

Stan The T. Rex Found! World's Most Expensive Fossil Finds Home In A New Museum

By Michael Greshko

Published March 23, 2022

• 14 min read

Since October 5, 2020, a dinosaur-size mystery has transfixed the world of paleontology: Who paid \$31.8 million for the famed *Tyrannosaurus rex* skeleton known as Stan, the most expensive fossil ever auctioned—and what did the buyer plan to do with it?

Today we finally have the answer. Stan will be a star attraction of a new natural history museum in Abu Dhabi, the capital of the United Arab Emirates.

Earlier this year, *National Geographic* followed Stan's tracks, using U.S. trade records to determine that a 5.6-ton shipment [worth \\$31,847,500](#)—Stan's [exact sale price](#)—was exported from New York to the U.A.E. in May 2021. Today Abu Dhabi's Department of Culture and Tourism confirmed that Stan will take up residence in the future Natural History Museum Abu Dhabi, a 377,000-square-foot museum under construction on [Saadiyat Island](#), a high-profile cultural district in the largest and wealthiest of seven sheikhdoms that make up the oil-rich Persian Gulf state.

Slated for completion in 2025, the Natural History Museum Abu Dhabi has ambitious plans to chronicle the history of life on Earth, with a focus on the Arabian Peninsula's flora and fauna, and the broader 13.8-billion-year story of the universe.

Abu Dhabi authorities also revealed the purchase of a fragment of the Murchison meteorite, a scientifically significant, carbon-rich meteorite that broke apart above Australia in 1969. For decades, the meteorite has provided researchers with unique glimpses into the chemistry of the infant solar system. It even contains seven-billion-year-old “presolar grains” that formed before our sun.

“Natural history has a new home here in Abu Dhabi, and we will tell the story of our universe through some of the most incredible specimens known to mankind,” Mohamed Khalifa al Mubarak, the chairman of Abu Dhabi’s Department of Culture and Tourism, said in a statement to *National Geographic*. “These are rare gifts from nature that we are proud to protect and share with the world.”

The journey of Stan the *T. rex*

The dramatic reveal of Stan’s new home is the latest chapter in the saga of one of the world’s best known *T. rex* skeletons. Dug out of private land in South Dakota in the early 1990s, the 67-million-year-old fossil spent more than two decades at the private Black Hills Institute of Geological Research in Hill City, South Dakota. Black Hills sells fossils, fossil replicas, and exhibits to museums and private collectors. ([Learn about what happened immediately after the impact that ended the dinosaurs’ reign.](#))

The institute hadn’t planned to sell the 39-foot-long *T. rex*: The fossil’s bones were displayed in the company’s museum, and were molded to make hundreds of *T. rex* replicas displayed around the world in museums and homes of [collectors such as actor Dwayne “The Rock” Johnson](#). But after a [legal dispute between brothers Pete and Neal Larson](#), two of the company’s largest shareholders, a judge ordered the fossil’s sale in 2018. Seventeen months ago, the *T. rex* sold at Christie’s New York for \$31.8 million, the most ever paid at auction for a

fossil of any creature.

In January 2022, online commenters noticed a skull that looked like Stan's in the background of an ESPN TV appearance by Johnson, but the actor confirmed that his was just a replica. "If I was the proud owner of the real STAN, I sure as hell wouldn't keep him in my office," Johnson wrote [on Instagram](#). "I'd keep him in a museum, so the world could enjoy, study and learn from him."

It was precisely that sentiment—that scholars and the public should have access to such an important relic—that has gnawed at paleontologists since Stan's jaw-dropping auction. The sale was legal, but some paleontologists worried the record-breaking price tag could make it harder for museums with small budgets to acquire specimens for research, and could even fuel the illegal fossil trade. Some scientists also fear that Stan's sale could further restrict research on private land in the U.S., if more landowners decide to sell fossils on the open market.

