

SK Films

EXPLORE AT HOME KIT

Keep the whole family engaged and learning with this exciting array of educational materials and activities developed by world-leading educators.

Explore amazing animal adaptations like camouflage and mimicry in the Amazon rainforest, descend into molten lava pools, fly with millions of monarch butterflies along their epic migrations, discover the astounding wilderness in your own backyard and much more!

Stream full episodes of the award-winning eco-adventure documentary series, *The Water Brothers*. Investigate the challenges facing our water resources - ocean and fresh water - and the clever solutions leading experts and scientists are coming up with.

All materials align with Next Generation Science Standards.



hhmi | Tangled Bank Studios

skfilms.ca

For more information: info@skfilms.ca



SK Films

EXPLORE AT HOME KIT

The materials in this kit were created as part of the extensive and stand-alone educational programs that accompany each of these award-winning IMAX®/Giant

Screen films:

- **Backyard Wilderness**
 - Amazon Adventure
 - Flight of the Butterflies
- **Volcanoes: The Fires of Creation**
 - The Water Brothers

These are the same tools that teachers and school groups use to deepen their understanding of these subjects. You don't need to have seen the films to have fun learning with these interactive activities.

SK Films hopes that, when the theaters in your local museums and science centers open again to the public, you will have an opportunity to watch the full films.

Please visit our website for theater listings and follow us on Facebook for updates about showings.

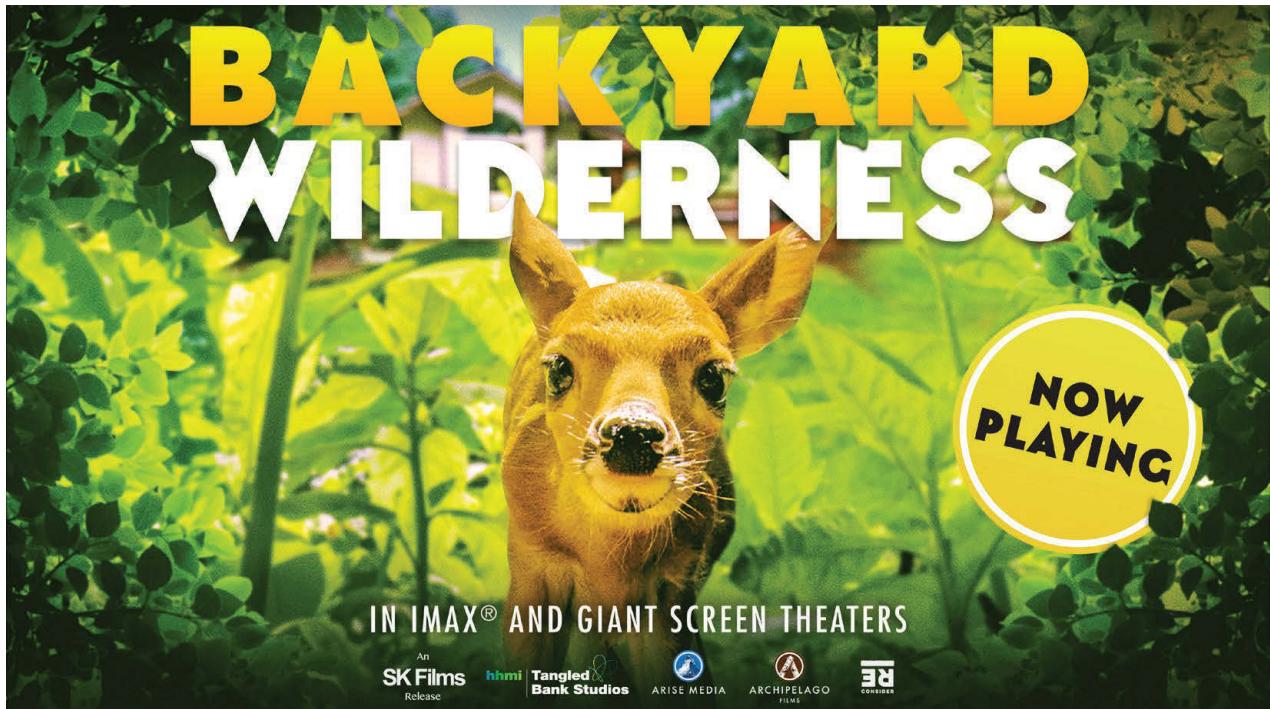
BACKYARD WILDERNESS



ABOUT THE FILM

Backyard Wilderness will surprise and entertain viewers with the unexpected wonders of nature that are right under our noses—in our own backyards. Spanning a seasonal year around a suburban home, the film displays a stunning array of unique wildlife images and behavior—all captured by cameras mounted inside dens and nests, and moving along the forest floor and pond bottom, to reveal its inhabitants in rare and breathtaking intimacy.

We follow Katie, a young girl, and her modern family living next to the woods who are blind to the real-life spectacle around them, absorbed by an array of electronic devices in their busy lives. Katie gradually discovers the intricate secrets that nature has hidden so close to her front door and we experience the joy she finds in her interactions with this new world. The film reminds us that Wi-Fi is not the only connection that matters and that sometimes in ordinary places, you can uncover extraordinary things that could transform you forever—you just need to step outside.



[Watch the Trailer](#)

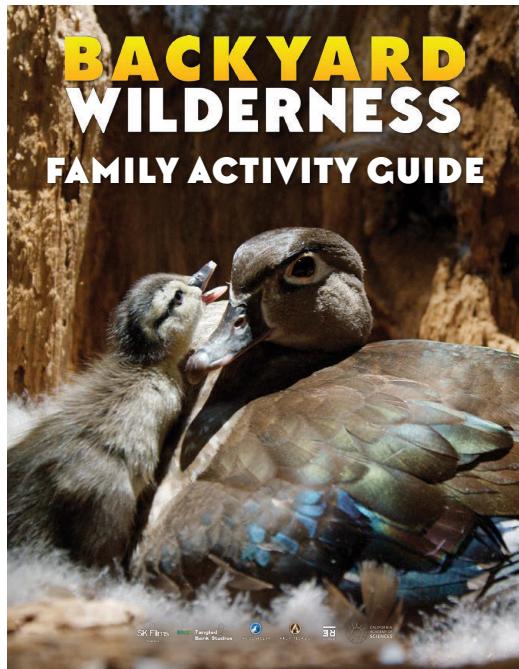
BACKYARD

WILDERNESS



Check out all the educational materials on our website:
backyardwildernessfilm.com/education

ACTIVITY GUIDES

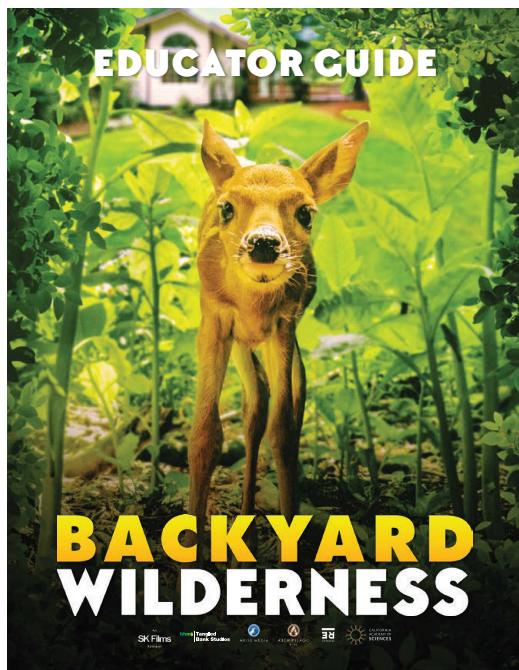


FAMILY ACTIVITY GUIDE (GUIA DE ACTIVIDADES FAMILIARES)

For families with elementary aged children, activities target science practices such as observation skills and problem-solving.

