little Falls Dam (Figure 2). Specific site locations and trinomials are not used due to tribal privacy requests. The seven sites of interest in this study are streamside campsites or villages, some of which were repeatedly occupied since the Early Archaic, while all were occupied since at least the Middle Archaic based on radiocarbon dates and projectile points recovered during past excavations. All of the sites contain fire modified rock features and/or freshwater shell middens. The majority of the artifacts were recovered from the surface, so their temporal context is unknown.

The artifacts included in this study originated from seven sites located along the lower Spokane River: four on the Lincoln County side, coded as Sites 1, 2, 4, 6, and three on the Stevens County side (Spokane Indian Reservation), coded as sites 3, 5, 7. The study included artifacts stored in the Spokane Tribe of Indians Collections Facility and artifacts located in the field. Collections facility artifacts were previously collected from the surface. The majority of field artifacts were located on the surface by pedestrian survey at previously recorded site locations, whereas a small minority were collected during controlled excavation. One artifact from Site 1 was excavated in

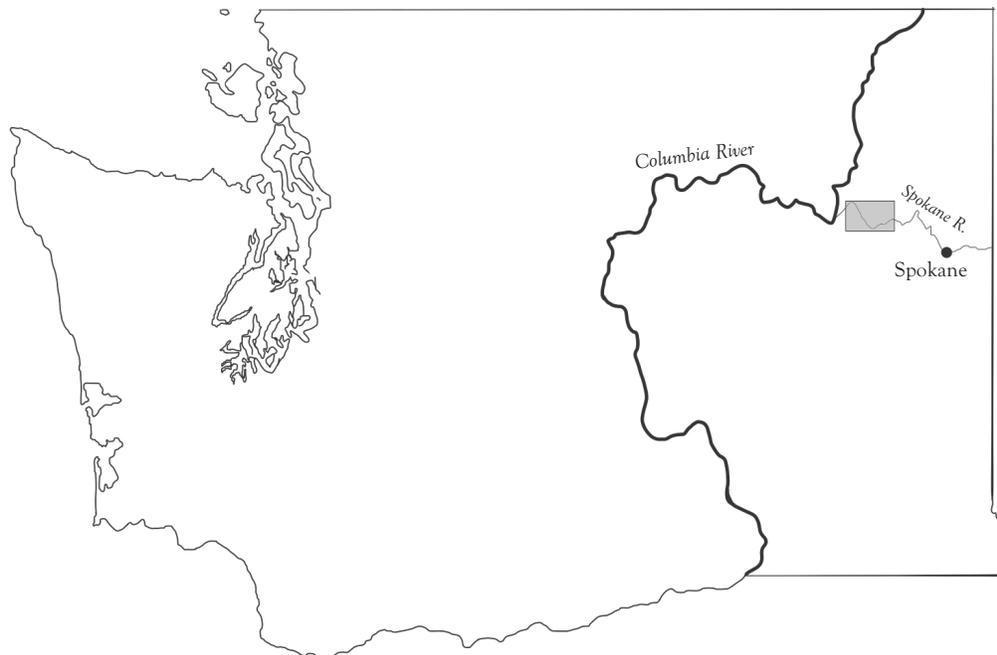


Figure 2. Map of study area (shaded).

association with charred organic material that returned a conventional radiocarbon date of $3,320 \pm 30$ years BP (two-sigma calibrated date range of 3635–3470 years BP [Beta#440718]). The metrics of maximum length, width, and thickness of 154 artifacts were measured using a sliding caliper and rounded to the nearest millimeter. The length-to-width (L:W) ratio was calculated to characterize the shape of the artifacts. Number and location of notches, as well as material type, were recorded. All objects measured in the field were replaced in their original location immediately after measurement.

Descriptive statistics were calculated for each site and for the pooled site samples. Inter-site comparisons then were made to determine if preferences for net weight size existed at different sites, which may have been a result of river current swiftness at different locations (Table 1). A one-way ANOVA test was performed to determine inter-site differences in the L:W ratio and thickness of objects. The comparisons of L:W were made between sites (Table 2). A chi-square test was used to investigate whether there was a significant difference between the observed and expected frequencies of material types at the different sites. The chi-square table included the categories “basalt” and “quartzite;” the remaining material types were pooled into a category called “other” due to the high number of cells containing no observed artifacts (Table 3).

Table 1. Summary Statistics of Three Attributes Measured

Attribute	n	Mean	Std. Dev.	Variance
Length	154	74.5 mm	10.7	114.9
Width	154	54.0 mm	7.1	50.5
Thickness	154	16.1 mm	4.6	20.7

Table 2. Summary Statistics of Length-to-Width Ratio

Site	n	Mean	Std. Dev.
1	23	1.44	0.23
2	24	1.33	0.17
3	19	1.38	0.23
4	13	1.3	0.18
5	10	1.4	0.27
6	27	1.37	0.14
7	38	1.46	0.24

Table 3. Chi-Square Analysis^a

Site	Quartzite	Basalt	Other
1	13 (12.8)	13 (11)	0 (2.19)
2	13 (11.8)	8 (10.1)	3 (2.03)
3	7 (7.9)	9 (6.75)	0 (1.35)
4	4 (6.42)	8 (5.49)	1 (1.1)
5	6 (4.94)	4 (4.22)	0 (.84)
6	13 (13.3)	11 (11.4)	3 (2.28)
7	20 (18.8)	12 (16)	6 (3.21)

^aobserved, (expected) frequencies

Results

Net weights were fashioned predominantly from quartzite (49%) and basalt (42%). The remaining material types included rhyolite, tuff, andesite, granite, and metasediment. Chi-square analysis showed a significant difference between observed and expected frequencies of material type occurrence at the sites at the 95% confidence level ($\chi^2=12.7$; $df=12$; $p=.389$) (Table 3). Notch placement overwhelmingly favored side notched to all other types. Side notching was found on 138 artifacts (90%), end notching occurred on one artifact, four artifacts possessed four opposing notches, nine had three notches, and two had a single side notch opposite a concave side.

The average net weight length was 74.5 mm, average width was 54 mm, and average thickness was 16.1 mm (Table 1). Length varied the most of the three attributes, followed by width, and finally thickness (Table 1). Figure 3 illustrates this in graphic form. Though all three attributes can affect the mass of the object, thickness was the least flexible raw material selection factor. The average L:W ratio for all sites was 1.39, which translates to an average net weight shape that is approximately 40% longer than its width (Table 2).

One-way ANOVA tests found no significant difference in the thickness attribute means among all sites, and the L:W ratio (thickness $F=1.83$, $p=.097$, $d.f.=6$; L:W $F=1.69$, $p=.13$, $d.f.=6$). Thickness varied the most at Site 1 and least at Site 2 (standard deviations of 8.7 and 2.5, respectively).

METRIC ANALYSIS OF CHIPPED COBBLE NET WEIGHTS

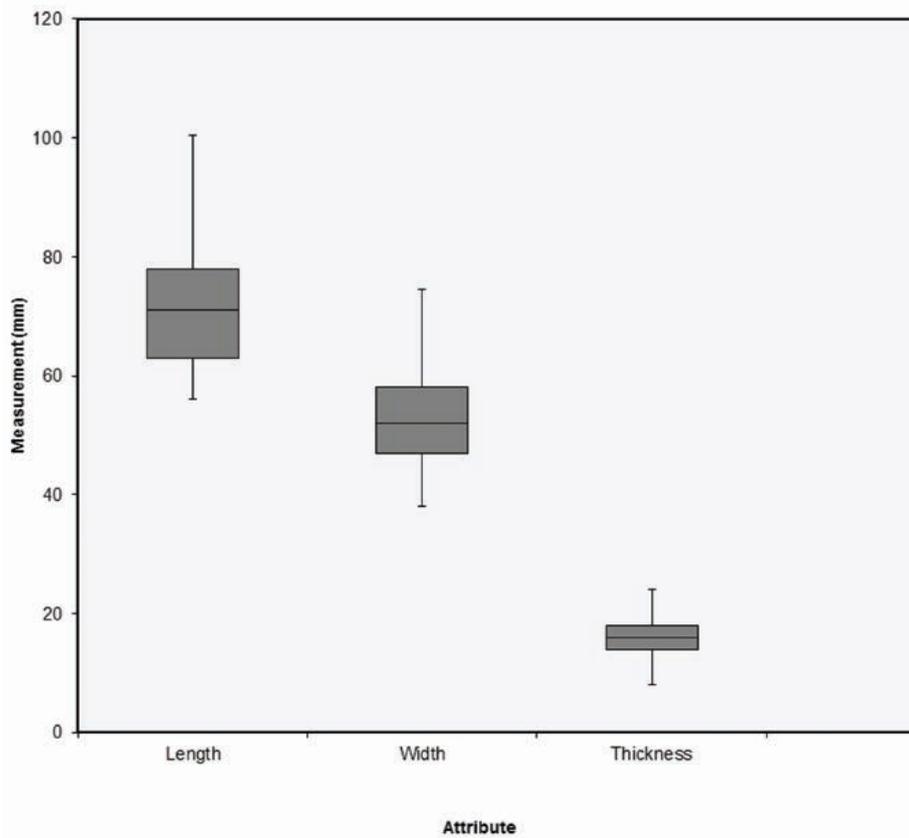


Figure 3. Box plot showing variation in attribute measurement.

