



## **PNWAS NEWS BULLETIN 151**

**WELCOME TO**

**PNWAS ZOOM  
AND A PROMISING  
NEW YEAR 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 fourth program is the most recent PNWAS ZOOM presentations:*

*March 11<sup>th</sup>, 2021:*

*Makahs, Quileutes, and the Precontact History of the Northwestern Olympic Peninsula, Washington  
By Dr. Gary Wessen, Wessen and Associates, Inc.,  
Port Townsend, WA.*

*(one thing nice about **ZOOM**, we can bring in speakers from anywhere in world, our next speaker is an internationally renowned speaker from University of New Mexico—see below )*

**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).**

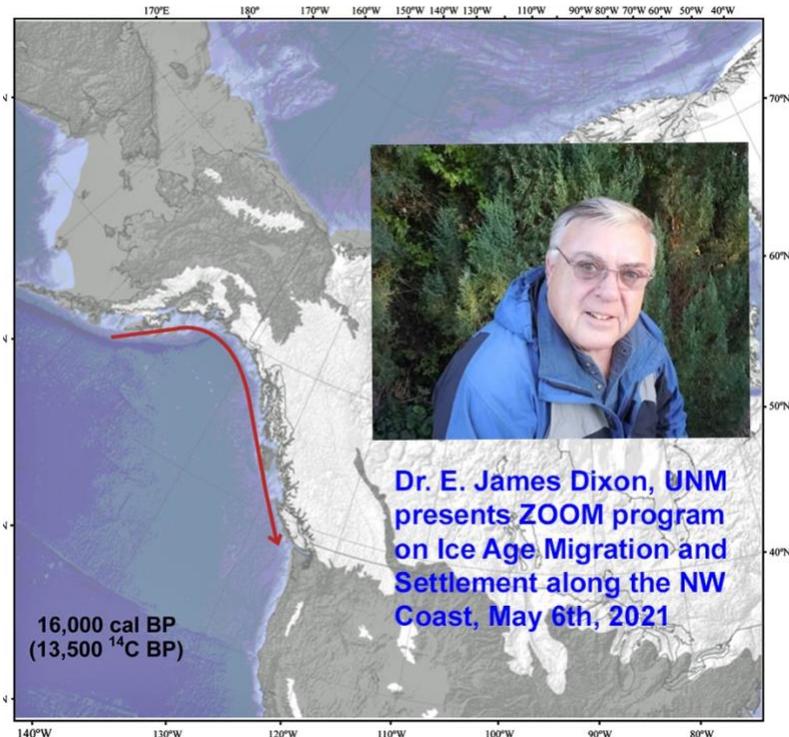
***NEXT and SPRING PNWAS ZOOM,  
Please Put on your Calendar:***

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

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

***THURSDAY, May 6<sup>th</sup>, 2021 on ZOOM  
starting at 6:30 with presentation at 7:00pm***

Archeological and genetic evidence indicates that people first entered North America from northeast Asia sometime during the last ice age, or late Pleistocene, at least 16,000 years ago, or possibly earlier. During the last glacial maximum (LGM) circa 18,000 years ago, sea level was approximately 120 m (about 390 ft) lower than it is today. As a result, the Bering Land Bridge and continental shelf of the Northwest Coast of North America created a continuous shoreline stretching from Northeast Asia to Southeast Alaska. Geological and archeological evidence suggests that this coastal corridor was ecologically viable and capable of supporting human groups and was the earliest ice-free pathway available for people to colonize the southern regions of the Americas.



*Dr. E. James Dixon, emeritus University of New Mexico, is an Internationally known expert who spent much of his career exploring both on land and in the sea for evidence of First People moving down the Alaska Coast into our region—directly implicating our Chehalis River Hypothesis.*

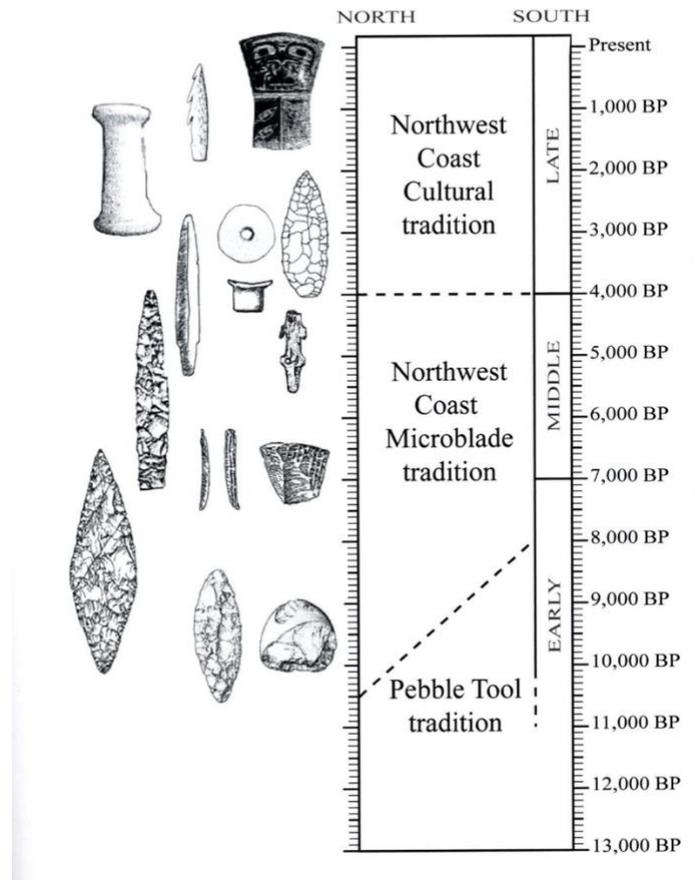
Following the LGM the climate changed rapidly resulting in: 1) sea level rise that flooded the Bering Land Bridge and severed the land connection between Asia and North America, 2) sea level rise along Alaska's Northwest Coast forced a landward retreat of people living along the coast in response to rising sea level, and 3) the newly deglaciated land provided new opportunities for people to move landward and colonize terrain recently exposed by melting glaciers.