[Download in English](#)

[Descargar en español](#)



EDUCATOR GUIDE (GUIA PARA EL DOCENTE)

For grades 3-8 with guiding questions for pre and post film viewing, classroom and outdoor activities, citizen scientist resources, all tied to the next generation science standards.

[Download in English](#)

[Descargar en español](#)

BACKYARD WILDERNESS



SMARTPHONE SCIENCE APPS



SEEK APP FOR KIDS

Use the power of image recognition technology to identify the plants and animals all around you.

Get outside and point the Seek Camera at living things. Identify wildlife and plants you see and take pictures to earn badges. Learn fun facts about the organisms all around you.

[Download on Google Play and the App Store](#)



iNATURALIST APP

iNaturalist builds nature knowledge by working with other naturalists and helping others.

Lend a hand as a citizen scientist and help experts and resource managers understand when and where plants and animals live.

[Download on Google Play and the App Store](#)

BACKYARD

WILDERNESS



ANIMAL FACT SHEETS

BACKYARD WILDERNESS

ALL ABOUT COYOTES

At the top of the backyard food chain, sits the coyote. Often referred to as the American jackal, the coyote is a smaller cousin to the wolf. They even share some of the same DNA with the dogs we keep as pets and, like our canine friends, they form strong family groups called packs to hunt, play and mate.

Their diets keep the populations of plants and smaller animals within a sustainable range. They have an important role to play in their ecosystems and depend on their habitats for survival. It's up to us to ensure their protection.

DID YOU KNOW? Coyotes can run up to speeds of 40 mph, which is faster than the fast Olympic Sprinter, Usain Bolt.

DID YOU KNOW? They also have a distinctive call their pack can recognize from miles away!

COTYOTE SIZE COMPARISON TO OTHER ANIMALS

- North American Wolf
- Golden Retriever
- House Cat
- Coyote

RANGE OF COYOTES ACROSS NORTH AND SOUTH AMERICA

ALL ABOUT COYOTES

With fun and memorable scientific facts, this info sheet will inspire your at-home students to learn all about these fascinating creatures that share the nature in our communities.

Read all about their amazing abilities to adapt to these ever-changing environments and how their family groups stick together.

[Download Now](#)

BACKYARD WILDERNESS

NORTH AMERICAN SALAMANDERS ARE AN INDICATOR SPECIES

All ecosystems need water to survive. This also includes us humans, which are mostly made up of water. However we're not the only ones who need this water to survive. Plants pull water from the ground and release it into the air as moisture. This moisture then comes together forming clouds and rain. Rainwater then makes its way into rivers, lakes, oceans and vernal pools (temporary spring ponds) where salamanders mate and breed.

DID YOU KNOW? The "Plethodon" mole salamander is found only in North America. They are known for digging holes just for mating.

DID YOU KNOW? They eat bugs found in dirt and under rotting logs and leaves.

Spotted salamanders rely on vernal pools to live, and it's their relationship to them and the rest of the ecosystem that make them an important indicator species. The term "indicator species" means they are very susceptible to tiny changes in their environment like higher temperatures, pollution, shorter or longer seasons and drastic water level shifts to name a few. A higher population of salamanders indicates that the environment is healthy because they're able to breed and reproduce with the resources they have.

However, lower numbers can be the early warning signs of an ecosystem's poor health. A sick ecosystem can't support life for long. If less than 10% of the salamanders, they're simply an obvious indicator that something is wrong and could be affecting many other species as well. The health of an ecosystem affects us, the plants and the animals that dwell within it and if the smaller, more numerous organisms die than the larger predators that depend on them as food, such as snakes, birds and mammals, may lead to further population decrease. Spotted salamanders are vital to the health of everything around them, even the water, and are proof that we are all connected.

THE SPOTTED SALAMANDER'S LIFE CYCLE

In the wild, they can live up to 32 years.

Emerging from hibernation, Spotted salamanders venture to the same vernal pool in which they were born to mate.

Female salamanders lay their eggs in big clumps of up to 100 eggs at a time.

6-8 weeks later the salamander eggs hatch. They look more like a tadpole than a salamander at this time.

They quickly grow legs and crawl out of the vernal pool before it dries up.

NORTH AMERICAN SALAMANDERS

Salamander populations indicate the health of their habitat, the more there are the healthier their ecosystem is.

Explore the important stages of their lifecycle and get your kids excited to go on a nature walk and look for these little critters.

[Download Now](#)