Discussion

The assessment of cobble net weights has shed some light on raw material selection and modification. Quartzite and basalt were the most common materials used to make these objects, likely owed to their relative abundance along the Spokane Arm of Lake Roosevelt. Length and width were the most variable metrics, which implies that they were less important factors in raw material selection. However, the average thickness of the objects was 16.1 mm, which varied little and is likely correlated with the difficulty of modifying such durable materials as quartzite and basalt. Both of these materials are more difficult to modify than sedimentary materials used for net sinkers found at sites elsewhere (Draper and Olson 1991; Nadel and Zaidner 2002; Prowse 2010). Hence, the edges of thinner quartzite and basalt cobbles are more easily flaked. L:W ratio also varied considerably, suggesting that shape was not a significant factor in cobble selection, although there was a tendency toward stones with straight or concave sides.

Side notching was the most common notch placement pattern. This agrees with the assessment of Prowse (2010:78). This may be due to the long sides having a straight or even concave outline, which requires smaller notches and less effort to modify them, as opposed to the convex outline of the ends of the cobbles. Those cobbles with more than two notches may have had a more specialized function or were used for more than one purpose.

Indigenous Spokane people from the Middle Archaic through the historic period relied heavily on riverine resources during the winter. Dams installed in the twentieth century blocked the passage of migratory salmonids, halting fishing activities that had sustained native people for millenia. Chipped cobble net weights, though seemingly unimportant and simple to produce, played a key role in the acquisition of resources along the lower Spokane River through the ethnographic period. Their deposition in groups in middens suggests they served their purpose for fishing, then were removed from nets and left behind. Based on this study, cobbles used for this pursuit were chosen primarily for their thickness, which likely facilitated easy modification. Length and width were lesser factors in material selection, though a tendency toward an oblong shape is evident.

Future data collection should go beyond simply recording the presence of these artifacts. Spatial information and metrics should be included to build a database that could be used to make inferences about material selection (type, size, shape), time investment, net or trap size, and current swiftness of the water body in which they were utilized. Furthermore, variability in size, shape, notching patterns, and material type can be compared throughout the region to provide insight into the challenges that material availability and type of marine environment may have imposed on the production of these tools. Net weights recovered in association with dateable materials could help uncover diachronic patterns in distribution and manufacture between individual sites and across the region.

ACKNOWLEDGMENTS

This research was funded by the Bonneville Power Administration and the Bureau of Reclamation through the Federal Columbia River Power System (FCRPS) cultural resources program. The author would like to thank JONA editor Darby Stapp and the anonymous reviewers for their thoughtful comments on this paper.

REFERENCES CITED

- Ames, Kenneth M.
1985 Hierarchies, Stress, and Logistical Strategies Among Hunter-Gatherers in Northwestern North America. In *Prehistoric Hunter-Gatherers: the Emergence of Cultural Complexity*, edited by T. Douglas Price and James A. Brown, pp. 155–180. Academic Press, San Diego, CA.
- Ames, Kenneth M., Don E. Dumond, Jerry R. Galm, and Rick Minor
1998 Prehistory of the Southern Plateau. In *The Plateau*. Handbook of North American Indians, Volume 9, edited by Deward E. Walker Jr., pp. 103–119. Smithsonian Institution Press, Washington, D.C.

Andrefsky, William, Jr.

- 2004 Materials and Contexts for a Culture History of the Columbia Plateau. In *Complex Hunter Gatherers: Evolution Organization of Prehistoric Communities on the Plateau of Northwestern North America*, edited by William C. Prentiss and Ian Kuijt, pp. 23–35. University of Utah Press, Salt Lake City.

Carlson, Roy L.

- 2011 The Later Prehistory of British Columbia. In *Early Human Occupation in British Columbia*, edited by Roy L. Carlson and Luke Dalla Bona, pp. 215–256. University of British Columbia Press, Vancouver, B.C.

Casserino, Christopher M.

- 2015 Archaeological Testing Report, Site 45LI720 (The Longhouse Site). On file at Washington Department of Archaeology and Historic Preservation, Olympia, Washington.

Chatters, James C., and David Pokotylo

- 1998 Prehistory: Introduction. In *The Plateau. Handbook of North American Indians, Volume 9*, edited by Deward E. Walker Jr., pp. 73–80. Smithsonian Institution Press, Washington D.C.

Draper, John A., and Deborah L. Olson

- 1991 Data Recovery Excavations at Three Prehistoric Hunter-Gatherer Sites in the Spokane Prairie. In *Archaeology of the Middle Spokane River Valley: Investigations Along the Spokane Centennial Trail*, edited by John A. Draper and William Andrefsky, Jr., pp. 9.1–9.94. Project Report Number 17, Center for Northwest Anthropology, Washington State University, Pullman.

Minor, Rick, Kathryn Anne Toepel, and Stephen Dow Beckham

- 1989 An Overview of Investigations at 45SA11: Archeology in the Columbia River Gorge. Report to Portland District US Army Corps of Engineers. Heritage Research Associates Report Number 83.

Nadel, Dani and Yossi Zaidner

- 2002 Upper Pleistocene and Mid-Holocene Net Sinkers From the Sea of Galilee, Israel. *Journal of The Israel Prehistoric Society*, 32:49–71.

Prowse, Shari L.

- 2010 Much Ado About Netsinkers: An Examination of Pre-Contact Aboriginal Netsinker Manufacture and Use Patterns at Five Woodland Period Archaeological Sites within Southern Ontario. In *The “Compleat Archaeologist”: Papers in Honour of Michael W. Spence*, edited by Christopher J. Ellis, Neal Ferris, Peter A. Timmins, and Christine D. White. Occasional Publication of the London Chapter, Ontario Archaeological Society, Number 9:69–96.

Ross, John Alan
2011 *The Spokan Indians*. Michael J. Ross, Spokane, WA.

Stewart, Hilary
1982 *Indian Fishing. Early Methods on the Northwest Coast*. Douglas and
McIntyre, Vancouver, B. C.

ABOUT THE AUTHOR

Christopher Casserino is the Principal Investigator for the Spokane Tribe of Indians Preservation Program where he has worked since 2012. He earned his BA and BS degrees from Eastern Washington University, his MA from the University of Montana, and his Ph.D. from the University of Oregon. In addition to his field work on the Spokane Reservation, he has worked on projects in the greater Spokane area, the Willamette Valley, and northwest Mexico.

Christopher M. Casserino
Principal Investigator
Spokane Tribe of Indians Preservation Program
P.O. Box 100
Wellpinit, WA 99040
chris.casserino@spokanetribe.com

Journal of Northwest Anthropology
List of Reviewers
2016–2017

The *Journal of Northwest Anthropology* would like to take an opportunity to thank the following people for their willingness to provide their time and expertise to continue to make the journal a success. The editorial staff and readers are in deep appreciation of the work you have done.

- | | |
|--------------------|---------------------|
| ◇ Roy Carlson | ◇ Rick McClure |
| ◇ Thomas Connolly | ◇ Jay Miller |
| ◇ Diane K. Hanson | ◇ Terry Ozbun |
| ◇ Richard Hughes | ◇ Madonna Moss |
| ◇ Jack Johnson | ◇ James Payne |
| ◇ Alice Kehoe | ◇ Mark Plew |
| ◇ Ruthann Knudson | ◇ Anna Prentiss |
| ◇ Sylvester Lahren | ◇ Rudy Reimer |
| ◇ Dennis Lewarch | ◇ Craig Skinner |
| ◇ Kevin Lyons | ◇ Lawrence Todd |
| ◇ Alan Marshall | ◇ Shannon Tushingam |

69th Annual Northwest Anthropological Conference Abstracts 24–26 March 2016

Hosted by the Washington State Parks
Tacoma, Washington

[Conference abstract]

Symposia and Posters¹

Symposia

Archaeology of the Mount Rainier Area: Papers in Honor of Greg Burtchard

Greg Burtchard's long career in archaeology began with graduate school at the University of New Mexico in 1968. Since then, he has worked in the Southwest, Hawai'i, and the Pacific Northwest.

Doing both research and resource management, Greg has maintained an interest in an ecological/evolutionary approach to archaeology, emphasizing a materialist-processualist perspective. In March of 2000, he became the chief archaeologist and tribal liaison for Mount Rainier National Park.

Since then, he has refined an ecologically-based model for explaining changes in Holocene subsistence and settlement in the Pacific Northwest. Moreover, he has supported and facilitated paleo-environmental research, archaeological field schools, internships, and ethno-botanical projects. He has also striven to improve the relationship between the Park and local tribes, realizing that collaborative work by all is essential for learning about the past.

This symposium celebrates Greg's legacy with papers by both students and professionals that reflect the results of his efforts and influence.

Organizer and Chair: Bradford W. Andrews

Rice, David G.