For years, Stan had been a key reference, providing crucial data in studies of [Tyrannosaurus rex's bone-crushing bite force](#) and [how T. rex's bones healed after severe injuries](#). Now that the dinosaur's location and new caretakers have been revealed, scientists are hopeful they will once again have access to the fossil, and that the iconic *T. rex* will introduce more people to the wonders of the prehistoric world.

"Paleontology is powerful. In it we see ourselves as part of a glorious continuum of life on Earth," Lindsay Zanno, a paleontologist at the North Carolina Museum of Natural Sciences in Raleigh wrote in an email. "If Stan can inspire a new generation to protect the past and lean into conserving our planet's biodiversity in the future, that's what I call a happy ending."

Stewards of natural history

The Middle East has few natural history museums, making any new collection a boon for education and public outreach. The Natural History Museum Abu Dhabi will join the ranks of institutions including Bethlehem University's [Palestine Museum of Natural History](#), Israel's [Steinhardt Museum of Natural History](#) in Tel Aviv, the [Egyptian Geological Museum](#) in Cairo, and the Sharjah Natural History and Botanical Museum, located in a neighboring U.A.E. sheikhdom.

Natural history museums aren't just public showrooms; at their best, they are also engines of conservation and discovery. Fossils, specimens, and artifacts in their collections—which often vastly outnumber items on display—create a record of biodiversity and human history, securing irreplaceable data that can be referenced for decades, even centuries.

Dedicated paleontology facilities are also rare across the Middle East and North Africa, though researchers there have worked hard to preserve the region's fossil record. In Morocco a team including National Geographic Explorer Nizar Ibrahim has spent years amassing a fossil collection at Casablanca's Hassan II University, with the eventual hope of seeding a Moroccan natural history museum. In 2010 Egypt's Mansoura University [opened a vertebrate paleontology center](#)—the region's first—led by paleontologist Hesham Sallam.

The Natural History Museum Abu Dhabi has lofty scientific goals. In a statement, the museum said that it would build and staff a scientific research facility that focuses on zoology, paleontology, marine biology, earth sciences, and molecular research, including the study of ancient DNA.

David Evans, a paleontologist at the Royal Ontario Museum in Toronto, says that if Stan is a permanent fixture in the museum's collection—and not on temporary loan from a private collector—then the fossil could help “grow scientific interest

in dinosaurs in a part of the world that has big potential for new fossil discoveries," he wrote in an email.

As Abu Dhabi's new museum positions itself as a repository for important specimens, its leaders also assume an ethical responsibility to consider the effects that expensive purchases could have on the rest of the marketplace, says Erin Thompson, an expert on the antiquities trade at the City College of New York's John Jay College of Criminal Justice. Some wealthy museums in the U.S. and elsewhere have been criticized for inadvertently incentivizing fraud or the trafficking of stolen objects as they paid colossal amounts to build their collections.

"There is a well-known problem of looting and smuggling of fossils," Thompson says, adding that if a museum indicates it will spend vast sums of money to fill out its collection, it risks encouraging looting or forgeries.

For Pete Larson, the Black Hills Institute's president, the announcement of Stan's new home brings one overriding feeling: relief.

"It's kind of like Indiana Jones's [famous line]: 'This belongs in a museum!'" he says. "We were able to save the data of Stan by doing 3D scans [and] doing all these multiple casts of Stan's skull and skeleton ... Now the original also is going to be available to research again, which is freaking awesome."

Dinos abroad

The new museum in Abu Dhabi will be built close to one of the Arabian Peninsula's richest fossil sites. Known as the Baynunah Formation, these rocks from the late Miocene period, roughly eight million to six million years ago, preserve [what was once an Arabian Serengeti](#): an ecosystem rife with the ancient cousins of modern hippos and giraffes, which lived alongside everything from turtles to catfish in a perennial

river system.

But the U.A.E.'s rock deposits aren't the right age and type to preserve the fossil world's biggest celebrities: dinosaurs. So the new museum had to source them from abroad.

