

FOR RELEASE
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Yukon fossils shed new light on scimitar cat history

Genetic evidence from Yukon fossils has helped uncover more about the history of scimitar cats over the last 50,000 years.

Using radiocarbon dating and DNA samples from fossil bones, researchers are shedding new light on the evolution and range of these ancient predators. The data also raises new questions about when and why the cats became extinct.

The recovered DNA indicates the scimitar cat populations in Eurasia and North America, once thought to be separate branches of the family tree, may have represented a single species that ranged across the Northern Hemisphere. They were previously believed to have disappeared from Europe around 200,000 years ago, but this new research suggests that they survived until as late as 28,000 years ago.

Two of the four fossil specimens that were used in this research were found in Yukon. One was discovered in the 1980s on a claim on Sixty Mile River while the other only a few years ago at a mine on Dominion Creek.

Quotes

"Yukon's rich fossil heritage is of international significance. Government of Yukon palaeontologists and archaeologists work with First Nations, miners, researchers and scientists from around the world to learn more about Yukon's ice age past. This study is another example of how collaboration can lead to fascinating discoveries."

–*Minister of Tourism and Culture Jeanie Dendys*

"We greatly appreciate the support we receive from miners and their contributions to Yukon palaeontology. The fossils they've uncovered are studied by scientists from all over the globe and have led to new understanding about the evolution and extinction of these fascinating beasts."

–*Yukon Palaeontologist Grant Zazula*

Quick facts

- The new findings are the subject of an article entitled *Evolutionary History of Saber-Toothed Cats Based on Ancient Mitogenomics* which was recently published in *Current Biology*, a journal published by Cell Press.
- Fossils of scimitar cats are among the rarest of any carnivore found in Beringia. Despite 100 years of collection, fewer than 20 bones have been discovered in Alaska and Yukon.
- Scimitar cats had long, serrated fangs. They are distinct from their saber-toothed cousin, the *Smilodon*, diverging from a common ancestor but very different genetically.
- The support of miners is invaluable to palaeontologists. The fossils collected at Yukon placer mines represent a wealth of knowledge, enabling us to learn about the evolution and extinction of ice age animals.

Learn more:

Current Biology article
About the scimitar cat

Contact:

Sunny Patch
Cabinet Communications
867-393-7478
sunny.patch@gov.yk.ca

Linnea Blum
Communications, Tourism and Culture
867-332-2625
linnea.blum@gov.yk.ca

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