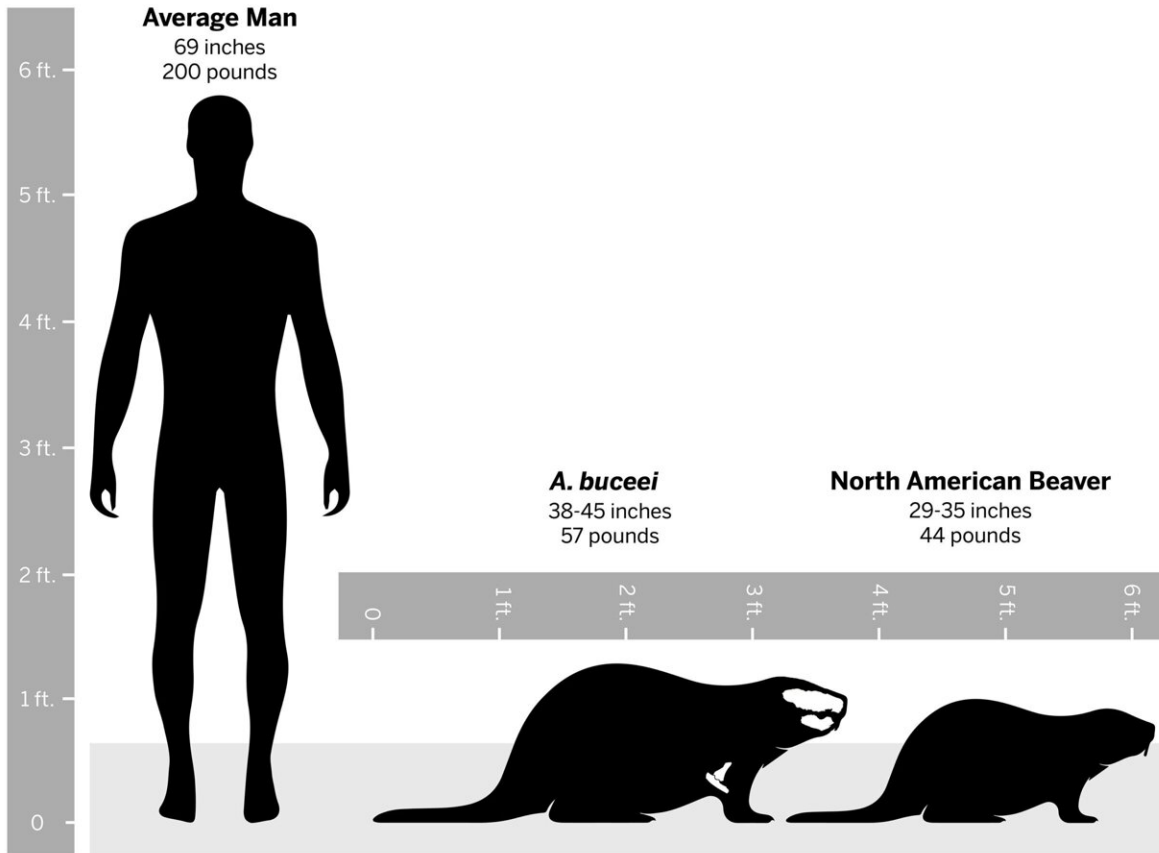


Beaver fossil named after Buc-ee's

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A graphic comparing the size of *Anchitheriomys buceei* with an average North American Beaver and an average man in the United States. Outlined in white are fossil bones in the UT collections, including a partial skull and jaw, and portions of the radius and ulna that make up the elbow. Credit: UT Jackson School of Geosciences/ National Center for Health Statistics/ USDA Forest Service.

A new species of ancient beaver that was rediscovered by researchers in The University of Texas at Austin's fossil collections has been named after Buc-ee's, a Texas-based chain of popular travel centers known for its cartoon beaver mascot.

The beaver is called *Anchitheriomys buceei*, or "A. buceei" for short.

Steve May, a research associate at the UT Jackson School of Geosciences, said that the beaver's Texas connection and a chance encounter with a Buc-ee's billboard are what inspired the name.

May is the lead author of the paper that describes *A. buceei*, along with another, much smaller, species of fossil beaver. Published in the journal *Palaeontologia Electronica*, the paper provides an overview of beaver occurrences along the Texas Gulf Coast from 15 million to 22 million years ago based on bones and archival records in the UT collections.

While driving down a highway in 2020, May spotted a Buc-ee's billboard that said "This is Beaver Country." The phrase brought to mind the Texas beaver fossils he had been studying at UT's Texas Vertebrate Paleontology Collections.

"I thought, 'Yeah, it is beaver country, and it has been for millions of years,'" May said.

A. buceei lived in Texas about 15 million years ago. To the casual observer, it probably wouldn't have looked much different from beavers living in Texas today, according to study co-author Matthew Brown, the director of the Jackson School's vertebrate paleontology collections. However, one key difference is size. *A. buceei* was bigger—about 30% larger than modern beavers—though still much smaller than the bear-size beavers that lived in North America during the last Ice Age.

The UT collections includes *A. buceei* fossils from six Texas sites. But most of what researchers know about the new fossil beaver comes from a unique partial skull from Burkeville, Texas. The fossil is a fusion of bone and brain cast that was created when sediment naturally seeped into the beaver's brain cavity eons ago, creating a rock replica of the brain as the specimen fossilized.

High-resolution X-ray images of the skull obtained at UT Austin's Computed Tomography Lab brought small anatomical details of the skull into clear view. These details helped May and Brown confirm that the skull belonged to a new species. But they weren't the first to suspect it.

The skull was originally collected by a team of Texas paleontologists in 1941. One of them, Curtis Hesse, a museum curator at Texas A&M University, said in notes that he intended to name it a new species. However, Hesse died in 1945 before he could complete his study and publish his findings. Eighty years later, May and Brown, with the help of new technology and a better understanding of the fossil record of beavers, picked up where Hesse left off.

"New discoveries in the field capture lots of attention, but equally as valuable are the discoveries made in existing museum collections," Brown said. "We know that these opportunities are littered throughout the drawers in these cabinets."

After hearing about the ancient beaver named after his business, the founder and CEO of Buc-ee's, Arch "Beaver" Aplin III, said that Buc-ee's has a longer history in Texas than he initially thought.

"Buc-ee's was founded in 1982, but we may need to rethink our beginnings," he said.

More information: Steven May et al, *Anchitheriomys buceei* (Rodentia, Castoridae) from the Miocene of Texas and a review of the Miocene beavers from the Texas Coastal Plain, USA, *Palaeontologia Electronica* (2023). [DOI: 10.26879/1236](https://doi.org/10.26879/1236)

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