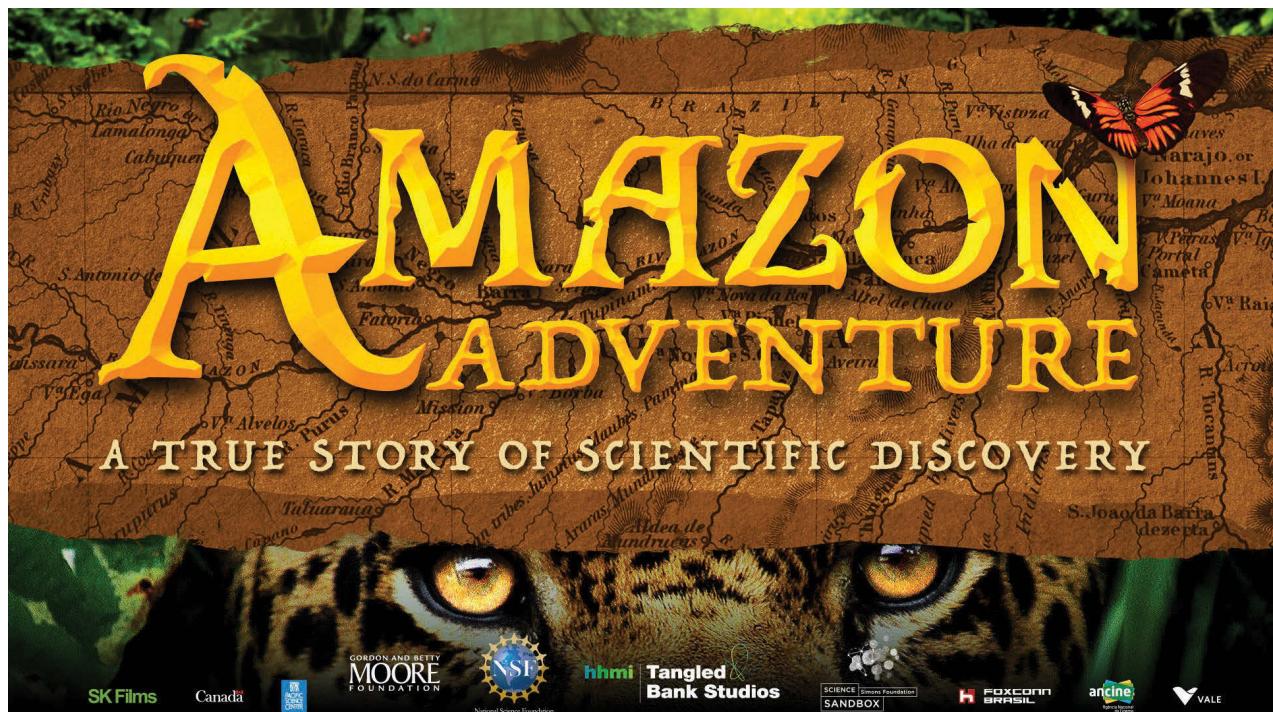
AMAZON ADVENTURE



ABOUT THE FILM

Amazon Adventure tells the epic, true story of explorer Henry Bates' fascinating 11 year journey through the visually stunning and biodiverse Amazon rainforest as a young man who risks his life for science in the 1850's. As in any great detective story, audiences will experience, in immersive IMAX®, the compelling clues Bates unearths in his major discovery of the phenomenon of mimicry, whereby certain animals (sometimes rarely seen by humans) adopt the look of others that helps them deceive predators and gain an advantage to survive.

Little known to the public, Bates made other crucial contributions to biology: identifying 8,000 species new to science and most importantly, putting forward the first ever case for the creation of a new species, which Charles Darwin called the "beautiful proof" for Natural Selection. Audiences will be wowed by the mind-boggling examples of camouflage and mimicry and inspired by Bates' endless curiosity and determination to explore the wilds of nature from the time he was a young boy.



[Watch the Trailer](#)

AMAZON ADVENTURE



Check out all the educational materials on our website:
amazonadventurefilm.com/educators

FUN INFO SHEETS



WILDLIFE FEATURED IN THE FILM

Amazon Adventure immerses audiences right into the biodiverse rainforest. The following is a list of the scientific names with photos of over 70 different species that appear in the film in chronological order.

Henry Bates' fascinating 11-year exploration through the perilous Amazon jungle shows him in constant contact with the wildlife inhabiting these visually stunning ecosystems. Everything from the smallest beetle crawling along the forest floor to the immense trees creating a canopy above, Bates wanted to examine it all.

Things are not always what they seem as Bates discovered many astounding examples of camouflage and mimicry. He also collected over 14,500 different species while in the Amazon and 8,000 new to science.



Assorted Butterfly Boxes appearing in various scenes throughout film (Stevens' shop, Bates' collections, etc)



Common: Leaf Mantis or Hooded Mantis
Scientific: Choeradodis rhomboidalis



Common: Brazil Stick Mantis
Scientific: Brunneria brasiliensis



Common: Katydid Insect
Scientific: Typophyllum lunatum

WILDLIFE IN THE RAINFOREST

Experience the biodiverse Amazon rainforest with over 70 different species that appear in *Amazon Adventure*.

Challenge yourself to pronounce the scientific names of these creatures and marvel at the diversity of animals and insects.

[Download Now](#)



ANCIENT AMAZONIAN TRIBES

Learn about the culture of the Mundurukú tribe native to the Amazon rainforest and how they helped early explorers navigate the lush jungle.



[Download Now](#)

The Native Tribes in *Amazon Adventure*: A Time of Change

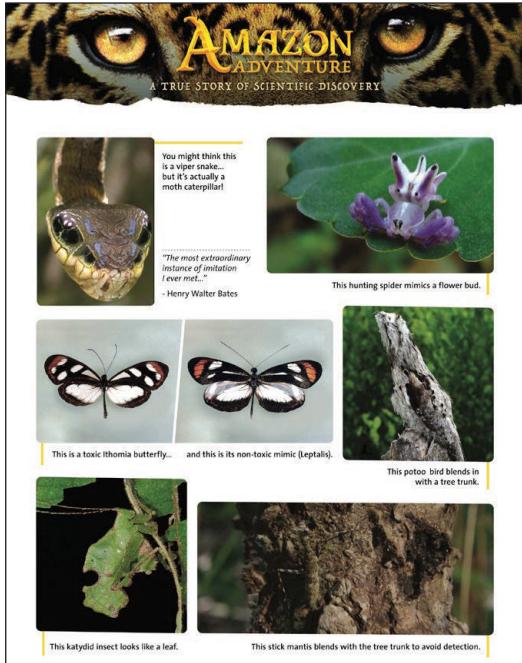
Henry Bates spent 11 transformative years in Brazil from 1848 to 1859 where he met many tribes along the Amazon River. These tribes taught Bates to adapt to the indigenous forest life, in exchange, the tribes received the chance to learn about life beyond the Amazon. It was a time of change. With less intertribal wars, young men left their homes searching for opportunities working in river trading and lumber mills. Some of these tribes were the Camáta, Maué, Tacuna, Shumána, Juris, Passés, Caishána, Cucáma, Marauá and Mundurukú.

The Mundurukú in particular had a curiosity that rivaled Bates' own. For example, during one of his visits, they insisted he show them all of the hundreds of pages in the *Pictorial Museum of Animated Nature*, carried everywhere by Bates during his journey. The drawings of animals and small curiosities like shells and fossils from the Americas were a great source of wonder for the Mundurukú people. Original copies of the two volume book were used in *Amazon Adventure*. The film focuses on this tribe because Bates described their encounters in detail in his book *The Naturalist on the River Amazon*, published in 1863.



From *Amazon Adventure*: The chief's daughter "Yara", wearing clothing traditional to Mundurukú women, sits with Bates

AMAZON ADVENTURE



SURVIVING THROUGH MIMICRY

Every species on the planet has adapted in some way to give them the best chance of survival.

Check out these amazing critters who have adopted the look of inanimate objects to hunt for food or the patterns of toxic species to deter predators.

[Download Now](#)



A WORLD BEFORE WIKIPEDIA

Before the incredible research resources we have online, explorers had to go out into nature to collect and track specimens new to science.

In the 1850s, creatures were hand-drawn and documented in a book called "The Pictorial Museum of Animated Nature". This book was an invaluable resource to scientists and naturalists like Charles Darwin and Henry Bates.

