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**ARTICLE**

## Archaeologist: Dr. Jeffrey Rose

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**BY ALYSSA SAMSON**

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Dr. Jeffrey Rose is an [archaeologist](#) and 2012 [Emerging Explorer](#). He travels throughout the Arabian Peninsula in search of evidence about early humans and their migratory paths outside of Africa.

### EARLY WORK

Most parents love it when their child is interested in reading encyclopedias at a young age. It shows they are eager and curious about the world around them. On the other hand, Jeffrey’s parents were not too excited when he decided to cut out all of the [“Seven Wonders of the Ancient World”](#) pictures from their encyclopedias and hang them on his wall.

“[The pictures] were always [Near East](#) too—the [Pyramids](#), the [Hanging Gardens of Babylon](#), that kind of thing, but then I saw [Indiana Jones](#) and I was locked in from there,” he says.

Jeffrey’s fascination with archaeology was clear even at the age of three, when his mother brought him home a [King Tut](#) coloring book from an exhibit. He became obsessed with a different world. “From day one, I was hooked,” he says.

“I was supposed to be a lawyer, a doctor, or something respectable. My sister is . . . [E]veryone else is doing something respectable. I was supposed to be something like a businessman, but I’m the freak,” he says.

### MOST EXCITING PART OF YOUR WORK

The most exciting thing for Jeffrey is getting to do [field work](#). “We don’t dig sites, we explore, so we are surveying sites and mapping for new sites. It’s an area that no one has been before, everything is new and everything is a discovery.”

“Every morning I just sit there with Google Earth, having my coffee, and I’m like ‘oh let’s go here today, let’s try this.’ To me that’s just one of the most interesting things, what are we going to find today?”

### MOST DEMANDING PART OF YOUR WORK

“There are a lot of times where you don’t find anything. There are days and days and weeks and weeks when you don’t find anything. **Morale** starts getting really low and there is this **tangible** sense of **despair**, which is really depressing. That’s a challenge, just getting through those really bad days.

“You have got to fail and have those days where you’re not finding anything or you’re finding the wrong stuff,” Jeffrey says. “The only way you can succeed is getting up the next day after failing and keeping at it.”

## HOW DO YOU DEFINE GEOGRAPHY?

“To me, it’s anything **spatial**, anything to do with the **distribution** of things across the Earth,” he says. “The **geography** I deal with is seeing the **landscape** as it was. It’s almost four-dimensional. I’m looking at a **sand dune**, but it wasn’t a sand dune 400,000 years ago, it was a lake.

“It’s reading the landscape and getting the geography of the ancient world.”

## GEO-CONNECTION

When Jeffrey was a **graduate student**, a professor told him, “the most gratified scientists are the ones that prove themselves wrong.”

“If you’re right all the time, you’re not learning anything,” Jeffrey says.

Jeffrey proved himself wrong when he and his team of archaeologists discovered artifacts that have changed the course of history . . . literally.

For years, scientists thought that when humans left Africa, the route they took was along the **coastlines** of Ethiopia, Yemen, and Oman. Most of Jeffrey’s career has been searching for archaeological artifacts to prove that this is the migratory path that humans chose 60,000 years ago.

But after a tiresome amount of searching the coastlines for evidence in 2010, Jeffrey was coming up short.

“Now, I have to go back home and I have nothing to show for it. I thought we were never going to get any more funding,” he says.

Finally, Jeffrey figured he needed to be more flexible and search in different locations, further from the coast.

On the second-to-last day of their exploration, Jeffrey and his team came across the **artifacts** they were searching for. The materials showed signs of being made by the “**Nubian Complex**,” **hunter-gatherers** from Africa’s Nile Valley.

“Hunter-gatherers are very mobile,” he says. “They didn’t just sit when they got there. In a lifetime they might have been crossing the Red Sea multiple times. That’s the thing we need to be aware of, that it’s very complicated.”

By using **technology** to date the artifacts, Jeffrey learned that some of the tools were more than 100,000 years old —indicating that the Nubian Complex not only left Africa much earlier than previously thought, but took a different route as well. As Jeffrey told National Geographic, “The Nile Valley and Oman’s Dhofar region are both **limestone plateaus**, heavily affected by **perennial** rivers. It’s logical that people moved from an environment they knew to another one that mirrored it. At the time when I’m suggesting they expanded out of Africa, southern Arabia was **fertile grassland**. The Indian Ocean monsoon system activated rivers, and as sand dunes trapped water, it became a land of a thousand lakes. It was a paradise for early humans, whose livelihood depended upon hunting on the open **savanna**.”

“We had never thought about that [scenario](#). In [retrospect](#), it was the most obvious scenario and I think how could I be so stupid for not considering that,” he says.

After his state of excitement wore off, Jeffrey came back to the U.S., eager to reveal his discoveries.

“The saddest and most depressing part was we went back and no one believed us. It took a year and a half to get the initial publication out,” he says.