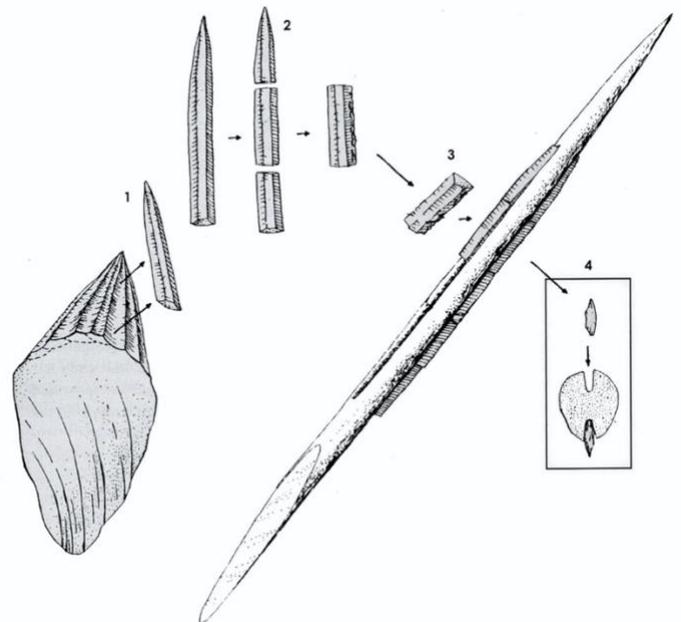
Some of the main northern Northwest Coast and the locations of archaeological sites to be discussed. Dr. Dixon was quite involved with the On Your Knees Cave on Prince of Wales Island, Alaska: [http://www.sitnews.us/0405news/041105/041105\\_onyourknees\\_cave.html](http://www.sitnews.us/0405news/041105/041105_onyourknees_cave.html); [https://en.wikipedia.org/wiki/On\\_Your\\_Knees\\_Cave](https://en.wikipedia.org/wiki/On_Your_Knees_Cave)

The “push-pull” forces of rising sea level and deglaciation were powerful forcing mechanisms contributing to human movement eastward from Asia to North America and the subsequent colonization and early settlement along the Northwest Coast.

## NORTHWEST COAST



*Cultural chronology and some of the diagnostic artifacts of the Northwest Coast of North America.*



*Idealized presentation illustrating how microblades were manufactured from wedge shaped cores and used as inserts along the sides of bone or antler projectile points.*

## Consider Dating a Mammoth!!!!



This could be **YOU** dating a Mammoth!



The past is in your own backyard.

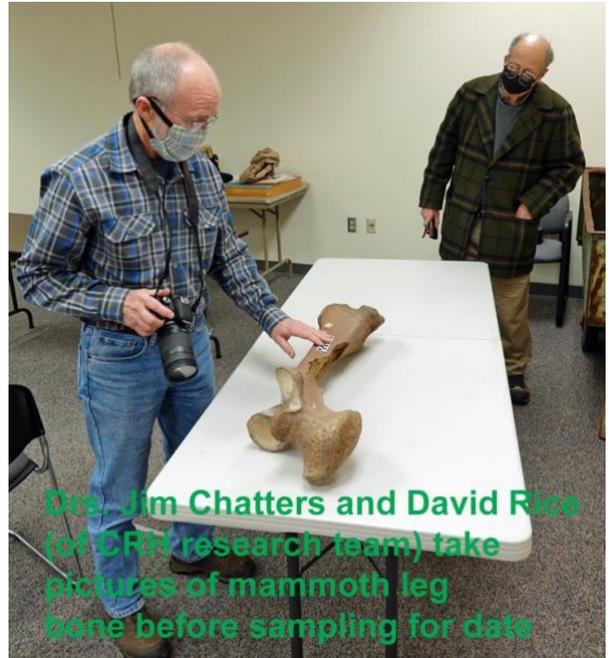
Help Us by "Dating a Mammoth!!!"