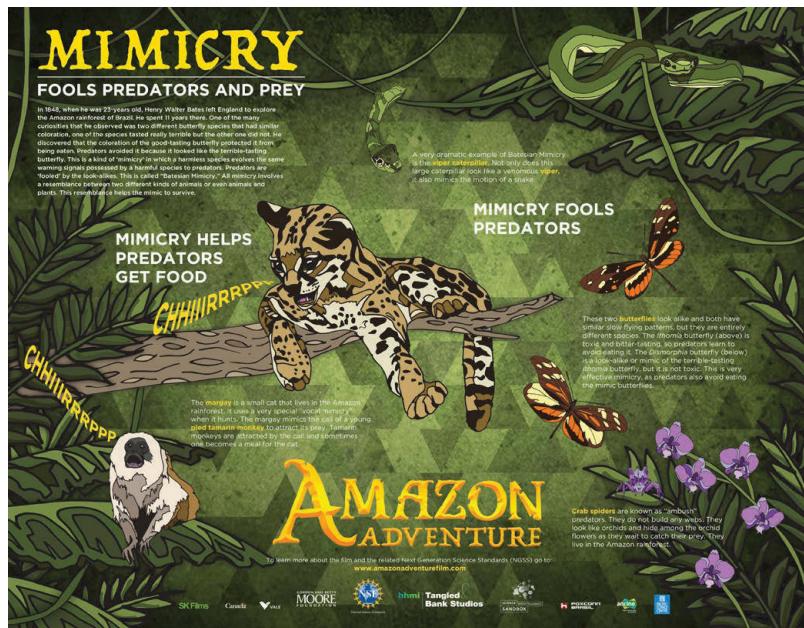
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AMAZON ADVENTURE

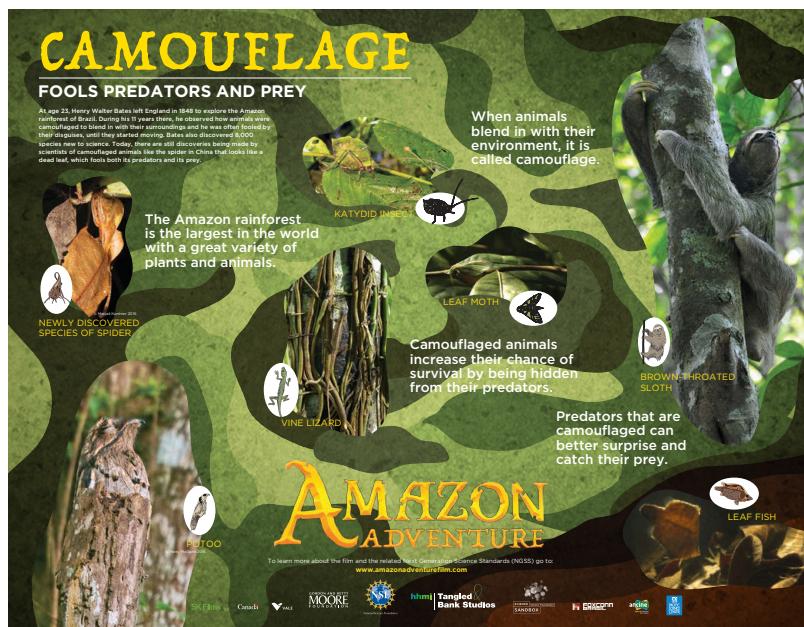


EDUCATIONAL POSTERS

Download these colorful and informative posters for your child's bedroom or print them in black and white for a fun coloring project!



[Download Now](#)



[Download Now](#)

AMAZON ADVENTURE

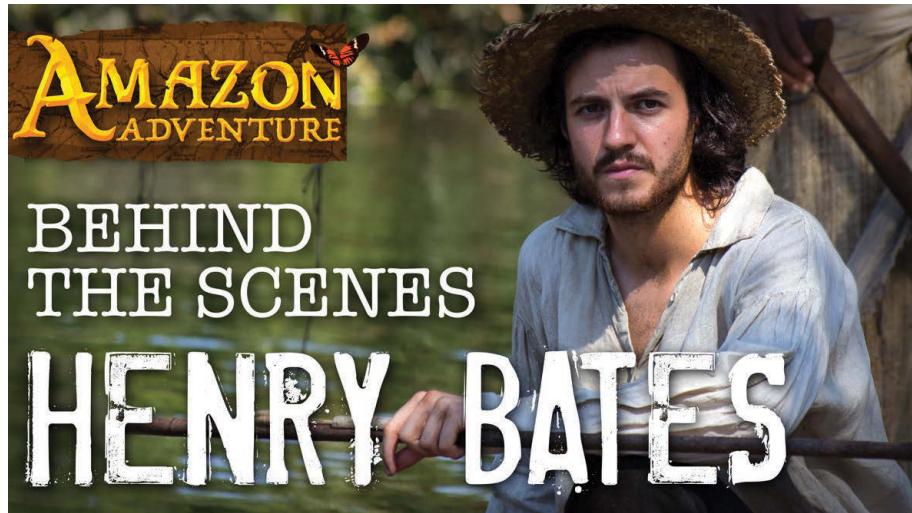


FUN & EDUCATIONAL VIDEOS



Challenges of Filming in the Amazon Rainforest

Extreme heat mixed with heavy and frequent rainstorms made filming in the jungle a challenge, but thanks to great teamwork shoot was a success!



Who is Henry Bates?

Meet Henry Bates, a naturalist risking his life over 160 years ago to explore the Amazon rainforest and became lifelong friends with Charles Darwin.

AMAZON ADVENTURE



Behind The Scenes of 1850s Set Design

After three years of tireless research, in consultation with over 100 scientists and historical experts, to bring a 1850s London and Amazon rainforest to life.



How 3D Filmmaking Works

Carrying an enormous 3D, IMAX/Giant Screen camera into the heart of the Amazon rainforest is no easy feat! Watch to see how the 3D team pulled it off.

AMAZON ADVENTURE



Filming in the Amazon - 360° Video

Explore the Amazon rainforest in 360° with the cast and crew as they take you through the lush and biodiverse filming locations for *Amazon Adventure*.



The Origin of Species:
The Making of a Theory



The Origin of Species - The Making of a Theory (from HHMI)

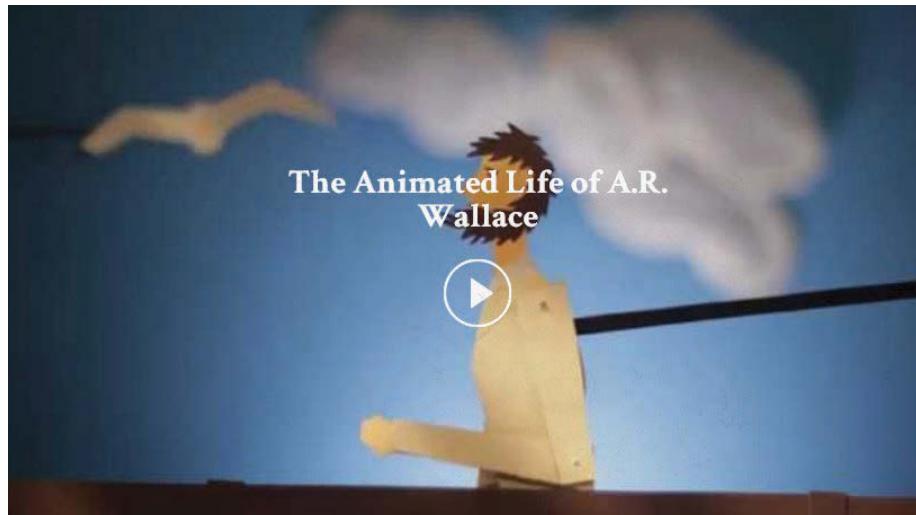
Charles Darwin and Alfred Russel Wallace independently made epic voyages in the name of science and discovered the nature of the origin of species.