The Beginnings of Archaeological Research in the Mountains of Washington at Mount Rainier National Park

Andrews, Bradford W., Kipp O. Godfrey, and Greg C. Burtchard

Lithic Tales: Specifying the Late Prehistoric Use and Utility of the Berkeley Rockshelter

Holm, Emma

Inferences about Land Use using Lithic Tools and Debitage: A Comparison of Four Archaeological Sites in the Mount Rainier Area

¹Abstracts of individual papers can be found at <http://northwestanthropology.com>

Wonderly, Megan

*Analysis and Implications of Obsidian Sources Represented in Mount Rainier
Archaeological Sites*

Gleason, Eric B. and Jacqueline Y. Cheung

*Finding Buried Sites: Constant Volume Sampling at the Ohanapecosh Campground, Mt.
Rainier National Park*

Abrams, Georgia

Difficulties with Dating: the Use of Tephrochronology at Mount Rainier National Park

McClure, Rick and Cheryl Mack

*Late pre-contact land use on the lower Ohanapecosh River: the archaeology of
Awxanapak-ash (45LE220)*

Brown, James W., Caitlin P. Limberg, Anne B. Parfitt, Patrick C. Lewis, and
Patrick T. McCutcheon

*A Statistical Analysis of the Spatial and Temporal Components of the Sunrise Ridge
Borrow Pit Site (45PI408), Mt. Rainier, Washington*

Gahr, D. Ann, Patrick Rennaker, and Patrick T. McCutcheon

Methodological Issues in Paleoethnobotanical Analyses at MORA

Ferry, Joy D., Patrick T. McCutcheon, and Kevin Vaughn

*Technological and Functional Variation in Four Lithic Assemblages on Mount Rainier,
Washington*

Davis, David R., Patrick C. Lewis, and Patrick T. McCutcheon

*Significant Variation on the Organization of Technology Revealed Through Analysis of
<0.635 cm Mesh Size Lithics at the Sunrise Ridge Borrow Pit Site (45PI408), Mt.
Rainier National Park, Washington*

Diaz, Ben and Melody Chester

Mount Rainier Ice Patch Archaeology and Monitoring

Belding, Samantha Nemecek

*New research indicates rise in importance of Mount Rainier as a repository of natural
resources to historically associated Tribes*

Hooper, David

Traditional plant collection within Mount Rainier National Park and its Ecology

Pritchard, Emily, Jacqueline Y. Cheung, and Eric Gleason

*Layered Landscapes: Historic Archaeology at Ohanapecosh Campground, Mount Rainier
National Park*

Burtchard, Greg C.

(Discussant)

The Confederated Tribes of the Colville Reservation Utilize a Multi-Faceted Approach to Cultural Resource Management

For members of the Confederated Tribes of the Colville Reservation, there is no discontinuity between past traditions and those currently observed. In this symposium, we present evidence of traditional practices still in use as documented by the Colville Tribes' History/Archaeology Program.

Additionally, we look at methods employed by the History/Archaeology Program to protect and preserve cultural and natural resources that are important to the Colville Tribes.

Organizer and Chair: Jon Meyer

Coyote, Arrow
Combining Archaeology and Traditional Cultural Knowledge: Eagle Rock Case Study

Armstrong, Elizabeth and Eric Oosahwee-Voss
Confederated Tribes of the Colville Reservation Perspectives on the 2014 Wanapum Reservoir Emergency Drawdown

Orsen, Aren
Ball and Dodd Funeral Home Grand Coulee Dam Reservoir Burial Removals: An Analysis of Archival Maps

Meyer, Jon
The Aftermath of the 2015 Fire Season on the Colville Reservation

Robson, Kali
Monitoring Traditional Cultural Plants on the Colville Reservation

Adolph III, Lewis
Developing a Relational Database for the Colville Tribe's Traditional Cultural Plant Project

Campbell, Lola J.
Where Culture Meets Science: The Colville Tribal Herbarium

Consultation, Collaboration, and Risk Management

Chair: Kelly Bush

Harrison III, James Burr
Consultation, Consent, or Circumvention: The Endangered Mount Spokane (čq'wulsum) TCP

Bush, Kelly
More Than Just "It's the Law"

Allen, Jennifer and Emily Pritchard

Protocol for Field going Archaeologists: How and When to Speak to the Public

Bush, Kelly

Risk Management Tools

Perpetuating Living Cultural Resources

Cultural resource management typically focuses on archaeological sites and historic structures, but cultural resources are defined much more broadly by most tribes. Likewise, most cultural resource protection involves keeping people away or minimizing their impacts on an area, whereas culturally important plants may require “disturbance” to be managed and harvested. This workshop encourages participants to explore issues and solutions related to the ongoing use of cultural resources like camas and cedar, bitterroot and serviceberry, or kelp and clams, resources important to the perpetuation of Northwest tribal cultures, resources which need care beyond static protection. Topics of discussion may include re-introduction of fire as a management tool, the upside of “disturbance,” pressures on sustainable gathering, culturally-oriented restoration, and ancient or innovative techniques of sustaining First Foods.

Tribal members and staff, agency resource managers, and anyone interested in the perpetuation of living cultural resources are encouraged to participate in this open discussion.

Organizer and Chair: Maurice Major (WA State Dept. of Natural Resources)

The Archaeology of the Periphery

Collected in this symposium is a summary of current research in one of the many peripheral watersheds of the Columbia Plateau. The Pend Oreille Valley, like its many peers, replicates and deviates from the normative expectations derived from the mainstem of the Columbia/Fraser Basins’ archaeological record. In as much as recognizing what is “normal” is important in the scientific definition of the past, so too is the development of knowledge of variation.

Center place in this symposium is an exposition of the efforts and the development of young and emergent scholars, the underlying and original purpose of the NWAC. Closing the session shall be an overview discussion from both academic and commercial practitioners on why the periphery as important to our understand of the past as the center is to our collective attention.

Organizer and Chair: Kevin Lyons

Lyons, Kevin

A Story about Much Loved and Often Poorly Understood Numbers: An Emerging Zeitgeist of Archaeology as Database

Johnson, Jeff
Projectile Point Variation in the Pend Oreille River Valley

Carney, Molly
*To Throw into the Fire: Paleoethnobotanical and Geoarchaeological Analyses at the Flying
Goose Site 45PO435*

Goodman Elgar, Melissa, Molly Carney, Elizabeth Truman, and Kevin Lyons
*Up in Flames: Reconstructing Firing Conditions from a Burnt Prehistoric Depression a
45PO435, Pend Oreille Valley, WA*

Hoke, Amanda
The Story of Coyote, Salmon, Trout, and the Pend Oreille

Maroney, Kendra
What lurks below... deep analysis of three GPR projects near the Pend Oreille River

Hicks, Brent
(Discussant)

Tushingam, Shannon
(Discussant)

Bastions of Identity Frontier Forts and the Complexities of Colonialism in the Pacific Northwest

The fur trade and American immigrant periods of the 19th century Pacific Northwest was coincident with significant changes in social relations, material culture, and identity formation. Frontier forts and their communities were symbols of the changing socioeconomic, demographic, and cultural change while serving as arenas for the negotiation of identities and power. The papers in this symposium explore how the material culture of northwest forts reveals the lived experiences of the diverse peoples who occupied them and reflect the momentous shifts attending colonialism in the Pacific Northwest.

Organizer and Chair: Doug Wilson

Wilson, Doug
Exploring Frontier Forts and the Complexities of Colonialism in the Pacific Northwest

Taber, Emily, Doug Wilson, Robert Cromwell, Kate Wynia, and Alice Knowles
Gastroliths and Avifauna at Fort Vancouver's Village

Tveskov, Mark and Chelsea Rose
*Disrupted Identities and Frontier Forts: Enlisted Men and Officers at Fort Lane, Oregon
Territory, 1853–1856*

Horton, Beth

Run It Up the Flagpole: Traditionally-Flaked Tools and Military Power Relationships at mid-19th century Vancouver Barracks, Washington

Griffin, Dennis

Archaeology of the Oregon National Guard: A Search for Archaeological Evidence of Early Military Encampments in Oregon

Archaeology of the Burnett Site (35CL96)

For three decades, the Burnett Site (35CL96) in Lake Oswego, Oregon, has been known as one of the oldest archaeological sites in the Portland Basin. The archaeological site was recorded and scientifically excavated in the 1980s by then-resident Robert Burnett. Burnett documented stemmed and lanceolate projectile points in stratified deposits that suggested affinities to the most ancient archaeological complexes in the Pacific Northwest. However, dating of the 35CL96 deposits proved difficult. Recent planning for construction of the Lake Oswego-Tigard Water Partnership project included collection of new archaeological data showing the site was used over much of the Holocene beginning about 11,500 years ago. This symposium presents detailed archaeological information along with Tribal views and a project proponent perspective. Collaboration between project stakeholders was important to balancing infrastructure and community needs with respectful treatment of this significant multicomponent site.

Organizer and Chair: Terry Ozbun

Bajdek, Brennan

After the Floods: Oswego Lake during the Early Holocene

Cowan, Jason

Modeling obsidian effective hydration temperature in the Willamette Valley to date the Burnett Site (35CL96)

Hulse, Eva

Chronology and Geoarchaeology of the Burnett Site (35CL96)

Ozbun, Terry

Cascade Lithic Reduction Technology at the Burnett Site (35CL96)

Walker, Cam

Would you like the Venison, the Duck, or the Lamb? Residue Analysis Results at the Burnett Site (35CL96)

Blaser, Andrea and Nicholas Smits

Iron and Old Town: Interpreting Lake Oswego's Industrial Past through Historical Research and Archaeological Evidence from the Burnett Site (35CL96)

Harrelson, David

Tribal Art as Outreach for Phase 3 Data Recovery within 35CL96

Buchholz, Terry

A Project Sponsor's Perspective – What are the Implications of Finding Significant Resources for My Project?

Ames, Kenneth M.

(Discussant)

Crossing the Line: State and Tribal Cooperation in the Investigation of Probable Burials at the Indian Shaker Mother Church

In March of 2015, construction workers excavating the foundation of a new home site on property adjacent to the Indian Shaker Mother Church near Mud Bay in Thurston County, Washington unearthed artifacts suggestive of a burial. Subsequent investigation of the site by the Department of Archaeology and Historic Preservation and Interested Affected Tribes with support by representatives of the Indian Shaker Church resulted in the recovery of additional artifacts and the delineation of a feature suggestive of a historic Native burial. Another possible burial was also identified. This symposium gathers tribal and non-tribal cultural resource managers involved in the project in a presentation/panel format to discuss the project, the adversities and bureaucracies encountered teamwork, and outcome of the project.

