



# PNWAS NEWS BULLETIN 152

WELCOME TO

## PNWAS ZOOM AND A PROMISING 2021!!!!

*Hope everyone is doing ok and staying safe. We believe 2021 will be a Promising New Year and with vaccinations we may be able to return to field trips, campouts and workshops!*

*PLEASE Renew for 2021 to allow PNWAS to continue to provide ongoing presentations on current archaeology of our region, remotely through ZOOM on the internet. We have purchased a PRO ZOOM account, so we can continue to bring our membership together. AND if you missed past PNWAS ZOOM YouTubes we have set up a PNWAS ZOOM Channel at: <https://www.youtube.com/user/SeattlePNWAS>. The fifth program is the most recent PNWAS ZOOM presentations and was very popular:*

*May 6<sup>th</sup>, 2021:*

*Ice Age Migration and Settlement along the Northwest Coast of North America*

*By Dr. E. James Dixon, University of New Mexico*

*(one thing nice about ZOOM, we can bring in speakers from anywhere in world.)*

**If a current member (2021), you will get an invitation to join the ZOOM meeting through an e-mail shortly before the talk (e-mail [dcroes444@gmail.com](mailto:dcroes444@gmail.com) to see if you are current for 2021, thanks).**

**NEXT and FALL PNWAS ZOOM, Featuring a new book on ancient Cordage and Knots from the Northwest Coast Wet Sites.**

***Please Put on your Calendar:***

***Ancient Northwest Coast Cordage and Knots*** (with release of new book, see at this link: [Cordage from the Ozette Village Archaeological Site: A 40 year update on cordage and knots from NW Coast wet sites](#) )

***By Dr. Dale R. Croes, PNWAS/ WSU***

***THURSDAY, October 7th, 2021 on ZOOM starting at 6:30 with presentation at 7:00pm***

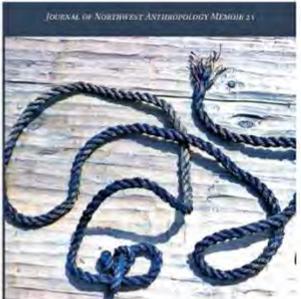
The “brother” to basketry, I have just published a 40-year update on ancient CORDAGE and KNOTS on the Northwest Coast of North America, with a focus on the 2000+ examples from the Ozette Village wet site. As one of the most common artifacts from Pacific Northwest wet (and shell midden) sites, cordage and knots play a key part in the dynamic Maritime Societies for over 10,000 years along the coast and riverways.

**CORDAGE FROM THE OZETTE VILLAGE ARCHAEOLOGICAL SITE**  
A TECHNOLOGICAL, FUNCTIONAL, AND COMPARATIVE STUDY

By Dale R. Croes  
Darby C. Stapp, Editor & Victoria Boozer, Publications Assistant

A section of a whaling village, with massive cedar plank long-houses, was engulfed by an enormous clay mudslide over three centuries ago at Ozette. Tens of thousands of wood and fiber artifacts were preserved, including thousands of cordage items (often demonstrating knotting techniques), in a waterlogged environment. Washington State University (WSU) archaeologists, working in equal partnership with the Makah Indian Nation, excavated a section of this site. Being the WSU graduate student who undertook the scientific study of ancient basketry and cordage items, Dale R. Croes worked directly with Makah Master Weavers at the Neah Bay School. The Makah leadership felt he could not fully understand these materials from Ozette unless he got this cultural training, and they were right. Through this approach a unique synergy of cultural and scientific analysis/synthesis is produced, and from these three levels:

- First, Croes defines the diverse array of Ozette cordage attributes (modes; including knots) and statistically compares them to the hundreds of ancient cordage examples that occur from all known Northwest Coast wet sites.
- Second, Croes combines culturally important cordage attributes, as learned from Makah weavers, into cordage types which also are compared to the diverse types found at all other wet sites; the results indicate a continuity of cordage cultural styles in three regions of the Northwest Coast for 2,000 to 3,000 years.
- And third, Croes combines the Ozette cordage types into functional sets, supported by them being archaeologically recovered in their original position in ancient households at the Ozette Village (noting that much of the plank house components were bound together by cordage). Croes computer mapped positions of cordage types in the Ozette I House demonstrating the location of different family units and reflecting the activities of household members.

