PNWAS NEWS BULLETIN 154

WELCOME TO PNWAS ZOOM AND A PROMISING 2022!!!!

Hope everyone is doing ok and staying safe. We believe 2022 will be a Promising New Year and with vaccinations/boosters we eventually may be able to return to field trips, campouts and workshops!

PLEASE Renew for 2022 to allow PNWAS to continue to provide ongoing presentations on current archaeology of our region. 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 seventh ZOOM program is the most recent PNWAS presentation and first in the series. This excellent talk links to our ongoing PNWAS theme considering the Chehalis River Hypothesis (CRH):

> December 9th, 2021:
> 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

If a current member (2022, see PWNAS schedule/membership form attached), you will get an invitation to join the ZOOM meeting through an e-mail shortly before the talks (e-mail dcroes444@gmail.com to see if you are current for 2022, thanks).

PNWAS Winter ZOOM Meeting, Thursday February 10th, 2022

COMBINING PALEOECOLOGY, GEOLOGY, AND ARCHAEOLOGY:
What Interdisciplinary Research Can Teach Us About Holocene Human-Landscape Interactions in the Pacific Northwest

### By Dr. Megan Walsh, Central Washington University (CWU)

Dr. Megan Walsh and husband Kevan Ferrier preparing to sample a surface sediment core while staying at the Hoko River campground, that they and students took from Beaver Lake, Clallam County, WA. (Dale Croes)

Understanding the role fire played in maintaining ecosystems prior to Euro-American settlement is key to restoring landscape resiliency and viability in the Pacific Northwest. To do this, site-specific fire histories that illustrate changes on centennial to millennial-length timescales are needed. More important, perhaps, is developing a better understanding of the past relationships that existed between fire activity and the factors that influenced its occurrence, frequency, and severity. This is especially true if fire history records are to be used to project how fire activity might change in light of future climate change.

CWU students and Dr. Walsh (below) struggling to core through the tephra layers in Sunrise Lake, Mt. Rainier National Park, July 2011(Megan Walsh).

The goal of presenting this research is to encourage researchers to use an interdisciplinary approach when investigating human-environment interactions in the Pacific Northwest, which will likely require developing novel methodologies for combining paleoecological, geological, archaeological, and additional sources of information.
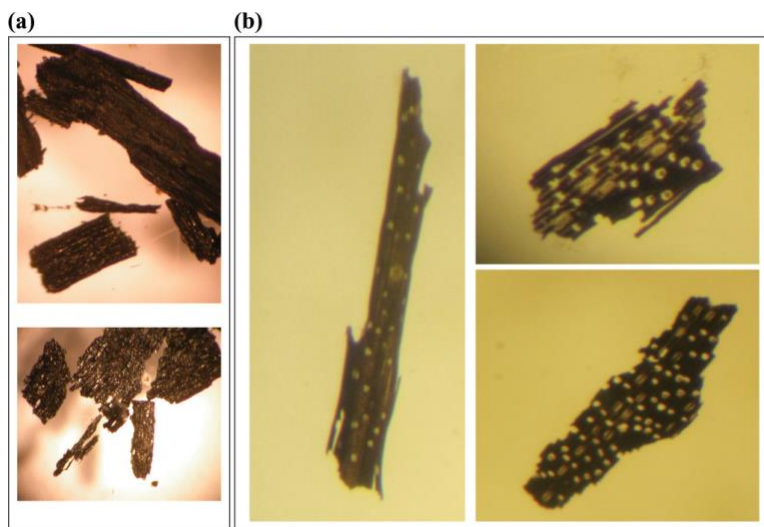
Examples of (a) woody charcoal from the Fish Lake core northeastern Washington and (b) herbaceous charcoal used to study fire histories (Progress in Physical Geography 2018:486).

While fairly straightforward methods exist to assess fire history within the context of past climatic variability, it is less clear how to evaluate these within the context of past human activity. Presented here are sediment core-based fire and vegetation histories, along with a synthesis of existing archaeological records, from three areas of the Pacific Northwest: the Willamette Valley (OR), Mount Rainier National Park (WA), and the eastern Cascades (WA). These case studies illustrate the complicated relationships that exist between fire, vegetation, climate, and humans in the Pacific Northwest, particularly during the late Holocene. The results support the idea that humans favored fire-modified environments, and in some cases significantly influenced landscape patterns as a source of fire ignitions.

Dr. Megan Walsh cuts open a core sample in her lab as Dusty Pilington looks on (CWU News).

A Race Against Time: Working to Preserve Some of the Oldest Traces of Early American History (Human and Mega-Fauna Footprints)

By David Bustos, Resource Programs Manager, White Sands National Monument

The team excavating trenches and following the tracks with ground-penetrating radar (NPS, USGS and Bournemouth University).

Trails of footprints called "ghost tracks" have been seen in the White Sands area for years, but usually only when the ground was wet (NPS, USGS and Bournemouth University).

Examples of ancient footprints at White Sands National Monument, New Mexico (NPS, USGS and Bournemouth University).

White Sands National Park has one of the largest concentrations of late Pleistocene megafauna and human fossil trackways in the Americas.

Unfortunately, the fossil prints, that range in age from 21,000 to 18,000 years before present, are rapidly being lost. The focus of this presentation is on the diversity of prints that have been found and what is being done to preserve and monitor the rates of erosion.

See NBC News report on this amazing find: [NBC National News Coverage of Ancient Footprint Discovery](#)

The location of the new excavations was the shore of a wetland when the human and mega-fauna footprints were made (Karen Carr).

Reconstructed scene of woman carrying her baby across white sands leaving her footprints (Karen Carr).

David Bustos sent these humans tracks found in early January 2022 in their race to recover examples before erosion removes them forever:

David Bustos sent this image to us from his current field work in January 2022 (David Bustos)

Pacific Northwest Archaeological Society
1219 Irving Street SW Tumwater WA 98512
Join at http://www.pnwas.org

Dr. Megan Walsh and husband preparing to sample a surface sediment core while staying at the Hoko River

Join us on ZOOM Thursday, February 10th at 6:30 pm for
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