Organizers and Chairs: Guy L. Tasa, Ph.D. and Rhonda Foster

Foster, Rhonda and Guy L. Tasa

Project Overview

Henry, Margaret, Brandon Reynon, and Jackie Wall

Tribal Perspective: Indian Mother Shaker Church, Cushman, and Indian Burials

Reynon, Brandon, Juliette Vogel, and Stephanie Neil

Feature and Artifacts

Panel Discussion: Guy L. Tasa, Margaret Henry, Brandon Reynon, Jackie Wall, Stephanie Neil, and Juliette Vogel

Facing the Reality of Misidentified Human Remains and Sacred Objects in Curated Archaeological Collections: A Collaboration between the Lummi Nation and Western Washington University

The Native American Graves Protection and Repatriation Act outlines a process for museums and federal agencies to repatriate human remains, funerary objects, sacred objects, and items of cultural patrimony to Native American tribes. In spite of good faith efforts to repatriate known burials and associated funerary

objects, it continues to be a reality that human remains and sacred objects remain in collections because they have been misidentified. The Lummi Nation Culture Department and the Western Washington University (WWU) Anthropology Department are working together to remedy these instances in the WWU collections. Using a culturally driven approach we have brought together a team of tribal cultural specialists, a physical anthropologist, professional archaeologists, and students to go through all materials in the Semiahmah (45WH17) and Cherry Point (45WH1) Collections. The panel discussion will cover the cultural significance of misidentified remains, the process used, the results in terms of the frequency and kinds of misidentified remains, and recommendations about the importance of training and teamwork.

Organizer and Moderator: Guy L. Tasa, Ph.D.

Panel Discussion: Sarah Campbell, Ryan Desrosiers, Alyson M. Rollins, Lena Tso, Ralph Tom, and Tamela S. Smart

Yama: A Late 19th and early 20th Century Japanese Transnational Community

The historic Yama community, located on Bainbridge Island, Washington, was occupied from the 1880s to the early 1920s. This Japanese village contained approximately 50 homes and 300 people. The inhabitants worked at the Port Blakely Mill along with other neighboring immigrant communities.

Yama is of national significance and represents one of the best preserved historic Japanese communities in the Pacific Northwest. In 2015, Olympic College began a three archaeological research project to document, reconstruct, and interpret life at Yama. The following papers discuss research findings from 2015. Analysis of the archival records and site features, structures, and artifacts reveals a complex and vibrant transnational community.

Organizer and Chair: Caroline Hartse

Aranyosi, Floyd
Archaeology at Yama

Evans, Etsuko
A Closer Look at Religious Life within the Yama Community

Moran, Chelsea
Identifying and Comparing the Residential Areas of Yama and Nagaya

Fliger, Donna
Bottle Analysis at Yama

Christensen, Anne
Designs and Motifs

Allen, Zachary

Feature Analysis of Yama, an Early Japanese Immigrant Village in the Pacific Northwest

Hannah, Jean

*Small Brick Structure Remains at Yama and Nagaya Port Blakely, Bainbridge Island,
Washington*

Pacific Northwest Food Studies

Food provides sustenance to the physical being and over time, food has come to mean much more. Understanding the rituals and meaning of food—finding, preparing, preserving, sharing, eating, and celebrating it—offer insights into the nature and culture of a people, a community, and a family. This symposium presents research and findings on the relationship between food and culture in the Pacific Northwest, ranging from 19th century Chinese faunal archaeological findings, to the culinary and feminist legacy of Portland's Lilian Tingle, to reconstruction of a heritage brewing recipe, and 20th century politics and memoir.

Organizer: Maureen Flanagan Battistella and Edwin Battistella

Johnson, Katie and Chelsea Rose

*What's For Dinner? Interpreting the Faunal Assemblage from the Jacksonville Chinese
Quarter*

Edmunson-Morton, Tiah

*Recreating a Legacy Lager: Connecting Past, Present, and Community Through Historic
Beer*

Arndt Anderson, Heather

Keep Everlastingly At It: The Culinary and Feminist Legacy of Lilian Tingle

Battistella, Maureen Flanagan

*Mrs. Mark O. Hatfield: The Cookbooks of Antoinette Kuzmanich Hatfield and How
They Reveal Her Public and Private Lives: A Cultural Study of Food and Politics*

Lebo, Kate

*All Tomorrow's Pie Ladies: Baking as Metaphor, Self Help, and Big Business in Modern
Fiction and Memoir*

Digital Resources and Emerging Research Methods

Chair: Sara E. Palmer

Starnes, Kandi Leigh

*Excavating an Archive: Using Old Oral Histories to Explore the Pasts of Latah County,
Idaho*

Thornburg, Aaron
La Grande Life: Digital Autoethnography in Rural Oregon

Haller, Jonathan M. and Ashley M. Morton
*Mapping the Memory of Walla Walla's Chinatown, Collaboration in Digital Public
Archaeology*

Senn, Amy
Enhance Your CRM Reports: Conduct Historical Research Online....For FREE!

Reid, Kenneth C., Kenneth P. Cannon, and Houston L. Martin
*Sometimes the Map is the Territory: Using Historic Maps and Geomorphic Fieldwork to
Understand 153 Years of Change at the Bear River Massacre National Historic
Landmark in Southeastern Idaho*

From There to Here: ODOT-WSDOT Annual Transportation Symposium

The construction and maintenance of transportation infrastructure is a monumental and never-ending public undertaking, resulting in a sizable investment in cultural resources management. This session presents a sampling of some of the projects conducted over the past year, both in the Pacific Northwest and beyond.

Organizers and Chairs: Caroline Holthoff and Scott Williams

Williams, Scott and Carolyn Holthoff
Opening Remarks

O'Neill, Brian
Anticipating Historic Features on a Dynamic Urban Landscape

Pettit, Daniel
*Opportunities for 3D Scanning and Historic Properties: A Demonstration Project of Two
Bridges*

Rudnicki, Larissa
Tree Trucks: The Story of Logging and Oregon's Highways

Graham, Tyler
Digitizing the Paper Trail: Replacing Paper Forms with Mobile GIS

Rose, Chelsea
Rising from the Ashes: A New Look into Jacksonville's 19th Century Chinese Quarter

Holter, Russell
*Developmental Pressures on Linear Historic Resources (a case study on the Hawaiian
Railway Society)*

Rinck, Brandy
*SR 532 Davis Slough Bridge Replacement Project and Mitigation at Dugwalla Bay, Island
and Snohomish Counties, Washington*

Williams, Scott and Carolyn Holthoff
Closing Remarks

Pre Contact Archaeology of the Interior

Chair: Tom Connolly

Davis, Mary Anne
Meeting with an Old Friend: Dry Sailing to Rock Art Sites in Southern Idaho

Connolly, Tom, Nick Jew, Mark (Jack) Swisher, Bill Cannon, Michel Waller, and
Kelsey Sullivan
*Picking Up the Pieces: Analysis of a Looted Collection of Lithic and Perishable Artifacts
from Rattlesnake Cave, South-Central Oregon*

Hotze, Karla
*Exploring Relationships Between Stacked Rock Features and Rock Art within the
Traditional Territory of the Klamath Tribes*

Hackenberger, Steven D. and Sarah M. H. Steinkraus
*Archaeological Context for Reservoir Archaeology in the Cascade Region of Washington
State*

Pre Contact Archaeology of the Northwest Coast—Part I

Chair: Scott Williams

Carriere, Ed and Dale Croes
*Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition: Master Salish
Basketmaker and Wet Site Archaeologist Explore 100 Generations of Cultural
Knowledge*

Hawes, Kathleen
*Re-Awakening a 2,000 Year Old Salish Sea Basketry Tradition: Cellular Analysis and
Identification of the Biderbost Wet-Site Basketry Collection*

Chatters, James C., David Sheldon, Bruce Gustafson, and Steven D.
Hackenberger
*The Bray Site: A Lacarno Beach-Aged Plant-Processing Field Camp in Southern Puget
Sound*

Environmental Anthropology

Environmental anthropology bridges the subdisciplines of the field through the examination of human experience within ecosystems. This session features the community-based work of faculty, students, tribal, and community partners associated with the Learn and Serve Environmental Anthropology Field (LEAF) School at Edmonds Community College (www.edcc.edu/leaf). The LEAF School partners with tribes, nonprofits, municipalities, state, and federal agencies on projects that apply traditional knowledge and anthropological methods to efforts to help make our communities more sustainable. Anchored by a series of field courses in human ecology and archaeology and supported by service-learning students in classes across the discipline, the LEAF School employs an indigenous pedagogy that includes peer mentoring and community-engagement to facilitate on-going research and activities by college students. Our reciprocal approach to participant observation engages students and faculty in cultural activities through collaboratively designed service-learning and research projects that address community-identified needs.

Organizer and Chair: Thomas W. Murphy

didahalqid (Michael Evans), Sam Barr, and Adam Lorio
Welcome from Tribal Canoe Families Blue Heron, Samish, and Stillaguamish Canoe Families

Barr, Sam and Adam Lorio
Cross-Cultural Understanding on Tribal Canoe Journeys with the LEAF School

Hundley, James
The Role of the Border in Tribal Journeys: Lessons for Environmental Anthropology

Van, Kaliane, Chris Walker, Melissa Buckley, Megan McDermott, Skyler Elmstrom, and Taymor Abou-Zaki
Tribal Youth Pull to Muckleshoot: Student Perspectives

lak^w ‘əlás (Tom Speer)
The Spirituality of Flowing Waters

celálakəm (Pamela Bond)
stəljx^wáli (Place-of-Medicine) Ethnobotanical Garden

Olson, Dee and Tom Ficca
q^wəld’ali (Place-of-the-Cooking-Fire) Cultural Kitchen

McDermott, Megan
Powwow: A Cultural Celebration and a Gathering Full of Life

Ward, David
The Role of Anthropology in Conservation: A Perspective from a State Agency

Murphy, Thomas W.