AMAZON ADVENTURE



Moth Mimicry: Using Ultrasound to Avoid Bats (from HHMI)

Follow scientists as they uncover how some moth species in Gorongosa National Park have adapted to avoid bats, including "jamming" bat sonars.



The Animated Life of Alfred Russel Wallace (from HHMI)

Aimed at high schoolers, this animated science adventure takes viewers on a journey with A. R. Wallace through his exploration of the Malay Archipelago.

Flight of the Butterflies

ABOUT THE FILM

The monarch butterfly is a true marvel of nature. Weighing less than a penny, it makes one of the longest migrations on Earth across a continent to a place it has never known. Follow the monarchs' perilous journey and join hundreds of millions of real butterflies in the remote mountain peaks of Mexico, with breathtaking cinematography from an award winning team including Oscar® winner Peter Parks.

Be captivated by the true and compelling story of an intrepid scientist's 40-year search to find the monarchs' secret hideaway. Unravel the mysteries and experience the *Flight of the Butterflies*.



[Watch the Trailer](#)

Flight of the Butterflies

Check out all the educational materials on our website:
flightofthebutterflies.com/in-the-classroom

ACTIVITY GUIDES



Educator Guide

SK Films



MONARCHS
IN THE CLASSROOM

Major Funding Provided by
NSF

Suitable for grades K-12. Download the full guide or any of the individual activity guides. All contain a number of interactive and enlightening activities.

Learn about metamorphosis, what butterfly wing colors mean and the difference between butterflies and moths

[Download the English Guide](#)

[Descargar la guía en español](#)

ACTIVITIES FOR ALL AGE GROUPS

[Download in English](#)

[Descargar en español](#)

ACTIVITIES: GRADE K-2 (GRADO K-2)

[Download in English](#)

[Descargar en español](#)

ACTIVITIES: 3-6 (GRADO 3-6)

[Download in English](#)

[Descargar en español](#)

ACTIVITIES: 7-12 (GRADO 7-12)

[Download in English](#)

[Descargar en español](#)

Flight of the Butterflies

HANDS-ON ACTIVITIES



OR



PLANT A BUTTERFLY GARDEN

For people interested in helping Monarchs, a butterfly garden is an easy way to participate in conservation and admire these beautiful creatures. The gardens can be any size - a window box, small yard or part of an untended area in your lawn.

With the right kinds of plants and flowers where Monarchs love to lay eggs and feed, you can enjoy watching them throughout the growing season.

[Start Your Garden Now](#)

Flight of the Butterflies



HANDS-ON ACTIVITIES



Photo by Journey North

BECOME A CITIZEN SCIENTIST

Take part in one of the many citizen projects that provides scientists with data to help them find out if monarch butterfly populations are healthy. The data from these tagging activities help determine the migrating path of the monarchs, as well as other factors that influence their progress.

While that sounds like a lot of butterflies to track, you can help! By reporting the monarchs you see in your backyard and around your home you can add pieces to the picture of monarch migration like pieces in a puzzle.

[Start Tracking Monarchs Today](#)



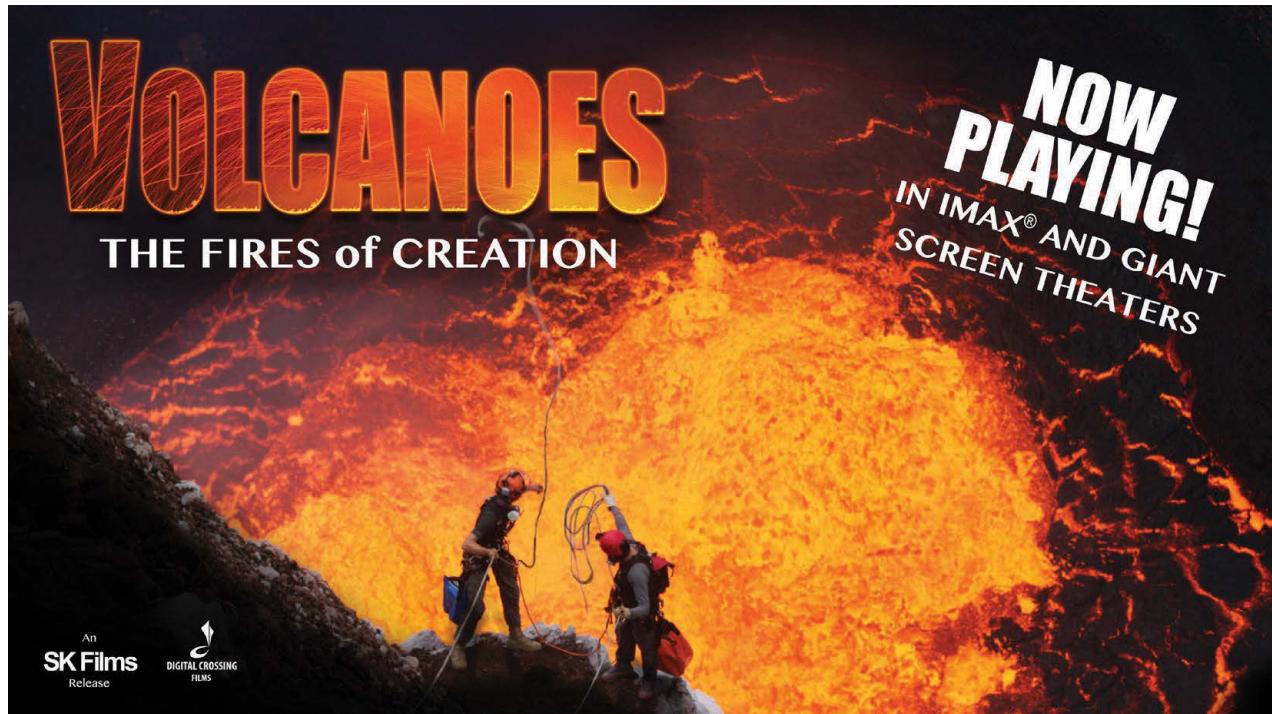
VOLCANOES

ABOUT THE FILM

Volcanoes: The Fires of Creation is a tale of science, culture, and thrilling adventure.

Earth is a planet born of fire. For billions of years, volcanoes have helped forge the world we know. From the continents to the air we breathe and even life itself, all have been shaped by volcanic energy. These processes have created extraordinary ecosystems and wildlife habitats. With over 500 active volcanoes, the Earth is bursting at the seams with these forces of mass construction. The story of volcanoes is the story of the planet's creation and the story of us.

With intrepid explorer Carsten Peter, dodge boulders at the edge of an active volcano in Indonesia, descend to a lava lake in Vanuatu and visit incredible acid ponds, geysers and mineral deposit fields in Ethiopia. Travel across the globe to see the archeological ghost town of Pompeii, hydrothermal vents at the bottom of the ocean and witness the devastating effects of the 2018 Kilauea eruption in Hawaii.