North American dinosaurs—especially *Tyrannosaurus* and *Triceratops*—are the most famous on Earth, and exhibitors around the world regularly buy U.S. dinosaur fossils for display and study. Earlier this month, Australia's Melbourne Museum unveiled its latest fossil, "Horridus," a largely complete *Triceratops* that it bought from [U.S. commercial paleontologist Craig Pfister](#).

For years, the U.A.E. has hosted temporary displays of U.S. dinosaur fossils. In 2008 the founder of Abu Dhabi's Etihad Modern Art Gallery organized [the display of a 140-million-year-old, long-necked *Apatosaurus* skeleton](#) at the emirate's main airport. In 2014 the same gallery [displayed a juvenile *T. rex* skeleton](#) from South Dakota.

"I kept hearing people and especially children say that there is no such thing as a dinosaur," Khalid Siddiq al Mutawaa, the gallery's founder, said in [a 2009 interview with the Emirati newspaper *The National*](#). "That really bothered me, and so I brought over a dinosaur for our people to see ... to learn more about that part of our global history."

Beyond their educational value, dinosaurs also create buzz and attract visitors, a fact not lost on Emirati business and government leaders, who have worked hard to entice foreign tourists with luxury shopping districts, art galleries, cultural exhibits, and other attractions.

In March 2014 the Emirati real estate developer Emaar announced that it had bought a remarkably complete *Diplodocus* skeleton found in a private Wyoming quarry. That dinosaur—nicknamed "Dubai Dino"—is currently on display next to a Cheesecake Factory [in the Dubai Mall](#), which also boasts

an aquarium and an ice-skating rink.

An island attraction for the ages

The new museum comes as Abu Dhabi and its sister emirates seek to diversify their economy beyond oil. In recent years, the U.A.E.—the Persian Gulf’s second-largest economy—[has overhauled its industrial strategy](#) and created a space agency to help grow its technology industries.

Tourism and the pursuit of diplomatic soft power also feature heavily in Abu Dhabi’s plan. Since 2007, the emirate has poured billions of dollars into the western end of Saadiyat Island to establish a major cultural district and tourism destination.

Some of Saadiyat’s projects aim to tell the story of U.A.E. history, including the in-progress Zayed National Museum, named for the Emirati founding father Sheikh Zayed bin Sultan al Nahyan. Other projects have struck partnerships with leading Western institutions. In 2014 New York University [opened an Abu Dhabi campus in the Saadiyat district](#); in 2017 the Louvre Abu Dhabi opened nearby. The Guggenheim Abu Dhabi is slated to open in 2025.

Other countries in the region are doing the same. Qatar built a vast educational complex called Education City, featuring branches of famous U.S. universities outside Doha, the country’s capital.

Neha Vora, an anthropologist at Pennsylvania’s Lafayette College who studies higher education in the Persian Gulf, says that Saadiyat and similar projects represent a transformational educational investment for the region.

Many major scientific and educational institutions are in Western countries where international visitors can “have trouble even getting a visit visa to come in and see things,”

Vora says. “I feel like it’s incredibly necessary to have places in the global south that have these kinds of universal institutions.”

Despite its grand ambition, the cultural tourism project being built on Saadiyat Island has faced obstacles. The sheer scope has led to years of construction delays, and international observers have questioned labor conditions for migrant workers, which authorities say they have tried to address through labor law reforms. Scholars have also expressed concern over political repression in the U.A.E., with some international academics barred from entering the country and some Emirati human rights activists imprisoned [and allegedly mistreated](#).

Once the Natural History Museum Abu Dhabi opens, its backers say that it will provide unique educational and scientific opportunities for the region and world. And Stan will likely be a popular ambassador for Earth’s remarkable evolutionary history.

“It should be on public display so that every person in the universe could go and see it,” says Larson, whose company dug up the fossil 30 years ago. “It should also be open for research, so researchers can look at the original material, both what’s on exhibit and what might not be on exhibit.”

It’s Larson’s hope—and expectation—that the museum will follow through. “This is just really wonderful, wonderful news,” he says.

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