Green Infrastructure in Puget Sound Municipalities: An Ethnographic Inquiry

Ryan-Peñuela, Erin

Climate Change Adaptation and Resilience in our Built Environment

Pickard, Ashley

From Goldilocks to Google: Mapping Human Perception of Bear's Space

Elmstrom, Skyler

A Spatial Perspective of the Fish and Wildlife of Mukilteo Gulch

Murphy, Thomas W.

All the Wrong Plants and Animals: Grave-robbery and the Book of Mormon

Murphy, Kerrie S.

The Making of a Mormon Sacagawea: Decolonizing Representation and Identity

Baca, Angelo

Rejecting Racism in All its Forms: Religion, Rhetoric, and Repatriation

Society Outreach: Lessons in Engagement with Membership and the Public

State and regional archaeological societies vary by geographic area of interest and sometimes focus on specific sub-disciplines of archaeology. The common threads for all societies include a strong ethic to preserve the archaeological record, a desire to engage and educate the public about archaeology, and a desire to contribute to the scientific study of archaeological resources. This panel brings together representatives of archaeological societies from the northwestern United States to discuss their approaches to achieving their society mission, successes in programming, changes they have seen in their society over time, and challenges they have faced. Discussion topics include membership, public education, society activities, social media, and the future roles of archaeological societies.

Organizer: Christopher Noll and Tabitha Burgess

Panel Discussion: Idaho Archaeological Society, Association for Washington Archaeology (AWA), Maritime Archaeological Society (MAS), Northwest Anthropological Association (NWAA), Association of Oregon Archaeologists (AOA), and Oregon Archaeological Society (OAS)

Research in a Nutshell—Powered by Pecha Kucha

Students and professionals present work and ideas in this unique and fun format powered by Pecha Kucha. Participants have less than seven minutes to present an idea, methodology, results, or introduce a project. Work can be at any stage of development. The format is simple: 20 slides—images only—each shown for 20

seconds. Images advance automatically as presenters share and discuss their work. Audience members then participate in informal discussions about contributions. For this collaborative event, participants are encouraged to take this as an opportunity to practice and receive feedback. This symposium is offered as an opportunity for gaining input and expanding presentation skills in an innovative way.

Organizers and Chairs: Mary Pietrich-Guy and Molly Swords

Maritime and Underwater Archaeology

This symposium covers a wide range of subjects related to submerged and non-submerged, historic and pre-historic heritage, preservation, and history projects. Focus areas include underwater paleocoastal archaeology, and how volunteer maritime archaeological organizations can cooperate to share resources, information, and expertise. The session will conclude with a panel discussion by presenters and other guests on all topics related to maritime and underwater archaeology.

Organizer and Chair: Christopher Dewey

Davis, Loren

Searching for Submerged Precontact Archaeological Sites on Oregon's Continental Shelf: A Preview of Upcoming Research

Beasley, Tom

The Underwater Archaeological Society of British Columbia: Forty Years of exploring and protecting underwater heritage

Hunt, Peter and Dan Warter

The Lost Intruder

Rogers, Richard

European Contacts in "Pre-Contact" Hawaii

Stokeld, Rachel

The Boards Aren't Boring: The Hidden History of a Columbia River Gillnet Boat

Dewey, Christopher

The Maritime Archaeological Society: Our First Year

Lithic Analysis

Chair: Roger Kiers

Rorabaugh, Adam

Style, Function, and Skill: Some Thoughts on a Fundamental Continuum

Brown, James W. and James C. Chatters
A Lithic Analysis of the Marymoor Site (45KI9): Development of a Seriation Using a Limited Stratified Sample

Chatters, James C. and James W. Brown
The Age of Marymoor and its Place in the Cultural Chronology of Puget Sound

Gouette, Nicholas
Sandstone Saws of Site 45WH05: Implications for Nephrite Tool Production

Harris, Megan
Spatial and Temporal Distributions of Ground Stone Disk Beads in the Salish Sea

Hamilton, Stephen C. and Bradley Bowden
35DS412: A Pre-Mazama Lithic Manufacturing Station on the Southwestern Flank of Newberry Caldera

Lancaster, JD L. and Loren G. Davis
Initial Results of Test Excavation at Silvies Cave, Grant County, Oregon

Pre Contact Archaeology of the Northwest Coast—Part II

Chair: Shari Silverman

Brown, Thomas J.
Demographic Fluctuations on the Northern Northwest Coast Between 11,000 and 5,000 cal BP and Their Relationship to Environmental and Mobility Pattern Change

Wessen, Gary
Western Washington Shell Midden Chronology: An Introduction and Overview

Curteman, Jessica A.
Geoarchaeological Investigations at the Devils Kitchen Site (35CS9) Southern Oregon Coast

Silverman, Shari Maria
Co-Seismic Activity and Archaeology in Southern Birch Bay, Washington

Safi, Kristin, Patrick Dolan, and Devin A. White
A Marine-Centric, Geospatial Approach to Understanding Travel Networks across the Salish Sea

Smith, Erin M. and Mikael Fauvelle
The Pacific Rim of the North American Oikoumene: Interactions between California, the Southwest, and the Pacific Northwest

Nakonechny, Lyle

*Prehistoric Occupation at the Forks Creek Site, Willapa River Valley, Southwest
Washington*

Dolan, Patrick

*Economics and Integration in a Marpole Period Plankhouse Community: Evidence from
the Dionisio Point (DgRv-003) Site*

The Ancient One: The 20 Year Anniversary of the Discovery of Kennewick Man

Twenty years ago this July, a nearly complete set of skeletal remains referred to as Kennewick Man or the Ancient One were discovered near Kennewick in eastern Washington State. Kennewick Man carried a stone projectile point embedded in his right hip and was dated at around 8,500 years old, making him one of the oldest sets of human remains ever found in North America. Since its discovery, Kennewick Man has become a national and international news sensation and a focal point in the battle between scientific and Native American interests. Recent major developments have included the publishing of a book describing the results of numerous exhaustive studies on the remains indicating Kennewick Man's dissimilarity to modern Native Americans and, for the first time, DNA results indicating the contrary. The papers in this symposium present a local perspective on the controversy surrounding the Ancient One, as well as thoughts on the appropriate resolution and perspectives from twenty years later.

Organizer and Chair: Allyson Brooks, Ph.D.

Brooks, Allyson, Ph.D.

Introduction

Whitlam, Rob, Ph.D.

Retro-Reflective Review of the Ancient One Case

Ames, Kenneth M.

Reflections on Cultural Continuity (and Discontinuity)

Lape, Peter and Laura Phillips

Reflections on the Burke Museum's Role in the Ancient One Case

Tasa, Guy L., Ph.D. and Juliette Vogel

*The Use of the Howells' Dataset in Determining Ethnicity in Pacific Northwest Crania:
Implications for Kennewick Man*

Tasa, Guy L., Ph.D. and Juliette Vogel

*A Comparison of Kennewick Man Cranial Morphometrics with Pacific Northwest Native
Crania*

Neller, Angela, Kate Valdez, and Jacqueline Cook
Repatriation of the Ancient One – A Tribal View: Then, Now, and In-Between

Buck, Rex
A Tribal Perspective on the Ancient One

Brooks, Allyson, Ph.D. and Kate Valdez
Where Do We Go from Here? Solutions and Parallel Paths Forward

Topics in Physical Anthropology

Physical anthropology, or biological anthropology, “is a biological science that deals with the adaptations, variability, and evolution of human beings and their living and fossil relatives” (AAPA). This symposium covers papers on all topics within the field of physical anthropology.

Organizer: Guy L. Tasa, Ph.D. and Juliette Vogel

Henebry-DeLeon, Lourdes
Do Old Measurements Measure Up? Southern Columbia Plateau Osteometrics

Hill, Alexander, Drew Bailey, Robert Walker, and David Puts
Sexual Selection on Primate Vocalizations: The Evolution of Sex Differences in Pitch

Ostrander, Thomas, Charlotte Roberts, Janet Montgomery, and Chris Otley
Irresistible Corruption: Osteological Evidence of Endemic Lead Poisoning in an Industrial Period Population

Sheeran, Lori K., R. Steven Wagner, Lixing Sun, Jinhua Li, and Dongpo Xia
Human-Monkey Interactions: 12 Years of Fieldwork on Tibetan Macaques at The Valley of the Wild Monkeys, Mt. Huangshan, China

Voight, Brianna, Lori K. Sheeran, Xi Wang, R. Steven Wagner, Jinhua Li, and Lixing Sun
*A comparison of proximity of Tibetan macaques (*Macaca thibetana*) near provisioned food sources and natural food sources at Mt. Huangshan, China*

Historical Archaeology

Chairs: Jenny Dellert and Sara E. Palmer

Gossen, Candace
Sasquatch, Pirates and the Blue Pearl: Garbage Archaeology at Deadman’s Bay, San Juan Island

Kleer-Larson, Corey
Our Lady of the Woodland: The Faith and Devotion of Pierce, Idaho

