



MARCH 2026

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# BEAR ENVIRONMENT

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THE MAGAZINE OF THE SOCIETY OF ENVIRONMENTAL AUTHORS & JOURNALISTS

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## Editor's Introduction

Hello to all our members new and old. As you will have noticed if you keep an eye on our members' web page, we have enrolled quite a few new members since the last issue of the 'Bear Environment.' And we hope you will be pleased to see that we have a few new contributors which adds colour and interest to our magazine.

As usual I wish to thank our subscribers for their varied articles which have been noted by our members. I would like to encourage all of you to send us copies of your own articles to be included in upcoming editions, and perhaps that are suitable to go on our website features section.

Jonathan and Angela Scott have kindly allowed us to reprint one of their articles which appeared in Swara, the magazine of the East African Wildlife Association, also see Jan Spencer's piece titled 'The Primer for Paradigm Shift' an interesting perspective on living within our natural boundaries.

This year we are introducing two Literary Awards, one to encourage young environmental writers (under 25s) to engage in the work we do, and another to reward Environmental Book authors who have written about matters that mean the most to us in our fight to save what we can of the planet (over 25s).

This will be in the form of a small plaque to go on the mantle piece or in a cupboard inscribed to the winners accordingly. We hope that one or two of our members might add to these prizes by donating a small sum of money or donating one of their published books.

In July we will as usual be involved with the Global Bird Fair at Rutland Water in the UK, if any of you happen to be there, you'll find us in the Green Room behind the Osprey Marquee. We have a gazebo erected in the enclosure in which we will be doing our podcast interviews. We would love to see you!

ROBERT TANSEY FLS

BEAR ENVIRONMENT IS PUBLISHED BY THE SOCIETY OF ENVIRONMENTAL AUTHORS & JOURNALISTS.

MANAGING EDITOR: DR ROBERT TANSEY

<https://environmentalwriters.org>

# EARTHWORKS

**Land and nature in uncertain times, a new book by Karen Lloyd, publishes on 2 April 2026.**

From Wainwright Prize longlisted author, Karen Lloyd, comes a rallying call – a celebration of renewal and resilience – for all who care about Earth’s future.

*“Fearless writing at its Orwellian best.” Mark Cocker.*

From the rainforests of Costa Rica to the Balkans and Scotland, Karen Lloyd explores the hidden life of habitats and species including sloths, the rockpool shrimp and the world’s only truly wild horse. She studies the biodiversity of urban wildflower meadows and the contested spaces of landscape recovery, including in the Lake District where she lives, assessing our human impact on the lives of creatures whose survival is deeply intertwined with our own.

## **Praise for Earthworks**

“If everyone thought as deeply as Karen Lloyd does about our complex relationship with nature, the world would be a far better place. Wisely observed and powerfully expressed, these essays form a map to navigate the anthropocene.”

*Lee Schofield, award-winning author of Wild Places*

“Lloyd has packed the explosives, lit the fuse and lobbed in our direction the bravest and boldest volume of Nature writing this century. And then she’s walked towards the fire. This is fearless writing at its Orwellian best.”

*Mark Cocker, multi-award-winning author and naturalist*

“An intensely optimistic book, where hope comes not from denial, but from a careful and studied attention to the natural world - both the writing and the thinking are precise, vivid and engaging: it’s a delight to spend time in the company of this writer.”

*Jenn Ashworth, award-winning author*

“In this brilliant collection...Lloyd’s writing is realistic, unsentimental, and refuses any romanticisation of ‘nature’ but, at the same time, evinces a deep love of, and respect for the environment in all its complexities.”

