



**NATURE'S GREAT EVENTS**



# Contents

FOREWORD BY KAREN BASS, SERIES PRODUCER **6**  
INTRODUCTION BY BRIAN LEITH, EXECUTIVE PRODUCER **8**

We are all hungry for knowledge of the epic and dramatic in the natural world, and the six stories in Nature's Great Events certainly show this in generous amounts. But it wasn't just drama that we wanted to reveal in this project.

We also wanted to tell actual stories of struggle, survival and even death, as experienced by individual animal characters caught up in natural dramas. Some of the most memorable wildlife films ever made have focused on the lives of individual animals and we wanted to follow emotional and engaging stories about particular creatures facing each other in a life or death struggle to survive.

We were also looking for one final element: a strong narrative. Fortunately, we had powerful 'natural' narratives built from the start into the events behind the six films.

Ultimately, filming Nature's Great Events, we became witnesses to, and chroniclers of, a fast-changing planet.

**Brian Leith**  
Executive Producer  
BBC Natural History Unit



## THE GREAT FLOOD **18**

The annual flooding of Botswana's Okavango Delta turns swathes of desert into a maze of lagoons, islands, and swamps and transforms the lives of thousands of animals far and wide.



## THE GREAT MELT **68**

Ten million square kilometres of ice melt every year in the Arctic. For the masters of the ice, the polar bears, this is a moment of jeopardy, but for others this is the richest place on earth.



## THE GREAT PLAIN **116**

Africa's parched Serengeti is the arena for bitter rivalries between cheetahs, lions, and hyenas. But, with the arrival of the rains, the plains flush green and attract millions of gazelle, wildebeest, and zebra.



## THE GREAT SALMON RUN **164**

The survival of the grizzly bear and forest wolf depends entirely on one great annual event when the rivers teem with spawning salmon, the life blood of the rainforest of British Columbia, Canada.



## THE GREAT FEAST **212**

A yearly explosion of life in Alaska's coastal waters draws a cast of thousands of animals from far and wide who are prepared to brave the killer whales in order to feed and stock up for the winter.



## THE GREAT TIDE **260**

The greatest marine spectacle on the planet occurs as millions of sardines move along South Africa's east coast, attracting a host of predators including dolphins, sharks, brydes whales, and many more.

INDEX **312**  
ACKNOWLEDGMENTS **320**

A close-up photograph of a lion with a thick, golden-brown mane leaning over a wildebeest. The lion's head is positioned over the wildebeest's head, and its mouth is slightly open, appearing to be in the process of eating or drinking. The wildebeest is dark brown and is lying down on the ground. The background is a blurred savanna landscape with dry grass and a clear sky.

# The Great Plain The Serengeti

Imagine this scene. Half a million antelope are tightly packed on the narrow floor of a steep-sided gorge. They're on the move and the smell of dust that rises from two million hooves pounding the dry ground is almost overwhelming. The dense crowds unfold as far as the eye can see - and beyond. Isolate a group and the horns and bodies of the animals take on the strange abstract beauty of an Escher print. These are white-bearded wildebeest, they're found in Eastern Africa and en masse they definitely create one of the great events in nature. But such spectacle is only part of a fascinating story.

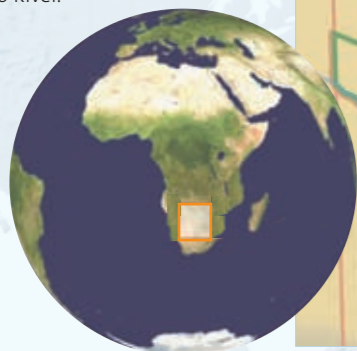
## The Okavango Delta

If you gaze down from space, high above planet earth over the Tropic of Capricorn, the vast Kalahari Desert unfurls below you across an immense, million square kilometre swathe of southern Africa. An ancient aeolian coat of sand-dunes, cadmium-orange and ivory white and 65 million years old, rolls like an ocean swell across the mountainless land, blanketed in a velvet mantle of hardy desert grasses and stunted trees. At its heart, amid the desert sands of north-eastern Botswana, a luxuriant emerald oasis spreads a giant hand, its watery fingers reaching two hundred kilometres into the parched Kalahari. This is the Okavango, “the land of many rivers”, one of the largest, and certainly the most pristine inland freshwater delta on earth.