Anderson, Rachel, Danielle Saurette, and Ray von Wandruszka
Chemical Sleuthing Among Artifacts Recovered From a Chinese Quarter

Campbell, Renae J.
*Connections and Distinctions: A comparative analysis of Japanese Ceramics Recovered
from Three Issei Communities in the American West, 1880-1940*

Dellert, Jenny
Celluloid, Bakelite, Catalin, and Lucite: Plastics in Early 20th Century Jewelry

Evenson, Lindsey
Pre-1900's Chinese Placer Mining in Northeastern Washington State

Gray-Jeffries, Cassie, Cody W. Schwendiman, and Stephanie Gunkle
*A Historical Archaeology of the Mount Emily Lumber Company "Jap Camp" during the
Internment Period*

Simmons, Stephanie C.
Investigation of the 1930s Cle Elum Dam Construction Camp

Valentino, Alicia, Katie Wilson, and Thomas Ostrander
*The Archaeology of a Seattle City Block from 1880s Squatters, Great Northern Railroad
Workers and the Establishment of Pike Place Market*

Grier, Colin and Chris Arnett
*Archaeology, History and Colonial-Indigenous Conflict at Lamalchi Bay, British
Columbia*

Zentgraf, Diane
Clay Tobacco Pipes of Fort Hoskins and Fort Yamhill, Oregon

Wesseler, Kim
A Preliminary Analysis and Examination of the Hospital at Fort Yamhill, Oregon

Smits, Nicholas
*Fighting over Tlithlow Station: The Puget's Sound Agricultural Company and the
Aftermath of the Oregon Boundary Dispute*

Ames, Kenneth M. and Thomas J. Brown.
*Radiocarbon Dating the Fur Trade II: A Bayesian Analysis of Radiocarbon Dates from the
Cathlapotle Site, Lower Columbia River*

Ethnographic Research with Northwest Tribes

This session will highlight the importance of ethnographic research with Tribes in the Pacific Northwest, and to show how the Federal compliance process can generate ethnographic work. Panelists will represent Federal Agencies who fund

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

Organizer and Moderator: Donald Shannon

Looting—An Inside Perspective to the Legal Process, Damage Assessment, and Mitigation

Looting has long been a major concern for Cultural Resource Managers, Tribes, and archaeologists. The panel will open discussion with a review of a recent looting case on WDFW land, following the events from identification and arrest, through (semi) successful prosecution, issuance of civil penalties and into hearings. The case study will serve as a lens through which we can examine the legal process of prosecuting looters criminally versus civilly, and explore ideas for insuring damage assessment, restoration and mitigation are achieved, as well as termination of actual looting. Participants will describe the case and their observations during the civil penalty hearing.

Organizer and Moderator: Katherine Kelly

General Anthropology- Perspectives on Health, Nutrition and Death

Chair: Heather Youckton

Ochoa, Jessica R.

“¡Según el doctor!..”: Mexican and Mexican-American mothers’ perceptions and attitudes towards dominant views of food, health, and childhood “obesity” in Yakima, Washington

Keller, Sarah

Food Aversion: From Revulsion Response to Childhood Ickyness

Packwood, Kirk

Speaking the Words That Need to be Said: Quartz Crystal Channeling and Societal Healing in an Extraterrestrial-focused Spiritual Group

Ziegler, Amber

Science, Culture, and Corpses: How does Science Influence American Cultural Norms Surrounding the Dead and Dying?

General Anthropology—Language, Identities and Social Norms

Chair: Edwin Battistella

Battistella, Edwin

From Here to There: Preliminary Results of the I-5 Speech Survey from Southern Oregon to Northwest Washington

Little Gems: Three-Minute Papers on People, Artifacts, and Ideas Picked Up Along the Way

Working on cultural resources projects often leads to curious discoveries—stories from a landowner, factoids during research, curious artifacts, patterns seen over multiple projects in the same area. While these little gems do not merit a full 20-minute paper, they are worth sharing. This series of 3–5 minute talks shares what we've learned along the way.

Organizer and Moderator: Paula Johnson

Can't See the Features for the FMR?

The archaeological record on FMR is spotty. When measured against the study of making tools, the study of cooking food and other heating technologies is lacking. There are few conclusive results without modern laboratory analyses, which make comparative analyses across 50 years of archaeological studies in the region challenging.

Contracted archaeological studies have produced ample data in terms of raw metrics however in this case of a seemingly relatively straight-forward technology, combustion features, and their contents in both primary and secondary site contexts remain minimally understood in terms of larger scale patterns and anomalies. Recent paleobotanical and ethnobotanical studies offer reliable data in terms of supplementary analyses whereas paradigmatic feature classification and experimental studies of fracture mechanics have been overlooked. This session offers current approaches to thermal feature and FMR analyses in Washington and Oregon.

Organizer and Chair: Kate Shantry

Shantry, Kate

FMR field recording and analysis at 45K11176, an upland logistical camp on the Issaquah-Fall City Trail, King County, Washington

Schalk, Randall

Experimental Approaches To Understanding Variability In Cooking Stone

Iversen, Dave

Fire Modified Rock Analysis from a Damage Assessment of 45WH525

Punke, Michele

*Fire-Modified Rock (FMR) Feature Analysis Using Multiple Lines of Inquiry from
Archaeological Site 45LE611 in Western Washington*

Solimano, Paul

*Examining Land-Use Intensification in the Portland Basin through Cooking and
Processing Features*

General Anthropology—Language, Identities and Social Norms

Chair: Heather Youckton

Krogstad, Tiffany J. and Julia Smith

Language, Ideologies, and Class Among African Americans in Cheney, Washington

Bocook, Aaron

Smartphones and Poverty in the United States

Lichtenberg, Nicole

No One Has the Emic Perspective (Yet): The Anthropology of New Student Orientation

Peck, Alexandra

Ecstatic Order: The Kwakwaka'wakw Hamat'sa as Shaman and Enforcer of Social Norms

Seelye, Elizabeth

Working Class Heroes: Punk Subversion and Working Class Solidarity

Shannon, Donald

*Incorporating traditional place studies and recognizing cultural continuity in "Routine"
Cultural Resources Compliance assessments: A case study from Point Defiance.*

Wegner, Wendy

Conducting Research in the Framework of Indigenous Methodologies

Emerging Trends in Digital Archaeology, Data Management, and Museums

Chair: Katherine Kelly

Calkins, Adam

*Creating a Methodology of Unmanned Aerial Vehicle (UAVs) in Historic Archaeology:
Case Studies from Virginia City and Aurora, Nevada*

Henderson, Joshua

Digital Technology and a New Era for Archaeology: Cooper's Ferry, Idaho

Wellington, Victoria

Data Preservation in American Archaeology

Stein, Julie

Washington's Oldest Museum is Becoming Washington's Newest Museum

McLemore, Morgan

An Introduction to Cloud-Based Archaeology Inventory Work Through WISAARD

Archaeo-astronomy

Chair: Candace Gossen

Gossen, Candace

Aliens, Akus and Giants: Paleoecological Findings and Cosmic Events in the Muck on Rapa Nui

Gossen, Candace

Aliens, Akus and Giants Part Two: Archaeo-astronomy and Timekeepers

Zooarchaeological Analysis

Chair: Scott Williams

Hawthorne, Paige and Colin Grier

Put a bird on it! A Multi-Analytical Approach to Avian Analysis in Southwestern British Columbia

Nims, Reno and Virginia L. Butler

*Late Holocene Biogeography of Sablefish (*Anoplopoma fimbria*) in the Salish Sea*

Syverson, Laura and Virginia L. Butler

Sampling a Village: Using Sampling to Redundancy (STR) to Characterize Fish Representation at the Tse-Whit-zen Site, Port Angeles, Washington

Williams, Mark

Middle Holocene Shellfish-Harvesting Practices: Evidence from the Labouchere Bay Sites, SE Alaska

Hopt, Justin and Colin Grier

Correspondence Analysis and Shell Middens: Exploring Patterns in Faunal Data to Decipher Complex Depositional Environments

Kiel, Lindsay

Food and Identity: The Archaeology of Neophyte Diet at Mission Santa Clara de Asis

Townsend, Mitchel and G. Mills

Using Forensic Biotic Taphonomy Dentition Signature Analysis to Identify Hominin Mastication Evidence: A Field Application Case Study

Fitzpatrick, Justin

A Zooarchaeological Analysis of the Mesa 12 Site: Preliminary Results

Posters

Armstrong, Elizabeth and Eric Oosahwee-Voss
Erosive Effects of the 2014 Wanapum Reservoir Emergency Drawdown on Archaeological Sites as Observed by the Confederated Tribes of the Colville Reservation

Bobolinski, Kathryn
A Spatial Analysis of Artifacts from the Housepit 54 Ilc Floor at the Bridge River Site (EeR11), Middle Fraser B.C.