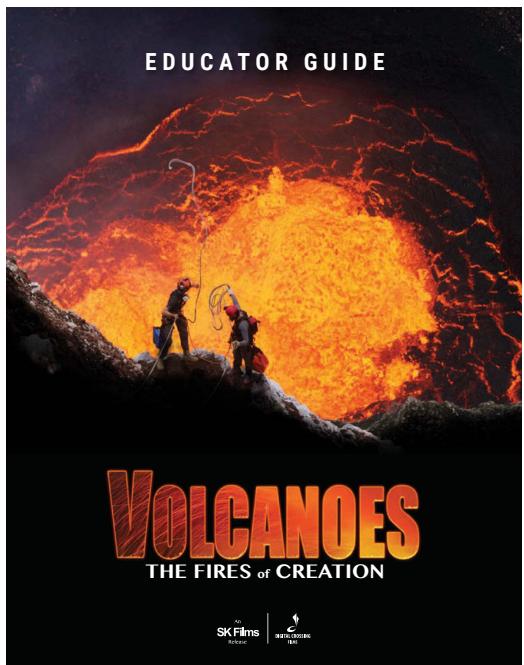
[Watch the Trailer](#)



VOLCANOES

Check out all the educational materials on our website:
volcanoesfilm.com/education

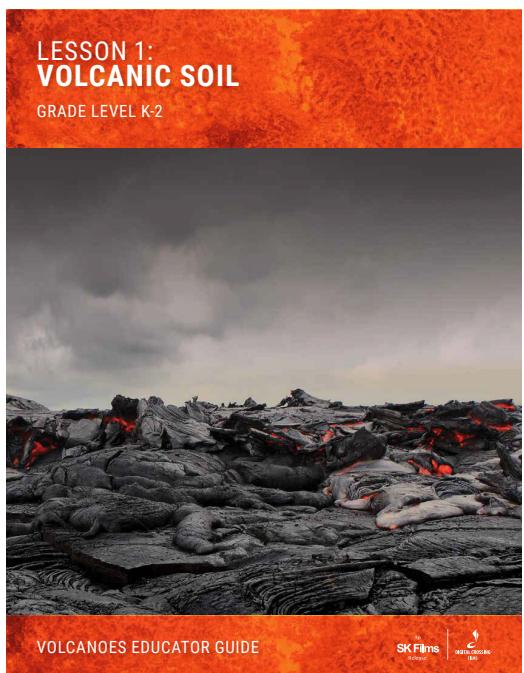
ACTIVITY GUIDES



Suitable for primary grades K-8. Download the full guide or any of the six individual lesson plans linked below. All contain a number of fun and enlightening activities.

Learn about the scientific method, how geologists predict eruptions and what we can expect when they happen.

[Download the Full English Guide with all Lessons](#)



LESSON 1: VOLCANIC SOIL

Grade K-2 (Grado K-2)

[Download in English](#)

[Descargar en español](#)

VOLCANOES



LESSON 2:
DESIGNING SAFETY
GRADE LEVEL K-2



VOLCANOES EDUCATOR GUIDE SK Films

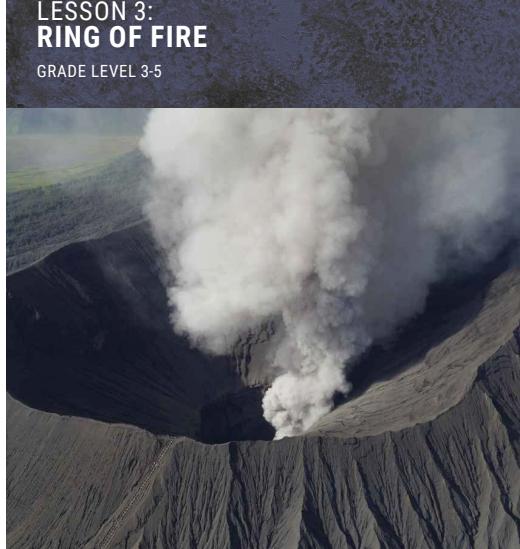
LESSON 2: DESIGNING SAFETY

Grade K-2 (Grado K-2)

[Download in English](#)

[Descargar en español](#)

LESSON 3:
RING OF FIRE
GRADE LEVEL 3-5



VOLCANOES EDUCATOR GUIDE SK Films

LESSON 3: RING OF FIRE

Grade 3-5

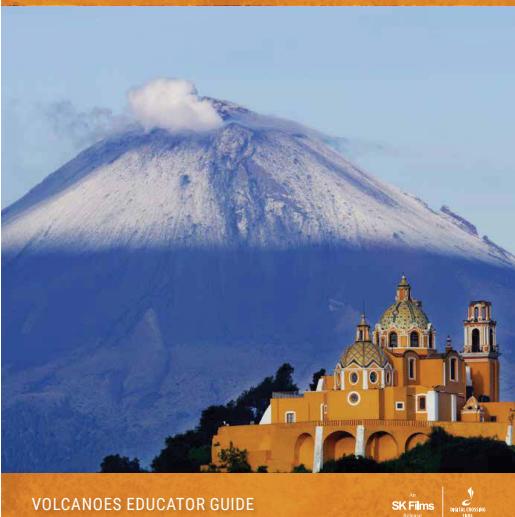
[Download in English](#)



VOLCANOES

LESSON 4: LIVING NEAR A VOLCANO

GRADE LEVEL 3-5



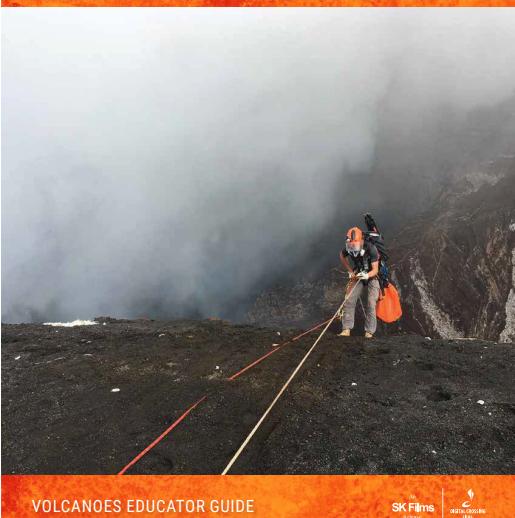
VOLCANOES EDUCATOR GUIDE

SK Films

MEET THE TEAM

LESSON 5: TECTONIC BOUNDARIES

GRADE LEVEL 6-8



VOLCANOES EDUCATOR GUIDE

SK Films

MEET THE TEAM

LESSON 4: LIVING NEAR A VOLCANO

Grade 3-5

[Download in English](#)

LESSON 5: DESIGNING SAFETY

Grade 6-8

[Download in English](#)



the Water Brothers



ABOUT THE SHOW

The Water Brothers is an eco-adventure documentary series following brothers, Alex and Tyler Mifflin, as they explore the world, uncovering the most important water stories of our time. What are the problems, and where are the solutions to help us better protect our most precious resource? Alex & Tyler take you on the search.