### Okavanga Delta Kalahari Desert Botswana, Africa

The Okavango Delta, the world's largest inland delta, drains into Botswana's Moremi Game Reserve, irrigating 15,000 square kilometres (5,800 square miles) of desert.

The Kalahari Desert spans 900,000 square kilometres (362,500 square miles) and covers much of Botswana, extending into neighbouring Namibia and South Africa. The Okavango, the fourth longest river in southern Africa, is the only permanent river in the desert and begins life in Angola as the Cubango River.



**Right** The Okavango Delta is an astonishing natural landscape – or rather, waterscape, creating a lush and watery carpet over an area of two hundred kilometres.





## The Great Forest

Lying in the northern hemisphere between the 50th and 60th parallels the Great Forest is smack in the middle of the northern temperate zone of the earth. Most of the forest lies within the boundaries of Canada but extends into the southern waters of the Alaska panhandle before eventually petering out in the northern end of panhandle near the border with the Yukon Territories. As it extends north the conditions that produce the greatest parts of the forest begin to be compromised by the more arctic like conditions of the northern parts of our planet – colder temperatures, less sunlight and shorter growing seasons.

The heart of the Great Forest lies in Canada between the northern end of Vancouver Island all the way to the Alaska border and beyond. This part of the coastline of North America is home to the largest tract of intact temperate rainforest left in the world. It is an area roughly 800 kilometers by 50 kilometers but it includes thousands of islands and a massive mountain chain broken by hundreds of fjords and inlets that produce a coastline that is more than 100 times longer than its actual length.

Centuries ago the temperate rainforests would have extend many hundreds of kilometers further south into continental United States. Along the coastline of Washington, Oregon and into North California the relationship between salmon and the forest would have continued if not for the influences of man. Throughout most of that region the great coastal forests are gone consumed by the voracious appetites of the timber industry and the salmon runs so over-fished by modern man that they are a shadow of what they once were.

But to the north in Canada and the Alaskan panhandle, where the influences of man have yet to reach such a degree, the temperate rainforest of western North America is still largely intact. That is where our story takes place.

### The Nature of the Landscape

The temperate rainforest of central British Columbia lies in a narrow strip of land between the crest of the Coast Mountain Range and the Pacific Ocean. It is a broken and convoluted landscape. The Coast Mountains are incised by hundreds of inlets and fjords some measuring more than a hundred and sixty kilometers in length. Hugging the edge of the splintered mainland lies an archipelago of islands numbering in the thousands: from tiny rocky crags to huge islands hundreds of kilometers long with their own mountain chains and fjords. Covering the whole is a green blanket of trees. From above, the landscape looks like a sea of green criss-crossed by a

**Left** The survival of bears such as this magnificent creature depends on the annual arrival of myriad spawning salmon, which provide a seemingly endless supply of food available for an easy catch.

## In Search of *Ursus maritimus*

At last we worked our way down through some tricky glacial moraines to our destination; the east coast of the main Island of Spitsbergen and the heavily glaciated bay of Kvalvagen. This was as wild and beautiful a place as I had ever experienced. The coastline runs north to south for a distance of 250km. As far as I could see there were peaks and bays, each with a huge glacier emptying into the sea. At this time of year the polar current pushes sea ice from the far north in a southwards direction, closing in bays and glaciers fronts, locking the island's eastern coastline in an icy grip. Sea ice pushed to the far south will round the southern cape of Spitsbergen, where propelled on the Gulf Stream, it is pushed north so that as winter draws on the whole Island can be enveloped in ice. Polar bears ride this sea ice 'carousel' and at this time of year Svalbard plays host to 3000 isbjorn,

