



GREAT LAKES UNTAMED



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3 x 50 min.
4K, 5.1 and Stereo



A landmark 3x1 hour series showcasing, for the first time ever, the natural history of Earth's largest freshwater ecosystem: the five Great Lakes of North America.

WHY NOW?

In a world short of freshwater, The Great Lakes are one of our planet's most important ecosystems providing one fifth of the world's fresh surface water and drinking water for over 40 million people.

EPISODE 1: SOURCE TO SEA

We start by exploring the vital role the Great Lakes watershed plays as one of the world's largest freshwater ecosystems.

Following the flow of water as it travels like one big river, the Great Lakes cover over 4,000 kilometers of coastline, more than anywhere else in North America and are home to more than 3,500 plant and animal species. Each of the five lakes has a unique nature and inter-relationship with the wildlife that depends on its ecosystem for survival.

Lake Superior is the largest and most northern of the Great Lakes. It is here that we witness the intricate correlation between beavers and wolves who control the purity and flow of water into the lake. This in turn creates a paradise for the loons that depend upon its clear waters to hunt fish.

Lake Michigan is next. More populated and a major trade route, Lake Michigan is home to the largest freshwater sand dunes in the world and one of North America's most endangered species of birds – the piping plover. It's also threatened by one of the continent's most dangerous invasive species. Silver carp have been introduced into the Michigan River and are now only a few miles from Lake Michigan. In a race against time scientists find innovative ways to prevent them from entering this ecosystem.

When we reach Lake Huron, we explore one of the largest concentrations of shipwrecks in the world. Each vessel is like a time capsule that reveals the tragic tales of ships sunk and lives lost.

Lake Erie, the shallowest and most southerly Lake, is a bi-annual stopping point for millions of migrating birds and home to the endangered Blue Racer snake, a large, non-venomous reptile that grows to 1.5 meters and is only known to inhabit the shores of Pelee Island in Western Lake Erie. Moving down the shoreline we encounter Niagara Falls, the most

powerful waterfall in the world with over 168,000 cubic metres flowing through the falls every minute.

Lake Ontario is home to the largest population of cormorants in the world. Close to extinction, this success story is an inspiring illustration of how human intervention, protected greenspaces and improved management can help the lakes recover and thrive.

Draining into the lake is the Ottawa River, often referred to as the 6th of the Great Lakes because of the enormous quantity of clean water flowing through it. Far below, a vast, newly discovered giant underwater cave system is discovered that harbours millions of native mussels that filter the water and provide us with an important look at the healthy ecosystem that once existed throughout the Great Lakes waterways.

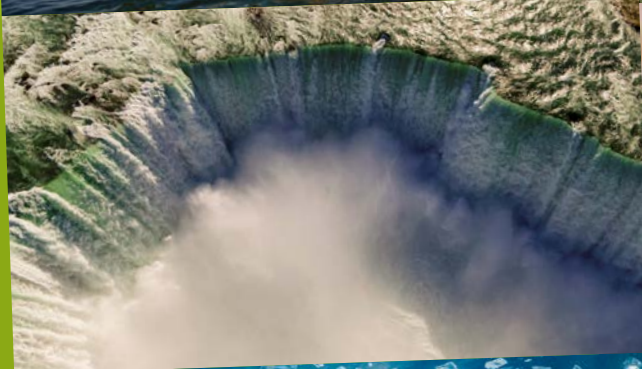
It will take 200 years for a drop of water to flow from the source of Lake Superior to the mouth of the St. Lawrence River, the largest estuary on Earth and a rich feeding ground for thousands of whales and over one million seals.

EPISODE 2: THE BIG FREEZE

This episode explores the Great Lakes in winter when animals must deal with the most extreme temperatures. On a single breath under a foot of ice, two free divers explore the largest body of fresh water on earth. Where they swim was once a colossal ice sheet grinding into the bedrock of North America. When it melted, five giant lakes were left behind. But each year the ice returns, challenging all life here with the wild elements of winter in North America's Great Lakes.

An extreme range of weather conditions can be found here caused by a powerful jet stream that, when it dips, creates huge ice storms, the world's largest freshwater waves, and Lake Effect snow.

All life on the Great Lakes has had to adapt to these powerful and dangerous forces. Otters act as free-divers and frolic beneath the ice surface of Lake Huron while giant freshwater cod sing and mate in the frigid waters. Ravens outwit bald eagles and wolves when hunting a deer that's been caught in a frozen lake. Snow provides the needed



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insulation to keep new-born baby black bears warm and a Canadian lynx reveals how it is perfectly formed to adapt to deep snow with its huge paws. Amazing night footage reveals flying squirrels with ultra-violet fur that enables them to communicate and avoid predators.

But some creatures are greatly suffering due to the shorter and warmer winters. A rare breed of wolverine is threatened by the warming climate and Great Lakes moose are now declining in large numbers.

Ice and snow created North America's Great Lakes and over time the species, who depend on the lakes, have evolved to survive the harsh elements. But in this warming world, the future of life in the Great Lakes will be shaped by one species – us.

EPISODE 3: MYSTERIES, MARVELS & MONSTERS

In this final episode, we explore the Great Lakes in Spring where animals experience the most extreme and unpredictable temperature changes on Earth – from summer highs of 40 degrees Celsius to winter lows of minus 40 degrees Celsius.

This transformation creates 'mysteries, marvels and monsters' of evolution and an explosion of life uniquely adapted to change. Glowing rocks show us how these giant lakes were formed by glaciers. Stories of ancient sea monsters reveal the world's largest mass spawning of Lake Sturgeon near Lake Michigan. And never-before-seen footage shows wolves fresh-water fishing for white suckerfish to feed their pups.

Massasauga Rattlesnakes are on the run in a desperate swim between Lake Huron's 30,000 islands to give birth to live young. With food scarce, a mother moose dives deep to the bottom of the lake to feed her calf.

It's a land of wonder with weird and unique animal behaviours. A thirty-year-old female salamander performs an epic migration across snow near Lake Huron and is the world's only 'photosynthetic vertebrate'. In the headwaters of Lake Erie, colourful reidside dace are the only fish on Earth to have evolved to catch insects in the air. Beneath the surface weird parasitic mussels imitate minnows to lure their prey and biologists use innovative new science to battle invasive sea lamprey.

The adaptation of wildlife to successfully live and thrive in the Great Lakes watershed gives us hope about the future of the world's greatest and most important freshwater ecosystem.

An Oak Island Films Canada / Merit Motion Pictures / Terra Mater Studios co-production in association with TVO, Smithsonian Networks, Doclights / NDR Naturfilm, ARTE France and Two Wise Monkeys Entertainment