## SO, YOU WANT TO BE AN . . . ARCHAEOLOGIST

“Over the summers, go on a dig. That’s what I did and that’s what opened the doors for me. There are a hundred excavations out there that will take volunteers. Just do it, just go out and dig. Find your passion. Find that itch that you really have to scratch. What is the burning question that you really want to know the answer to?”

## GET INVOLVED

Jeffrey encourages any age to visit a [dig site](#). “I have had volunteers from 90 years old to 12 years old. Anyone can do it. It’s wonderfully rewarding. It never gets jaded. When you are picking something up and you’re the first person to touch that artifact since the person who dropped it, that never gets old,” he says.

## VOCABULARY

Term	Part of Speech	Definition
<b>ancient</b>	<i>adjective</i>	very old.
<b>archaeologist</b>	<i>noun</i>	person who studies artifacts and lifestyles of ancient cultures.
<b>artifact</b>	<i>noun</i>	material remains of a culture, such as tools, clothing, or food.
<b>coastline</b>	<i>noun</i>	outer boundary of a shore.
<b>despair</b>	<i>noun, verb</i>	hopelessness.
<b>dig site</b>	<i>noun</i>	place where paleontologists, archaeologists, or other scientists are digging into the Earth to find artifacts or fossils. Also called an excavation.
<b>distribution</b>	<i>noun</i>	the way something is spread out over an area.
<b>Emerging Explorer</b>	<i>noun</i>	an adventurer, scientist, innovator, or storyteller recognized by National Geographic for their visionary work while still early in their careers.
<b>fertile</b>	<i>adjective</i>	able to produce crops or sustain agriculture.
<b>field work</b>	<i>noun</i>	scientific studies done outside of a lab, classroom, or office.
<b>geography</b>	<i>noun</i>	study of places and the relationships between people and their environments.
<b>graduate student</b>	<i>noun</i>	person who pursues a college or university degree program beyond the basic bachelor's degree.
<b>grassland</b>	<i>noun</i>	ecosystem with large, flat areas of grasses.
<b>Hanging Gardens of Babylon</b>	<i>noun</i>	(605-562 BCE, possibly legendary) enormous rooftop garden complex built by the Chaldean civilization in what is today Iraq.

<b>hunter-gatherer</b>	<i>noun</i>	person who gets food by using a combination of hunting, fishing, and foraging.
<b>Indiana Jones</b>	<i>noun</i>	series of movies (named after the main character).
<b>jaded</b>	<i>adjective</i>	exhausted, bored, or weary.
<b>King Tut</b>	<i>noun</i>	(1341-1323 BCE) nickname of Egyptian pharaoh Tutankhamun.
<b>landscape</b>	<i>noun</i>	the geographic features of a region.
<b>limestone</b>	<i>noun</i>	type of sedimentary rock mostly made of calcium carbonate from shells and skeletons of marine organisms.
<b>monsoon</b>	<i>noun</i>	seasonal change in the direction of the prevailing winds of a region. Monsoon usually refers to the winds of the Indian Ocean and South Asia, which often bring heavy rains.
<b>morale</b>	<i>noun</i>	emotional or psychological condition of a person or group of people.
<b>Near East</b>	<i>noun</i>	imprecise term for countries in southwestern Asia, sometimes including Egypt.
<b>Nubian Complex</b>	<i>noun</i>	(128,000-74,000 years ago) nomadic hunter-gatherers who flourished in Africa's Nile Valley.
<b>perennial</b>	<i>adjective</i>	continual, perpetual.
<b>plateau</b>	<i>noun</i>	large region that is higher than the surrounding area and relatively flat.
<b>Pyramids</b>	<i>plural noun</i>	three large pyramids outside Giza, Egypt: the Pyramid of Khufu (2560 BCE), the Pyramid of Khafre (2532 BCE) and the Pyramid of Menkaure (2515 BCE). Also called the Pyramids of Giza.
<b>retrospect</b>	<i>noun</i>	consideration of past events.
<b>sand dune</b>	<i>noun</i>	mound of sand created by the wind.
<b>savanna</b>	<i>noun</i>	type of tropical grassland with scattered trees.
<b>scenario</b>	<i>noun</i>	predicted sequence of events.
<b>Seven Wonders of the Ancient World</b>	<i>noun</i>	unofficial list of remarkable constructions made by ancient civilizations of the eastern Mediterranean and Near East: Pyramid of Giza (Egypt), Hanging Gardens of Babylon (Iraq), Temple of Artemis at Ephesus (Turkey), Statue of Zeus at Olympia (Greece), Mausoleum of Halicarnassus (Turkey), Colossus of Rhodes (Greece), Lighthouse of Alexandria (Egypt).
<b>spatial</b>	<i>adjective</i>	having to do with location and placement.
<b>tangible</b>	<i>adjective</i>	able to be touched or felt.
<b>technology</b>	<i>noun</i>	the science of using tools and complex machines to make human life easier or more profitable.

## For Further Exploration

### Articles & Profiles

- Archaeology News Network: Stone tools point to early human migration into Arabia

### Audio & Video

- BBC: Incredible Human Journey, Episode 1, Arabia Sequence



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