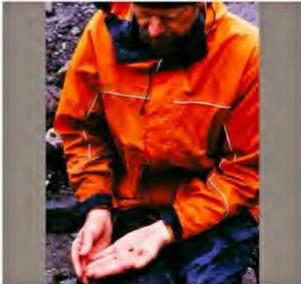


JOURNAL OF NORTHWEST ANTHROPOLOGY MEMOIR 21

CORDAGE FROM THE OZETTE VILLAGE  
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JONA Memoir 21



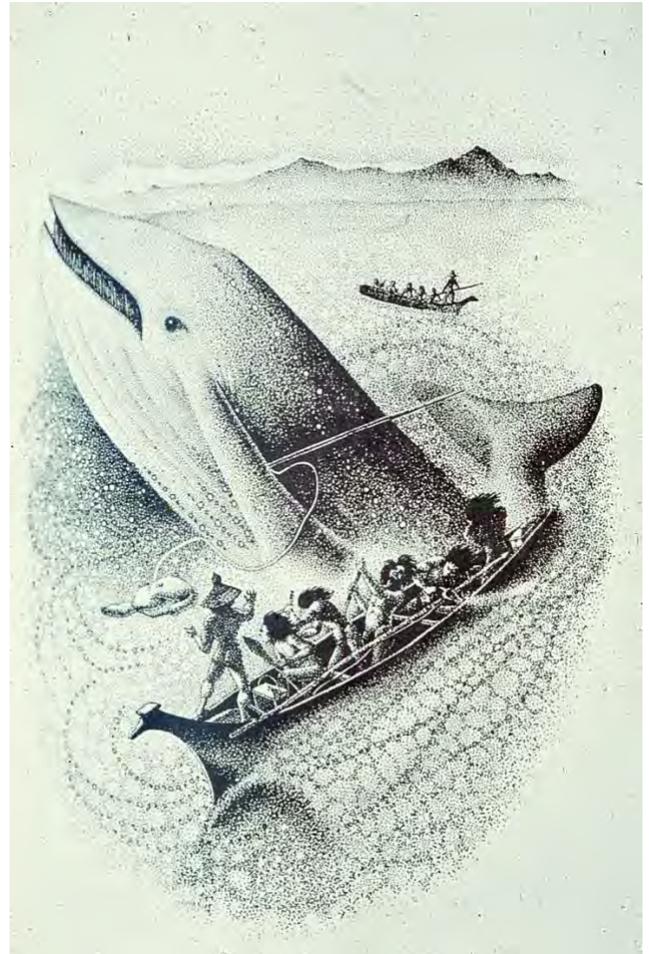
The 1<sup>st</sup> flyer/figure shows (1) 3-strand, twisted cedar limb Ozette whale harpoon rope with a running noose knot on end, (2) Daryl Fedje, Director, holding a spruce and grass 3-strand braid string/thread dating to 10,700-years-old from a southern Haida Gwaii, B.C. wet site,



The 2<sup>nd</sup> flyer/figure shows (in counterclockwise direction from bottom). 3. Makah Museum replica of the ancient Ozette house (in their museum) showing cedar limb 1-strand withes tying the house wall boards, slung between double pairs of poles, 4. 3-strand twisted cedar limb collar on a 700 year old Sunken Village wet site wooden wedge near Portland, OR, and 5. Ed Carriere, Suquamish Elder and Master Basket/Cordage Maker, shows how he stores his split cedar root in cordage loops for later use (these are common in ancient wet sites too). Please check it out at the publisher's (JONA) web site: <https://www.northwestanthropology.com/> publications and Amazon

As will be seen, ancient cordage (and knots) on the Northwest Coast were some of the most common artifacts, often hundreds and sometimes thousands in

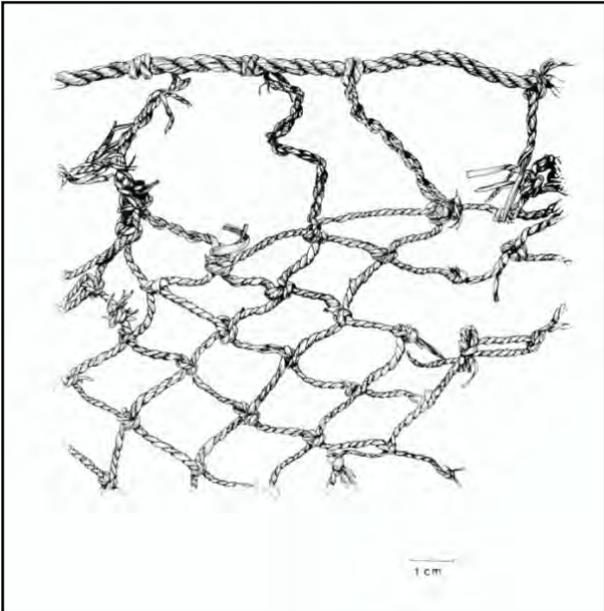
most NW wet site excavations. Cordage was basic to the complex Maritime Societies on the Northwest Coast of North America, from whale harpoon cedar bough twisted ropes, to spruce root string nets to cedar bark string warps wrapped with bird skins strips with down adhering to make thick warm blankets.