As part of our Chehalis River Hypothesis (CRH) theme and PNWAS effort, we have been visiting local museums to better understand the mega-fauna, and especially mammoth remains in our region. The Evergreen State College (TESC) intern, Ms. Gomez, reported some interesting finds from the Chehalis drainage and upper Cowlitz River drainage (we hope to continue this intern program under Dr. Ulrike Krotscheck, TESC faculty, next summer too).

We received a grant from the Squaxin Island Tribe Charitable 1% Funds to C14 some of these mammoth bones (enough for one \$345/ea date, and part of another). Since all this area once was home to attractive hunting for earliest Native Peoples of large game (megafauna), especially mammoths, mastodons, sloths,

ancient bison, horses, etc., our team of specialists (archaeologists, geologists, and GIS specialists) would like to better understand this ancient environment.

CRH Research Team members Dr. David Rice, Dr. James Chatters (DirectAMS C14 lab) and I (Dale Croes) visited and took samples from a broken mammoth ulna leg long bone and two teeth at the Cowlitz County Historical Museum to get some C14 dates. The long ulna bone may have been broken open for marrow by early Peoples, though it appears to more likely broken by a digging machine or plow.



Dr. Jim Chatters and David Rice (of CRH research team) take pictures of mammoth leg bone before sampling for date

Since a C14 date costs about \$345 each, we were fortunate that DirectAMS C14 dating lab in Bothell, Wa. agreed to date all three, since they wanted to experiment with dating mammoth teeth.



Mammoth teeth from different animals found near Chehalis, Wa.

We wanted to report to the PNWAS Membership that we got the first date back from the Mammoth ulna leg

bone and it is dated at **18,300 years old** (see chart). This would be at glacial maximum in our region (Seattle would be under a mile of ice and Olympia under several hundred feet!). The date shows that mammoth populations existed and probably thrived in areas just south of the glacial front in the Chehalis/Cowlitz drainages.

The oldest human-involved archaeological sites in our region so far date to about 14,500 years ago (from the Paisley cave that we heard about in second PNWAS ZOOM program; also, the Manis Mastodon in Sequim, dates to 13,800 years old, with a spear in the rib of a mastodon).

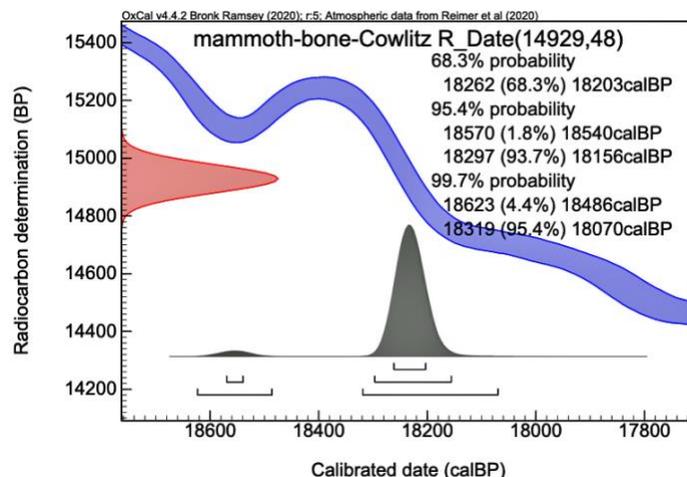
Whether First Peoples were here 18,000 years ago remains doubtful, though as glaciers began melting, we would expect peoples along the Northwest Coast in refugium's by 16,000 years ago and possibly reaching the Chehalis drainage below the ice flow and coming through our region at that time. This allows First Peoples into the entire American continent, sometimes called the Second Earth, since no humans had yet reached this other side of the world.

We will report the mammoth teeth dates when they are available, and we also hope to work with the Squaxin Island Museum Cultural Research to bring together the dated megafauna remains for public viewing.

If you would like to “Date a Mammoth” and help us with this effort (we have spent out the grant funds, so need the help), please send tax-deductible (PNWAS is a non-profit) contributions to PNWAS (through PayPal buttons on our web site: <https://pnwas->

[society.weebly.com/dating-a-mammoth.html](https://society.weebly.com/dating-a-mammoth.html)), or mail a check (to PNWAS “Date a Mammoth”) at our address shown, and we will send you a letter of appreciation for the donation and for tax purposes.

A C14 date costs about \$345.00 so any part of that you can support will assist us with the CRH research we are conducting in PNWAS.



*In this chart, prepared by CRH Researcher, Geologist Pat Pringle (gave PNWAS's first ZOOM talk—see our PNWAS YouTube Channel link above), the lower gray curve area in bottom shows the range of dates with a 93.7% probability that it is 18,297 years old.*

**THANK YOU FOR YOUR SUPPORT!** We will be updating our progress in future PNWAS news bulletins and announcing our summer campout plans (hopefully) at the Hoko River Mouth Retreat and Makah Days, and our Fall PNWAS talks soon.

## ***Pacific Northwest Archaeological Society***

1219 Irving Street SW Tumwater WA 98512

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



Join us on **ZOOM Thursday, May 6th at 6:30 pm for**  
***Ice Age Migration and Settlement along the Northwest Coast of North America***  
***By Dr. E. James Dixon, University of New Mexico***