EDUCATION WORKSHOP

Secrets of The Whales with Underwater Photographer, Brian Skerry

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Grades 5th - College

with

BRIAN SKERRY
Underwater Photographer

In Local Partnership with South Carolina Aquarium

NATIONAL GEOGRAPHIC LIVE

SECRETS OF THE WHALES

BACKGROUND PHOTO BY BRIAN SKERRY
HEADSHOT PHOTO BY STEVE DE NEEF
Secrets of the Whales

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Celebrated National Geographic photographer Brian Skerry has spent nearly four decades exploring and documenting Earth's oceans. For his latest project, he turns his lens to one of the world's most beloved animals to illuminate startling new insights into their lives and culture. Discover the extraordinary communication skills and intricate social structures among four different species of whales—from the international cuisines of orcas to families of beluga whales playing at their “summer resort”—and learn what these majestic creatures can teach us about ourselves and our planet.¹

ABOUT BRIAN SKERRY

Brian Skerry is a photojournalist specializing in marine wildlife and underwater environments. Since 1998, he has been a contributing photographer for National Geographic magazine, covering a wide range of subjects and stories. He was named a National Geographic Society Photography Fellow in 2014 and a National Geographic Society Storytelling Fellow in 2017. In 2017, he was also awarded the title of Rolex National Geographic Explorer of the Year.

WATCH

Secrets of the Whales Trailer

FOSSILS OF WHALES
What animal do you think is the nearest relative to the whale? Did you say a shark or alligator? You might be surprised to hear that the hippopotamus is actually the closest relative to whales. Whales evolved from four-legged land mammals! Over time, paleontologists (scientists who study fossils) have been studying whale fossils to see how they have evolved over millions of years. It is believed that the Sinonyx is one of the oldest ancestors of whales. These wolf-sized hyenas lived over 56 million years ago and have the dental and facial characteristics like living dolphins and whales.

LAND WHALE FOSSIL FOUND IN EGYPT

LAND WHALE FOSSIL FOUND IN PERU

WATCH

When Whales Walked

Secrets of the Whales
Brian Skerry
This provocative book of photography offers bold new insight into the lives of the world’s largest mammals, along with their complex societies. In these pages, we learn that whales share an amazing ability to learn and adapt to opportunities, from specialized feeding strategies to parenting techniques. There is also evidence of deeper, cultural elements of whale identity, from unique dialects to matrilineal societies to organized social customs like singing contests. Featuring the arresting underwater images of Brian Skerry, who has explored and documented oceans for over four decades, this book will document these alluring creatures in all their glory—and demonstrate how these majestic creatures can teach us about ourselves and our planet. 

The Walking Whales
J.G.M. Hans Thewissen
Hans Thewissen, a leading researcher in the field of whale paleontology and anatomy, gives a sweeping first-person account of the discoveries that brought to light the early fossil record of whales. As evidenced in the record, whales evolved from herbivorous forest-dwelling ancestors that resembled tiny deer to carnivorous monsters stalking lakes and rivers and to serpent-like denizens of the coast.

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SECRETS OF THE WHALES

ADAPTATION

So how did whales go from a four-legged land animal to a gigantic marine mammal? According to the National Geographic Society, “In evolutionary theory, adaptation is the biological mechanism by which organisms adjust to new environments or to changes in their current environment.”5 Throughout the course of time, whales have had to evolve and adapt to different environments in order to survive. “The idea of natural selection is that traits that can be passed down allow organisms to adapt to the environment better than other organisms of the same species.”6 For example, to help them adapt to the ocean, whales developed echolocation, thick layers of blubber, modified lungs, better hearing, and larger arteries, among other things, to ensure their survival and prosperity. Orcas have evolved into one of the fastest mammals alive today and are also able to dive for longer than ten minutes at a time. They have adapted the ability to slow down their heartbeat when diving. They also have the ability to ration their oxygen supply towards their heart, lungs, and brain that requires more oxygen.7

CLASSROOM WORKSHOP

Opposable Thumb Adaptations  Grades: 5th-12th

In this workshop, students will learn about how animals have had to adapt for survival, humans being one of the mammals to adapt an opposable thumb. Partners will record their time in performing everyday tasks and will compare their times in performing the same tasks without the use of their thumbs.

CLICK HERE FOR WORKSHOP

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6 National Geographic Society, “Adaptation.”
BIBLIOGRAPHY


EDUCATIONAL PARTNERS

The Gaillard Center would like to thank the following educational partners in their ongoing support of our Education & Community program. This program is also supported, in part, by a grant from a private foundation.

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