### Polar Bear

#### *Ursus maritimus*

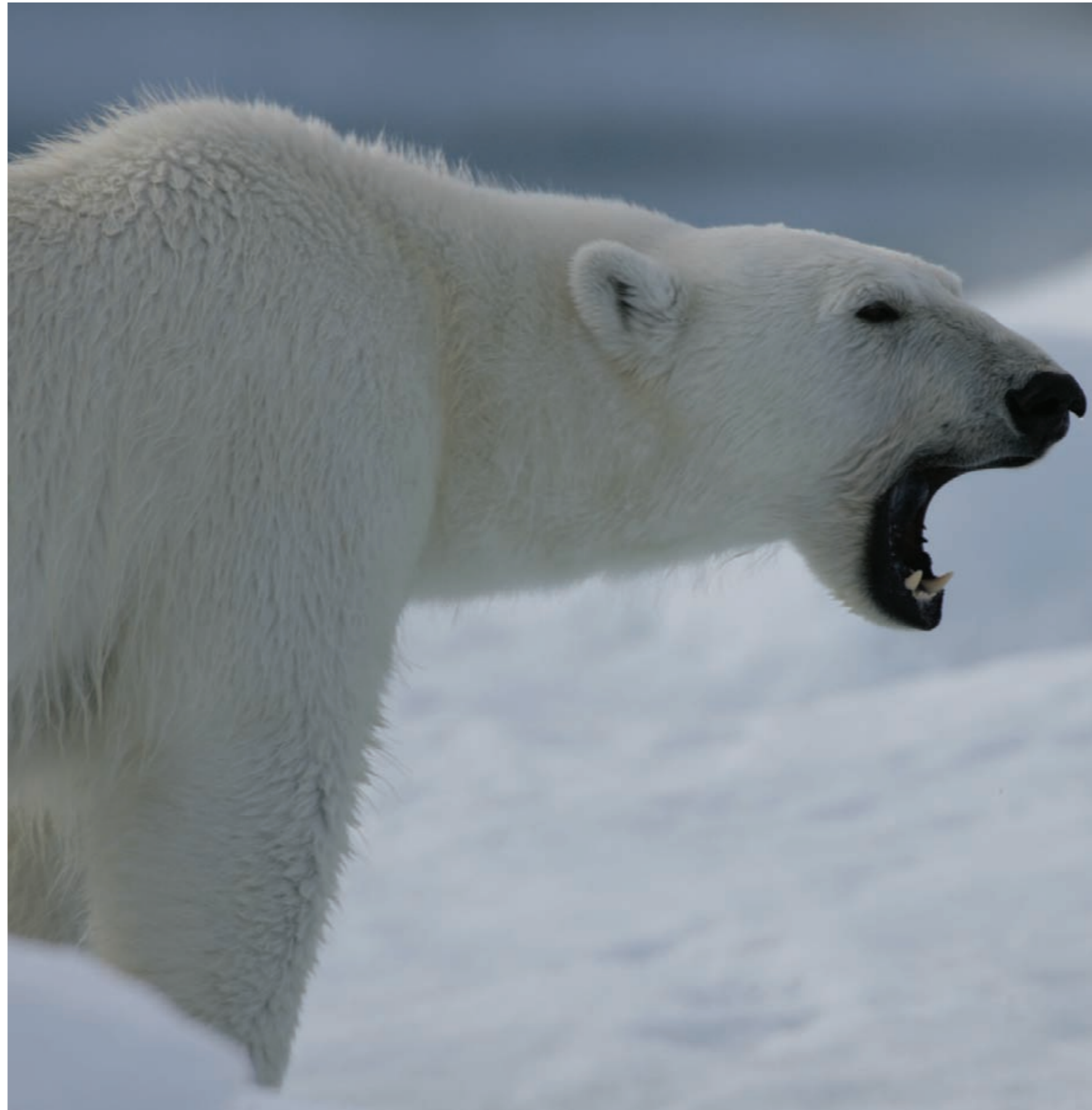
Take a moment to create a mental picture of a polar bear's (*Ursus maritimus*) environment. During the winter subzero temperatures prevail, made more severe by incessant wind and periodic blinding snowstorms. Everyday that hunting is good has to be used to store up fat in preparation for these severe times. The sea ice is a highly variable environment, alternating between being frozen.

