Evidence of One of the Oldest Human Occupations in Western United States Discovered on BLM Land in Southeast Oregon

Portland, Ore. – Near the Rimrock Draw Rockshelter outside of Riley, Oregon, archaeologists recently discovered evidence suggesting one of the oldest known human occupations in the western United States.

Archaeologists with the Bureau of Land Management (BLM) and the University of Oregon Archaeological Field School have been excavating at the Rimrock Draw Rockshelter since 2011. Their discoveries have included a number of stone projectile points and tooth enamel fragments likely belonging to a prehistoric camel (Camelops sp.) that became extinct approximately 13,000 years ago.

But what has the archaeological community most excited is a small stone tool found below a layer of volcanic ash.

Near the bottom of a 12-foot deposit, archeologists discovered a layer of ash that was identified as volcanic ash from a Mt. St. Helens eruption about 15,800 years ago.

Beneath the layer of volcanic ash, archaeologists discovered a small orange agate tool believed to have been used for scraping animal hides, butchering, and possibly carving wood. A blood residue analysis of the tool revealed animal proteins consistent with bison, the most likely species being Bison antiquus, an extinct ancestor of the modern buffalo.

“The discovery of this tool below a layer of undisturbed ash that dates to 15,800 years old means that this tool is likely more than 15,800 years old, which would suggest the oldest human occupation west of the Rockies,” said Scott Thomas, BLM Burns District archaeologist.

Presently, Oregon’s Paisley Cave, also managed by the BLM, is considered home to the earliest known residents of North America based on human physical evidence. In 2008, a team of archaeologists, led by Dr. Dennis Jenkins with the University of Oregon's Museum of Natural and Cultural History, discovered coprolites - dried feces - containing human DNA dated over 14,000 years old.

Dr. Patrick O’Grady, with the University of Oregon Archaeological Field School, has been directing the Rimrock Draw Rockshelter excavations since they began.
“When we had the volcanic ash identified, we were stunned because that would make this stone tool one of the oldest artifacts in North America. Given those circumstances and the laws of stratigraphy, this object should be older than the ash,” said O’Grady. “While we need more evidence before we can make an irrefutable claim, we plan to expand our excavation this summer and hopefully provide further evidence of artifacts found consistently underneath that layer of volcanic ash. That’s the next step.”

The University of Oregon Archaeological Field School, in partnership with the BLM and volunteers from the Oregon Archaeological Society, will begin its fifth season this summer, offering students, researchers, and volunteers invaluable field experience.

Stan McDonald, BLM Oregon/Washington lead archaeologist, explained the potential this discovery has for the archaeological community.

“For years, many in the archaeological field assumed that the first humans in the western hemisphere were the Clovis people – dating to around 13,000 years ago. While a handful of archaeological sites older than Clovis cultures have been discovered in the past few decades, there is still considerable scrutiny of any finding that appears older,” McDonald explained. “With the recent findings at Rimrock Draw Shelter, we want to assemble indisputable evidence because these claims will be scrutinized by researchers. That said, the early discoveries are tantalizing.”

- BLM -

The BLM manages more than 245 million acres of public land, the most of any Federal agency. This land, known as the National System of Public Lands, is primarily located in 12 Western states, including Alaska. The BLM also administers 700 million acres of sub-surface mineral estate throughout the nation. The BLM’s mission is to manage and conserve the public lands for the use and enjoyment of present and future generations under our mandate of multiple-use and sustained yield. In Fiscal Year 2014, the BLM generated $5.2 billion in receipts from public lands.
Rimrock Draw Rockshelter archaeological site

Field school crew, post-sandbagging

Agate stone tool found beneath the volcanic ash

Camel enamel tooth fragments