

THE HISTORY OF NATURAL HISTORY

What is natural history?

Natural history is the study of nature, past and present, to understand the relationships between organisms and their environments over time. A person who focuses on natural history is called a natural historian or a naturalist. Naturalists observe plants, animals, landforms, rocks, minerals, etc. in the natural world; collect and preserve specimens; and classify specimens, connecting patterns to bigger scientific questions, to describe and explain the diversity of nature.



From left to right: Dr. Jessica Ware, entomologist; Dr. Brandon Kilbourne, mammalogist; Dr. Rae Wynn-Grant, ecologist; Cameron Muskelly, paleontologist.

What role do natural history museums play in scientific discoveries?

Natural history museums began as collections of objects that allowed viewers to observe plants, animals, mineral specimens, rock samples, and other specimens from distant places they could not visit themselves. Over time, these collections evolved into organized displays of preserved specimens and artifacts from expeditions. Natural history museums today are buildings that house plants, animals, fossils, and rocks, along with the data associated with them. The role of these museums is not only to educate the public about the history of Earth and the diversity of life over time, but also to provide scientists with access to the collections for investigating research questions in biology, ecology, geology, climate science, genetics, and other fields.



More than 3,000 specimens and artifacts are displayed in the Louis V. Gerstner, Jr. Collections Core at the American Museum of Natural History. A.Keding/© AMNH

Many people do not know that there is more to museums than the objects on display. They do not know about museums' collections and the scientific research they support. Natural history museums can have large collections of specimens—including very rare ones—from different time periods and all over the world. Today, these collections continue to grow through ongoing scientific expeditions. Scientists can use these important resources to make discoveries about a species, its environment, or Earth and solar system history, without having to leave the museum. Scientists have discovered many unknown species in museum collections and have used the collections to uncover information about rare species that are difficult to find in the wild. Natural history museums are centers for both public education and scientific research. They truly are libraries of life, Earth, and our solar system.

Who has contributed to the field of natural history? What have been the challenges?

Historically, natural history museums have reflected or even promoted racist beliefs and functioned as spaces for storing and displaying cultural objects and specimens collected during colonial expeditions around the world. These displays often ostracized other cultures, presenting them as “the other.” Colonial scientific expeditions go hand-in-hand with the persecution of native peoples, slavery, and massacres.

Colonialist practices were common in the past and caused challenges for Black and Brown naturalists, but currently, the evidence of racism and colonialism is not always obvious to museum visitors. The work that went into the collection and preservation of specimens during expeditions was often performed by non-White people. However, their work frequently goes unacknowledged in public museum displays and even collection records, where often only the White explorers are credited.



Botanist Graman Quassi was sold into slavery and sent to a Dutch colony in South America. The background in this illustration shows a colonist or slave-holder directing enslaved people to capture a snake.

Despite their erasure, Black and other non-White people have made considerable contributions to natural history and museums. Some African cultures, as a result of living on the land for so long, preserved immense knowledge of the animals and plants surrounding them. Expeditionists on the land often turned to the locals to learn about and find wildlife. And enslaved Africans were often used to capture organisms that explorers wanted to bring back. Some enslaved people were taught skills like specimen preservation so that they could be used as assistants on expedition trips.

We have come a long way over the years. Black individuals now hold responsible positions in museums as scientists, curators, collection managers, and more. Instead of being relegated to indirect roles, they participate directly in natural history research and museum work. Nevertheless, despite these considerable accomplishments, a majority of Black individuals in the field still experience challenges due to prejudice and racism.