The secret to a polar bear's survival in such harsh conditions is insulation and maintenance of a constant body temperature.

Physiologically polar bears have a number of adaptations that enable this, the first and foremost being its immense layer of blubber, which can be up to 15 cm thick. It also has an extremely tough hide and thick hair with various. The thick under-fur is up to 5 cm in length, and longer, hollow guard hairs growing to 15 cm. Like a down sleeping bag this hair traps air for further insulation.

#### KEY FACTS

Location	Arctic, N Canada
Habitat	pack ice, shore line, open water
Lifespan	up to 25 years
Size	2-3.5 metres (7-11ft)
Weight	300-600 kg (660-1320 lb)
Food	seals, young walruses, whales, reindeer



**Right** Far from their soft and gentle appearance, the polar bear is one of earth's greatest – and most powerful of hunters.

# NATURE'S GREAT EVENTS

General Editor, Karen Bass

Introduction by Brian Leith

---

In 2007, the BBC's landmark series *Planet Earth* made its American debut on the Discovery Channel, garnering massive critical acclaim and enthralling television audiences nationwide. Featuring breathtaking sequences of predators and their prey, lush vistas of forests from the tops of towering trees, and images of creatures from the ocean's darkest realms, the show brought unknown wonders from the natural world straight into our homes and forever changed the way we see the world. Along with the companion volume of the same name—which sold over 140,000 copies and was a *New York Times* bestseller—*Planet Earth* is considered the greatest wildlife documentary series ever made.

Enter *Nature's Great Events*, the highly anticipated follow up that makes its print and television debut in 2009. Exploring six of the most spectacular natural phenomena on our planet, this series and the book are epic in every sense, charting seasonal and annual events that transform entire ecosystems and the life experiences of the thousands of animals within them, from the largest mammals to the smallest microorganisms. Using groundbreaking filming techniques and state-of-the-art scientific and photographic technologies, *Nature's Great Events* shows life in action and across the globe. The six events include the flooding of the Okavango Delta in Botswana, which turns sprawling swaths of desert into an elaborate maze of lagoons and swamps; the melting of 10 million square kilometers of ice in the Arctic, which imperils polar bears across the region; the migration of the Serengeti,

where life is on the edge for both predator and prey and where lions and wildebeest battle to survive; the great salmon run in British Columbia where rivers teem with thousands of fish—and where grizzlies and wolves eagerly await them; the explosion of sea life in Alaska's coastal waters where countless animals from far and wide brave killer whales to feed; and perhaps the greatest marine spectacle on the planet, the annual tide of sardines along South Africa's east coast, where the greatest concentration of predators—including sharks, whales, and dolphins—come to feast.

These events are among the processes most important to the survival of life on the planet. Tracking them at every stage with over 400 remarkable photographs throughout, the book follows individual animals as they live and die during these events, often capturing the drama from their unique point of view. The result is an awe-inspiring and truly novel work that brings these events into more brilliant focus than ever before.

**KAREN BASS**, Series Producer for *Nature's Great Events*, is a TV producer and filmmaker whose award-winning works include *Wild Caribbean*, *Andes to Amazon*, *Jungle*, *Pygmy Chimp*, and episodes of *Natural World* and *Wildlife on One*. **BRIAN LEITH**, Executive Producer for *Nature's Great Events*, has been a producer and director for over twenty years in natural history filmmaking and is the author of *The Descent of Darwin*.

---

10 X 11

320 pages • 440 color images

ISBN-13: 978-0-226-47154-9

Publication date: February 2009

Cloth: \$39.95

For a review copy or other publicity inquiries,  
please contact:

Mark Heineke

Promotions Director

The University of Chicago Press

1427 East 60th Street

Chicago, IL 60637

Phone: 773-702-3714

Fax: 773-702-9756

E-mail: [mheineke@press.uchicago.edu](mailto:mheineke@press.uchicago.edu)

To place orders in the United States, please contact  
your local University of Chicago Press

sales representative or contact

The University of Chicago Press

by phone at 1-800-621-2736,

or by fax at 1-800-621-8476.

Other rights are restricted.