



Joint Press Release

For Immediate Release

National Park Service ■ John Day Fossil Bed National Monument

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For Additional Information

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Oregon Fossil Discovery Reveals Last Non-human Primate Species in North America

Kimberly, Ore. – Recently discovered fossils at Oregon’s John Day Fossil Beds National Monument reveal a new species that scientists believe was the last non-human primate in North America.

The small, lemur-like animal is believed to have crossed a land bridge at the Bering Strait about 29 million years ago, according to Dr. Joshua Samuels, John Day Fossil Beds National Monument chief of paleontology.

“This new species shows little resemblance to other North American primates,” said Samuels. “Where it came from and how it is related to other primates has long been a mystery.”

As reported in the American Journal of Physical Anthropology, *Ekgmowechashala zancanellai* was a fruit-eating lemur-like primate that weighed less than five pounds. The discovered fossils are similar to primate fossils from Thailand and Pakistan, suggesting that this new species was a member of the lemur-like adapiform group.

“Comparison of the new finds from Oregon to some recently discovered species from Asia has really helped us understand where this unusual animal came from,” said Samuels.

The new species was named for recently retired Bureau of Land Management archaeologist and Oregon paleontology program coordinator John Zancanella. For more than a decade, Zancanella worked cooperatively with National Park Service staff to protect fossil sites throughout Oregon.

While prospecting with National Park Service paleontologists in 1997, Zancanella found the first tooth of the new species. After more than a decade of diligent searching, Park Service staff found two additional teeth at the exact same site in 2011. In 2015, Samuels found a jaw fragment that two of the teeth fit onto, confirming these teeth are from the same individual.

Primates appeared in North America about 55 million years ago and have a rich fossil record on this continent. The closed canopy forests these primates inhabited began to dwindle, being replaced by more open woodland and savannah habitats as global climate conditions changed. Primate species declined and the last of them vanished from North America about 35 million years ago. Six million years later, the lemur-like species appeared in Oregon and the Great Plains, surviving until 25 million years before humans arrived on this continent.

Oregon's John Day Basin contains one of the most complete and well-known fossil records on Earth, with nearly 50 million years of time preserved. These fossil beds record the history of ancient ecosystems, changing climate, and plant and animal evolution during the 'Age of Mammals.' For 150 years, paleontologists have been visiting the area to collect fossils and study geology. As a result of this research, the John Day Formation boasts an incredibly diverse fauna with over 100 recognized species of mammals, including sabertoothed nimravids, early dogs, three-toed horses, and giant 'hell pigs.'

"Finds like this exciting new primate show that, even though the John Day Basin has been studied for more than a century, there are always more discoveries to be made," said Shelley Hall, John Day Fossil Beds National Monument Superintendent. "These discoveries highlight the importance of protecting fossil sites like John Day Fossil Beds National Monument."

The new study can be found online in the American Journal of Physical Anthropology:
<http://onlinelibrary.wiley.com/doi/10.1002/ajpa.22769/abstract>

Additional information about John Day Fossil Beds National Monument is available online at:
www.nps.gov/joda

Teeth (left p4, m1, and m3) of *Ekgmowechashala zancanellai* (JODA 6322), the new primate species described in the study.



Ekgmowechashala reconstruction by Christopher Herndon



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