Boswell, Sharon
Not Just the Beer: Breweries, Saloons and Community Development

Bowden, Bradley and Jennifer Olander
The (Briefly) Lucrative World of Hop Farming in the Southern Puget Sound, 1880-1920

Butler, Alexander
Bringing Archaeology into the Community: School Outreach

Cascella, Melissa, Shane M. Sparks, and Tait J. Elder
Testing the Reliability and Precision of Two Archaeological Site Sensitivity Models on the Puget Sound Coast

Clark, Jorie
Sea Level Rise Past, Present and Future: Implications for Cultural Resources in the Pacific Northwest

Coffin, Mikelynn
Astor Fort Okanogan Collections Research

Cooper, Jason B., Tyler McWilliams, and Tim Gerrish
Hop to It: Growing Hops in the White River Valley During the 19th Century in South King County, Washington

Daily, Phillip
Conditioning and Predicting Technological Variability in Coastal Oregon: Utilizing Dr. Lewis Binford's Hunter Gatherer Database

Damitio, William, Emily Whistler, Melissa Goodman Elgar, and Kevin Lyons
Small scale sediment sampling as a method for identifying anthropogenic features: A case study from Pend Oreille County, Washington

Dampf, Steven, James Burr Harrison III, and Kendra Maroney
Geophysical Survey at the Sandy Heron Site (45SP485), Spokane County, Washington

Danner, Bryce
The Lochsa River: A Precontact Overview

Davis, David R., Jenn Calabro-Pecora, Max Morton, Patrick McCutcheon, and
Patrick M. Lubinski

*Central Washington University 2015 Cultural Resource Management Archaeological
Field School on Washington Department of Fish and Wildlife Lands*

Davis, John M.

*A Statistical and Managerial Analysis of Testing Projects on the US Army Yakima
Training Center, WA*

Desrosiers, Ryan and Josh Heflin

*Using Crystallographic Texture of Bivalve Shells to Confirm Taxon: A Case Study from the
Tse-whit-zen Village Site (45- CA-523)*

Diaz, Nickolas

Itrax based chemostratigraphic analysis at Woodburn High School in Woodburn, Oregon

Ellison, Leigh Anne, Adam Brin, and Jodi Reeves-Flores

Curating and Preserving Digital Archaeological Data: A Guide to Good Practice

Falzon, Rachel

The Archaeology of Historic Pen d'Oreille City (1860–1880)

Fashing, Allison, Emma Scott, and Darcy Wayman

*The Pursuit for Happiness in Times of Darkness: An Exploration into Recreational
Activities at the Kooskia Internment Camp (1943–1945)*

Frierson, Andrew and David Rice

Revisiting Rock Creek Shelter: Results from the 2015 Summer Fieldwork

Fulkerson, Tiffany J.

*Gender, Task Differentiation, and Power in Prehistory: Engendering the Archaeological
Record of the Southern Plateau, Northwestern North America*

Gamble, Erin

Homestead Archaeology Project: Results from First Field Season

Gamet, Nambi, Christopher Barrett, and Heather Boswell

Osteological Complexity: Testing Allometric Hypotheses on Pterion—Preliminary Study

Gilmour, Daniel M., Paul S. Solimano, Thomas J. Brown, and Kenneth M. Ames
Site Types and Assemblage Structure within Radiocarbon Dated Windust Assemblages

Gonzalez, Sarah and Ian Kretzler

*Field Methods in Indigenous Archaeology: Community-Based Research on the Grand
Ronde Reservation*

Gonzalez, Sarah, Ian Kretzler, Scott Adams, Karl Bloomberg, Daisy Jaime,
Kandice Joyner, and Allie Terjeson

Field Methods in Indigenous Archaeology: A Low-Impact Approach to the Study of Grand Ronde History

Goodwin, Matthew, Breanne Taylor, and Paul Solimano
Interpreting Site Data at the Bruce's Eddy Site (10CW1)

Hanson, Marsha R.
Investigating the Middle Paleoindian Lithic Industry: The Woodhaven Phase

Harris, Megan and Mike Rousseau
Mega Cache Pits of EfQw-26

Herritt, Caroline, Daniel J. Polito, and Renae J. Campbell
Bar Hopping as Praxis: The Bovill Run as Orality and Folklore

Hibdon, Sarah R. and Stephanie A. E. Jolivette
Clothing Fasteners from the Historic Morgue at the Washington State Insane Asylum

Johnson Humphries, Sarah and Michelle N. North
Landscape Modification and the Importance of Historic Research in CRM

Johnson, Matthew
A Proposed Faunal Analysis of Two Columbia River House Feature Sites: Hole-in-the-Wall-Canyon (45KT12) and French Rapids (45KT13)

Johnson, Meghan, Marci Monaco, and Kelley Prince Martinez
Portland Basin Projectile Point Technology

Jolivette, Stephanie A. E. and Sarah J. Van Galder
Late 19th Century Daily Lives of Patients at Western State Hospital

Karson Engum, Jennifer
Places Are Alive as Long as We Remember

Kearns, Michelle and Patrick Pringle
Do oral histories of Puget Lowland tribes preserve a cultural memory of catastrophic volcanic floods from Mount Rainier in the Puyallup and White Rivers from more than 1100 years ago?

Kiers, Roger
A Tale of Two Privies: Residents of Early Tacoma's Lower Pacific Neighborhood

Kirkpatrick, Molly
Probing into the Past: Revisiting the Tahkenitch Landing Site (35DO130) and Surrounding Area

Lewis, Ian

Mermaid Tears and Midden: A Possible Protohistoric Artifact from 45SJ50

Litzkow, Jamie M.

The Development of an Historic Mining Context for Northeastern Washington State

Lockwood, Chris and Thomas Ostrander

A Lahar Runs Through It: Archaeological Implications of Post-Glacial Geomorphology of the Duwamish River Valley

Maroney, Kendra L. and Sharon Boswell

The Kalispel Tribe and SWCA Dive into the History at Beaver Lake and Gamlin Lake

Martinez, Kelley Prince

Laying the Groundwork: A Preliminary Examination of Ground Stone Distribution and Analysis in the Lower Columbia River Valley

Mastrangelo, Elizabeth and Alexander Gall

Recording Hobbyist Knapping Sites in Washington State

McConnell, Kelson

Maker's Marks on Ceramic Artifacts from the 2015 Bush Homestead Excavation

Montine, John and Emily Chesterfield

Into the Woods: Early 20th Century Logging in Skagit County

Moret-Ferguson, Celia

Artifact Illustration: Bringing the Past to Life

Palmer, Erica, Shannon Tushingam, and Brian M. Kemp

*Ancient Smelt Fish DNA Species Identification from Northern California Region
Archaeological Projects*

Palmer, Sara E.

LiDAR Applications in Cultural Resource Assessment

Paton, Courtney J.

Investigating the Hunting Dog of the Coast Salish

Rinck, Brandy, Josh Wisniewski, and Robert Kopperl

Archaeological Investigations at the Point Julia Shell Midden (45KP21), Port Gamble Bay, Washington

Robison-Mathes, Anna

Data Collection and ArcGIS Collector

Sappington, Ericha E.

Surviving the Florida Frontier: An Examination of Spanish and Native American Agency and Trade at Fort San Marcos de Apalache, 1639–1821

Saunders, Anthony and Steven Hackenberger

Modeling Prehistoric Land Use on the Frank Church River of No Return Wilderness

Shong, Mike

Native American Contribution to the Early Hops Industry in the Southern Puget Sound

Skinner, Trent, Robert Dickenson, Katee Withee, and Kay Shelnut

Chinese Miners at the Happy Camp Mining Complex

Sparaga, Joseph

Choice and Design: An Analysis of Lithics from Block A4 from the Tse-Whit-Zen Village site

Stevenson, Alexander and Steve Navarro

Pacific Brewing and Malting: Rise, Fall, and Rebirth of a Tacoma Brewery

Taylor, Amanda, Emma Holm, Mark Adler, Jordan Thompson, Alejandra Barrera-Pallares, Amber Brown, Shaleigh Diaz-Ryder, Mara Page, Nicole Plastino, Marcy Galloway, and Jack Johnson

The Roche Harbor Homestead Project

Thompson, Jordan

Portable X-Ray Florescence: From the Laboratory to the Field

Wang, Penglin

Semantic Notes on the Ethnonyms Xiongnu, Loufan, and Tabyač

Williams, Laura A.

An Examination of Avifaunal Remains Recovered from Birch Bay Archeological Site

Williams-Larson, Alexandra

Up, Up, and Away: Examining Site 35WN93's Role in the Northward Trade of Obsidian Cliffs Obsidian

Wright, Kaitlin, L. K. Sheeran, J. A. Mayhew, R. S. Wagner, L. Sun, and L. Jin-Hua
Play in Immature Tibetan Macaques: Location Preference and Causes of Bout Termination at Mt. Huangshan, China

Yamasaki, Yuumi

The Contributions and influences of Don E. Crabtree to Lithic Technology

Erratum in *Chemical Sourcing of Obsidian Artifacts from the Grissom Site (45-KT-301) to Study Source Variability*

The Journal of Northwest Anthropology Staff

In Parfitt and McCutcheon (2017), a row of data was inadvertently omitted from Table 3. This omitted row is provided below in bold. The original table can be found in its entirety on pages 50–51 in the prior issue of JONA, 51(1). The digital version of this issue, found on our website www.northwestanthropology.com, has been updated with the corrected version of Table 3.

Table 3. Primary XRF Data for the 51 Sourced Grissom Artifacts^a (cont.)