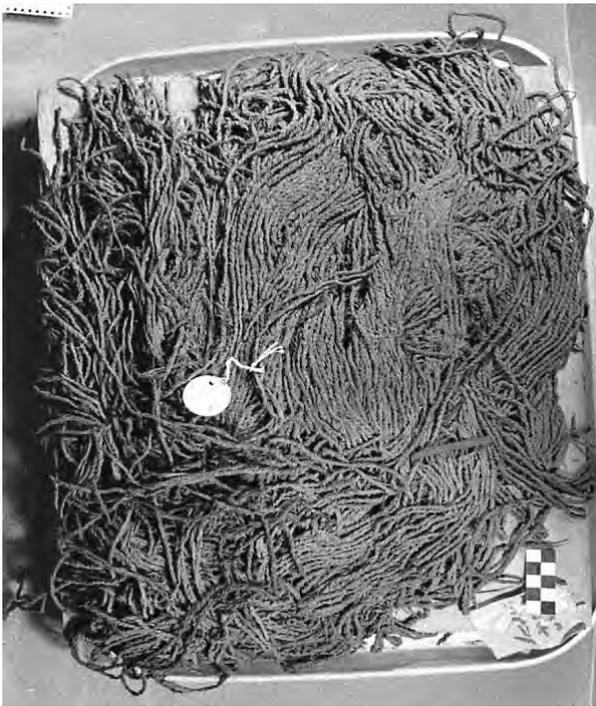
*Harpoon ropes for hunting whales using seal skin float drags*



*Harpoon lines and floats to buoy the whale and diver sews mouth shut to prevent drag with cedar bough single strand withes.*



*Spruce root Ozette dip nets*



*Cedar bark 2-strand string warps thought to have been once wrapped with bird skins with down adhering and twined together with sinew. The bird skin/down and sinew does not preserve in wet sites.*



*What the down wrapped cedar bark strings twined with sinew look like as seen in Makah down blanket collected in 1866. Described as being very warm!*

And an example of a wooden wedge with cedar bough twisted collar from the Sunken Village wet site, Portland, Oregon. Wedges like this have been found for over 10,000 years from NW Coast wet sites, demonstrating the success of wood wedge splinting technologies through time.



Though we cannot have a book signing for this new Cordage book through **ZOOM**, let me know if you buy one and I will send a personalize signing to insert in the book. Thanks, Dale ([dcroes444@gmail.com](mailto:dcroes444@gmail.com))

***Our Winter PNWAS ZOOM—in line with our Chehalis River Hypothesis theme on First Peoples in the Americas:***

***Late-Glacial Hunter-Gatherers in the Central Alaska Range and the Role of Upland Ecosystems in the Peopling of Alaska***

***By Dr. John C. Blong, WSU***

***THURSDAY, December 9th, 2021 on ZOOM starting at 6:30 with presentation at 7:00pm***

(Dr. Blong is a new Anthropology faculty at Washington State University, welcome him to the Northwest. He also worked at Paisley Cave in Oregon)

Upland ecosystems are typically thought of as less productive and more challenging for humans to live in than lowland ecosystems. It can also be difficult to conduct archaeological research in high-elevation locations. Because of these issues, archaeological research often prioritizes investigations in the lowlands. However, upland ecosystems can provide novel resources that attract human activity. With increased research focus in recent years, archaeologists are pushing back the earliest evidence for human activity in upland ecosystems around the world. This is also the

case in central Alaska, where there is growing evidence that the earliest humans to settle eastern Beringia during the late-glacial period made use of subsistence and lithic resources in the central Alaska Range.



***Photograph of the upper Susitna basin study area, showing an alpine tundra landscape in the Alpine Creek valley, Clearwater Mountains. [no doubt similar to our Salish Sea region in post-glacial times]***

In this presentation I review the late glacial paleoecological and archaeological record of the central Alaska Range, highlighting its role in hunter-gatherer land use during the initial settlement of eastern Beringia. The early use of upland landscapes in Alaska suggests variability in land-use patterns during the initial settlement of North America and has significant implications for our understanding the process of the peopling of the Americas.



***Pacific Northwest Archaeological Society***

1219 Irving Street SW Tumwater WA 98512

Join at <http://www.pnwas.org>

Join us on **ZOOM Thursday, October 7th at 6:30 pm for Ancient Northwest Coast Cordage and Knots—a New Book**

***By Dr. Dale R. Croes, PNWAS/WSU***

*Contemporary Cordage Print: Salmon Cedar Rope by Susan A. Point, Coast Salish, Musqueam First Nation*