Alex and Tyler are passionate about the subject of water conservation and use their respective educations in film and environmental studies to create this award-winning series. Alex is the lead researcher, co-writer and co-host and Tyler is the co-host, director, videographer and co-producer. They share a love of travel and adventure, a passion for the subject and a powerful desire to communicate their passion to audiences, especially for their own generation.

Join **The Water Brothers** on their adventures from the largest gatherings of humans on earth, to diving into dead zones, sailing into the middle of the Great Pacific Garbage Patch or climbing Mount Kilimanjaro. **The Water Brothers** circle the globe to bring back stories that affect, inspire and educate viewers.



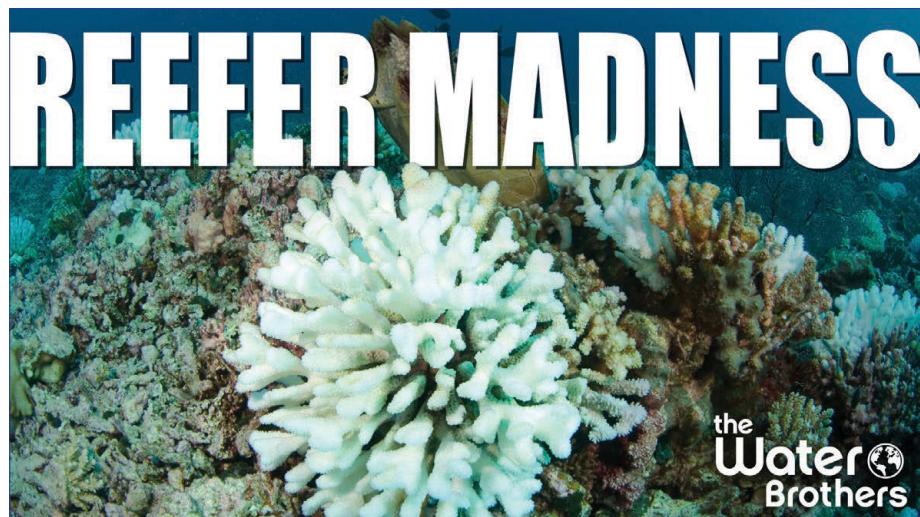
[Watch the Trailer](#)

the Water Brothers



Watch all episodes and explore the educational activities on our website:
thewaterbrothers.ca

WATCH SEASON ONE



The world's coral reefs are home to a quarter of all marine life – and they're being wiped out. ([Watch Now](#) / [Activity Guide](#))



Asian carp have invaded the Mississippi River, and destroyed its lucrative fishing industry. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



The North Pole is melting faster than ever. Change in the Arctic is happening at warp speed. ([Watch Now](#) / [Activity Guide](#))

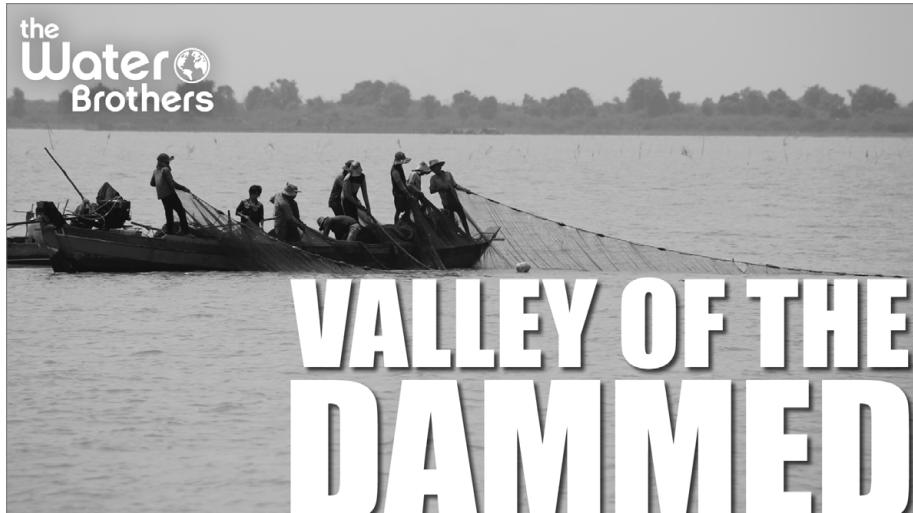


Tap water is cheap and easily accessible, so why is there such a huge demand for bottled water? ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



How did one of the driest places in North America, California, become the continent's largest agricultural supplier? ([Watch Now](#) / [Activity Guide](#))



The Mekong River has shaped the culture and people of Southeast Asia for thousands of years. Now, it's changing. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



WATCH SEASON TWO



Many Hindus believe the holy river Ganges cannot be polluted, yet it is one of the most contaminated in the world. ([Watch Now](#) / [Activity Guide](#))



Sail to the "Great Pacific Garbage Patch", a massive collection of plastic waste caught in Pacific Ocean currents. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



Habitats once teeming with life are reduced to biological deserts, why?
[\(Watch Now / Activity Guide\)](#)



Travel to Africa and witness how simple water projects can have huge impacts on economic advancement. [\(Watch Now / Activity Guide\)](#)



the Water Brothers



WATER EVERYWHERE, BUT NOT A DROP TO DRINK



the
Water
Brothers

Approximately one in five First Nations communities in Canada lacks access to clean drinking water. ([Watch Now / Activity Guide](#))



the
Water
Brothers

HERE COMES THE FLOOD

Experience first hand the impact of rising sea levels and the amazing adaptations of the people of Bangladesh. ([Watch Now / Activity Guide](#))



Globally, over 70% of the salmon we eat is raised on fish farms in the open ocean. Does it matter? ([Watch Now](#) / [Activity Guide](#))



the Water Brothers



WATCH SEASON THREE

(Note: Season 3 and 4 are only available in Canada)

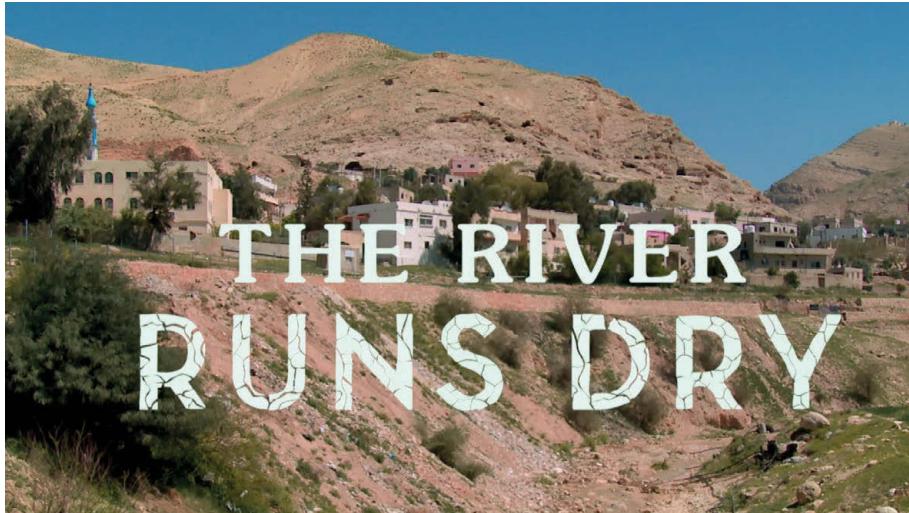


Dive into a research expedition to Cocos Island, home to one of the richest marine habitats on Earth. ([Watch Now](#) / [Activity Guide](#))