Entry Number	Catalog Number	Geochemical Source	Trace Element Concentrations (ppm)				
			RB	SR	Y	ZR	NB
56	1579	Quartz Mountain, OR	132+/- 2	64+/-2	46+/-2	187+/-2	9+/-1
108	7531	Stray Gulch Tachylyte, WA	48+/-2	280+/-4	51+/- 2	253+/-3	18+/- 2
77	8131	Stray Gulch Tachylyte, WA	64+/-2	262+/-3	53+/- 2	279+/-3	19+/- 2
78	8140	Stray Gulch Tachylyte, WA	63+/-2	291+/-3	54+/- 2	269+/-3	21+/- 2
7	9099	Stray Gulch Tachylyte, WA	65+/-2	262+/-3	54+/- 2	291+/-4	22+/- 2
164	9336	Stray Gulch Tachylyte, WA	57+/-2	264+/-4	55+/- 2	274+/-4	20+/- 2
162	9536	Stray Gulch Tachylyte, WA	55+/-2	242+/-4	54+/- 2	280+/-4	19+/- 2
131	9767	Stray Gulch Tachylyte, WA	46+/-2	254+/-3	48+/- 2	232+/-3	17+/- 2
132	9936	Stray Gulch Tachylyte, WA	59+/-2	250+/-3	55+/- 2	277+/-3	20+/- 2
100	13713	Stray Gulch Tachylyte, WA	51+/-2	272+/-4	46+/- 2	228+/-3	17+/- 2

^aTable adapted from Skinner and Thatcher (2013a: Table A-1), Skinner and Thatcher (2013b: Table A-1), and Skinner (2014:Table A-1).



Announcing the 71st Annual Northwest Anthropological Conference
Boise, Idaho
March 28-31, 2018

Hotel and Meeting Venue: Riverside Hotel
208-343-1871

Journal of Northwest Anthropology

Memoir Series

The *Journal of Northwest Anthropology* publishes occasional monographs and multi-author collections under the *Memoir* series. *Memoirs* are available for purchase through Amazon.com. Authors interested in publishing through this series should contact the *Journal of Northwest Anthropology* editors at the Richland, WA office (JONA@pocketinet.com).

Memoir 7 - Festschrift in Honor of Max G. Pavesic

Kenneth C. Reid and Jerry R. Galm, editors
\$19.99 (2012)

**Memoir 8 - Action Anthropology and Sol Tax in 2012:
The Final Word?**

\$10.99 (2012)

**Memoir 9 - Rescues, Rants, and Researches:
A Re-View of Jay Miller's Writings on
Northwest Coast Indian Cultures**

Darby C. Stapp and Kara N. Powers, editors
\$10.92 (2014)

Memoir 10 - Tribal Trio of the Northwest Coast

Kenneth D. Tollefson
\$14.95 (2015)

**Memoir 11 - An Ethnographic Assessment of Some
Cultural Landscapes in Southern Wyoming and Idaho**

Deward E. Walker Jr., Pamela Graves, Joe Ben Walker,
and Dan Hutchison
\$49.95 (2015)

**Memoir 12 - The Contemporary Coast Salish:
Essays by Bruce Granville Miller**

Bruce Granville Miller and Darby C. Stapp, editors
\$19.95 (2016)

**Memoir 13 - 50 Years of Northwest Anthropology:
A Content Analysis and Guide to
Journal of NW Anthropology**

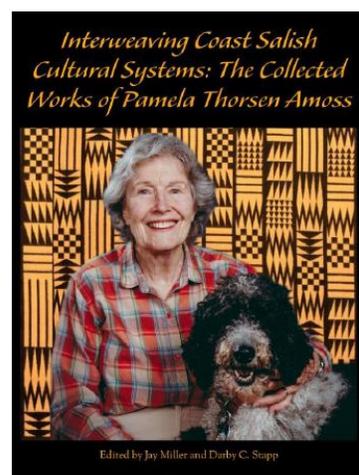
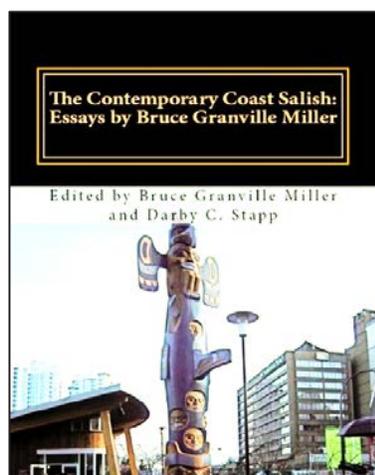
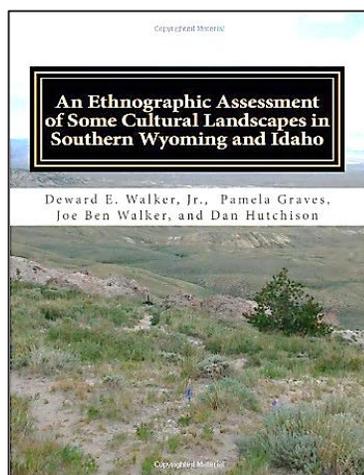
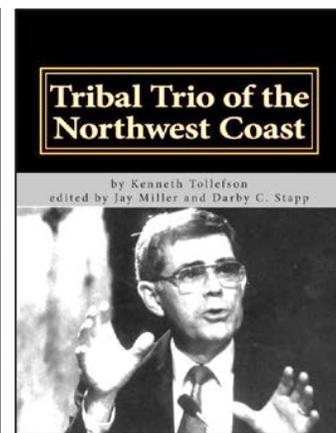
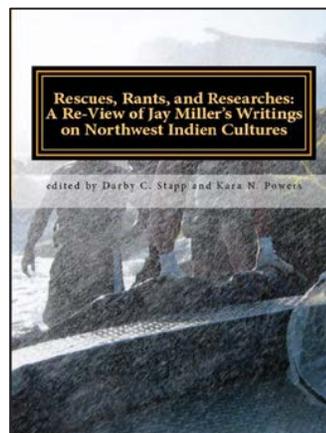
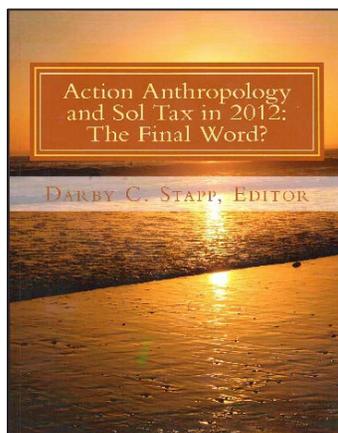
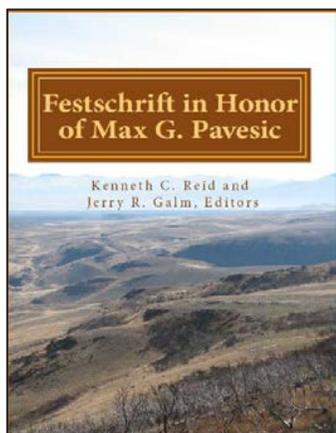
Deward E. Walker, Jr., Darby C. Stapp,
and Amanda S. Cervantes
\$34.99 (2017)

**Memoir 14 - Interweaving Coast Salish Cultural
Systems: The Collected Works of
Pamela Thorsen Amoss**

Jay Miller and Darby C. Stapp, editors
\$22.95 (2017)

**Memoir 15 - Re-Awakening Ancient Salish Sea
Basketry: Fifty Years of Basketry Studies
in Culture and Science**

Ed Carriere and Dale Croes
\$49.95 (January 2018)



A Content Analysis and Guide to the
Journal of Northwest Anthropology

50

Years of
Northwest Anthropology

Memoir 13

Deward E. Walker, Jr., Darby C. Stapp, and Amanda S. Cervantes

Journal of Northwest Anthropology, Memoir 13

2017 • 100 pages • \$34.99

50 Years of NW Anthropology: A Content Analysis and Guide to Journal of Northwest Anthropology contains summaries of published content, journal history, authors and institutional affiliations, and research themes, in addition to a **fully searchable DVD** containing all 50 volumes of *Northwest Anthropological Research Notes* (1967–2001), the *Journal of Northwest Anthropology* (2002–2016), and *Memoirs* 1 to 7.

JONA is the Pacific Northwest's only peer reviewed professional journal devoted to the four fields of Anthropology (archaeology, linguistics, physical, and cultural), and is published twice a year.

Using the Adobe PDF search function, researchers can quickly search the collection, which also includes all abstracts from the Northwest Anthropological Conferences (1968–2015), to find any places where individuals, site numbers, rivers, artifact types, tribes, theoretical concepts, methods, etc., were mentioned.

*Re-Awakening Ancient
Salish Sea Basketry*
Fifty Years of Basketry Studies in Culture and Science



By
Ed Carriere
Suquamish Elder & Master Basket Maker

&
Dale Croes
Wet-Site Archaeologist, Washington State University

Journal of Northwest Anthropology, Memoir 15

Expected January 2018 • 325 pages • \$49.95

Re-Awakening Ancient Salish Sea Basketry: Fifty Years of Basketry Studies in Culture and Science traces the evolution of traditional basketmaking on the Northwest Coast of North America from thousands of years ago to contemporary times. The book is the result of a collaboration between Mr. Ed Carriere, Suquamish Elder and Master Basketmaker, and Dr. Dale Croes, Northwest archaeologist specializing in ancient basketry and excavation of Northwest Coast waterlogged sites (also known as "wet-sites"). Both men have spent over 50 years of their lives exploring their mutual interest in the art of basketry.

Re-Awakening Ancient Salish Sea Basketry explores the lives of these two basketry specialists; describes their analyses of the 2,000-year-old basketry collection from the Biderbost wet-site, Snoqualmie Tribal Territory, currently housed at the University of Washington Burke Museum Archaeology Program; describes their development of Generationally-Linked Archaeology, a new approach that connects contemporary cultural specialists with ancient and ancestral specialists through collaboration with archaeologists; and details the sharing of their efforts with cultural audiences, such as the Northwest Native American Basketweavers Association, and scientific audiences, such as the annual Northwest Anthropological Conference. The book concludes with the authors' reflection on the contributions that ancient sites and artifacts can make to community cultural perpetuation efforts.