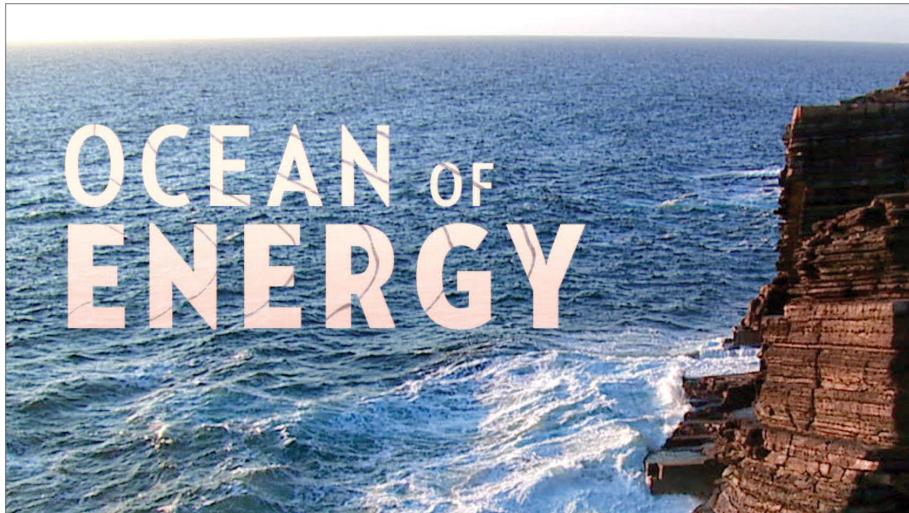


Join a team of dedicated marine biologists as they tag and track sea turtle migration routes. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers

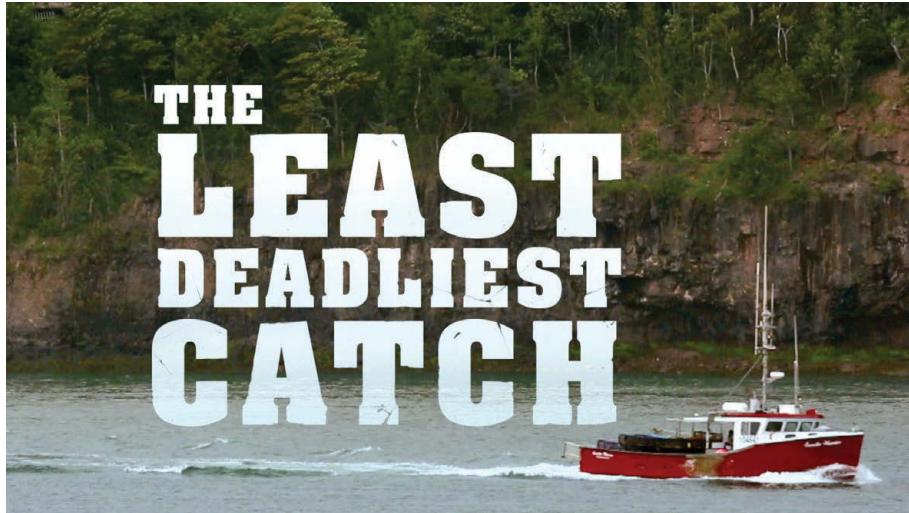


The Jordan River that nourished the growth of ancient civilizations has been reduced to a glorified sewage canal. ([Watch Now](#) / [Activity Guide](#))

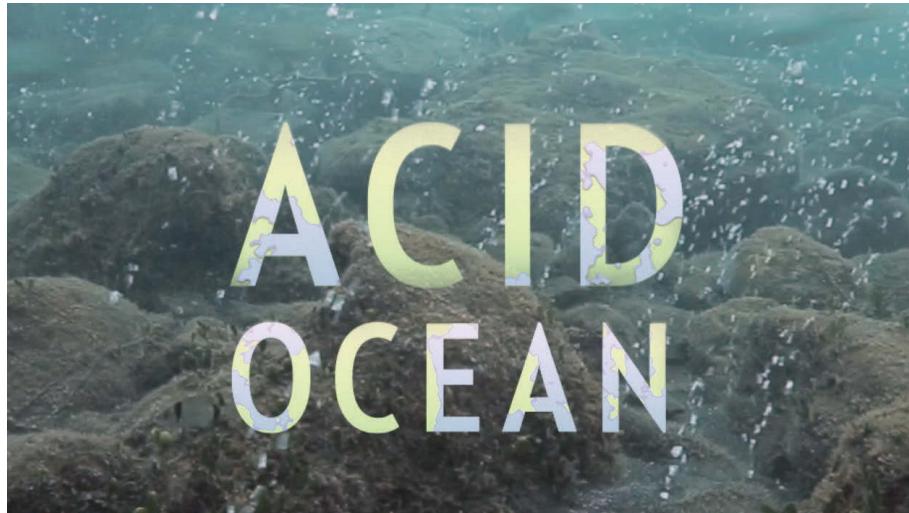


The tidal and wave power of the oceans are some of the largest, untapped sources of clean energy on the planet. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



Fish stocks are depleted, and yet growing populations are more dependent on these vital food sources than ever. ([Watch Now](#) / [Activity Guide](#))



As fossil fuels burn, carbon dioxide seeps into the oceans and has an alarming impact: ocean acidification. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



NASA explores the vastness of space, but much of their research is related to water – both on and off the planet. ([Watch Now](#) / [Activity Guide](#))



the Water Brothers



WATCH SEASON FOUR

(Note: Season 3 and 4 are only available in Canada)



Deforestation is thought to be one of the leading causes of water shortages in Brazil that struggles with droughts. ([Watch Now](#) / [Activity Guide](#))



One of the worst crimes in nature plays out daily on the high seas as vessels fish illegally on an industrial scale. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



Few of us are aware of the problems facing our outdated water infrastructure which cost billions of dollars to fix. ([Watch Now](#) / [Activity Guide](#))



70% of all freshwater we use is for agriculture. As populations rise and people eat more food, how can we increase production without putting more pressure on water resources? ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



Investigate sushi's impact on the ocean and meet chefs introducing customers to more sustainable options. ([Watch Now](#) / [Activity Guide](#))



The largest freshwater supply in the world is increasingly at risk due to the effects of climate change. ([Watch Now](#) / [Activity Guide](#))

the Water Brothers



INTERACTIVE LEARNING PORTAL

Dive Deeper into the topics covered in Season 4 of *The Water Brothers* with their interactive learning portal. Click on the image below to begin a journey of discovery and learn more about the environmental challenges we face and how you can get involved in the solutions.



[Explore Now](http://DIVEDEEPER.CA)