*Professor Charlie Gere, Lancaster University*

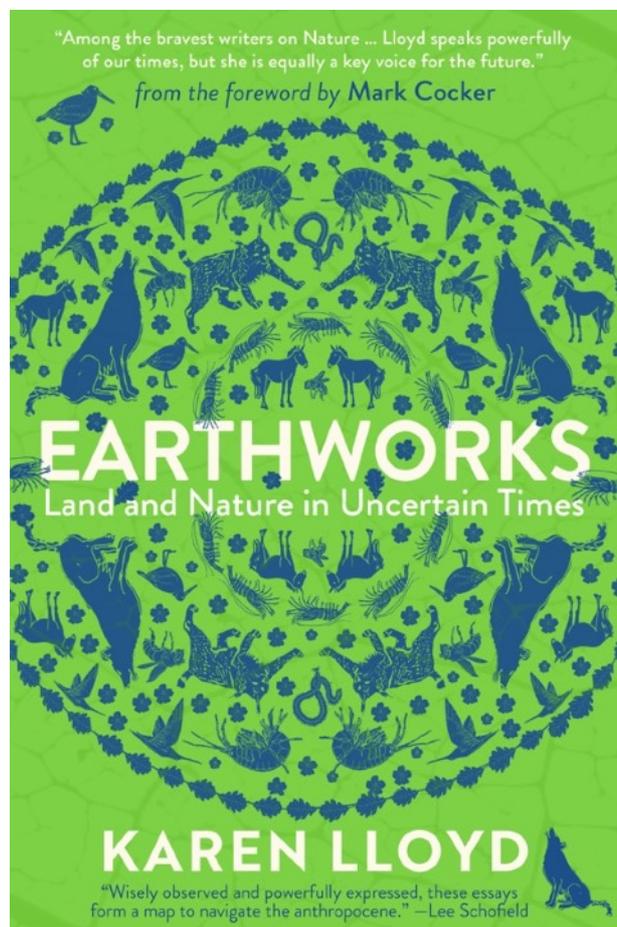
“In Earthworks, Karen Lloyd again confirms herself as one of our most vital and ambitious

writers on nature and place... Few writers evoke so powerfully, and so personally, both the wounds and the wonder of the living world.”

*Professor Ian Convery, IUCN Commission on Ecosystem Management Vice Chair*

## **About the author**

Karen Lloyd is an award-winning writer of non-fiction and poetry, and an academic and teacher, based in Kendal, Cumbria. Her 2022 book, *Abundance*, was longlisted for the Wainwright Prize for Conservation Writing. Both her debut, *The Gathering Tide*, and her second book, *The Blackbird Diaries*, won Lakeland Book Awards and were selected as books of the year, in the *Observer* and the *Birdwatcher’s Handbook*. She has contributed to the *Guardian*, *Royal Geographical Society magazine*, *BBC Wildlife and Countryfile*, and she edited and produced *Curlew Calling Anthology*. Karen gained her PhD from Lancaster University, where she taught on the Creative Writing MA and was writer in residence at the university’s Future Places Centre.



# When Tourism Crosses the Line

**STORY & PHOTOS BY JONATHAN AND ANGELA SCOTT**

The great wildebeest and zebra migration across the Mara-Serengeti a 25,000 km<sup>2</sup> ecosystem straddling the Kenya-Tanzania border, is one of nature's greatest spectacles. Watching wildebeest calving on the Serengeti's short-grass plains (January–March) or witnessing river crossings (July–October) ranks high on many bucket lists.

Recently, videos of tourists leaving vehicles at the Kogatende River crossing in Serengeti National Park went viral, sparking outrage online. But such scenes are hardly new. In the Masai Mara National Reserve (MMNR), it was once common to see a hundred or more vehicles crowding the banks at crossings, engines revving as animals hesitated at the water's edge. The chaos often forced wildebeest back into the jaws of crocodiles or lions, turning a natural drama into a man-made circus.



## **From wilderness to tourism hotspot**

I first came to live at Mara River Camp in 1977, just as Tanzania closed its border with Kenya amid political tensions. With tourism collapsing in the Serengeti, attention shifted to the Mara, already famed as a big-cat haven.

Rinderpest eradication had allowed the Serengeti's wildebeest to swell from 200,000 in the 1950s to 1.4 million by the late 1970s, accompanied by 200,000 zebras. The surge pushed herds further north into the Mara during the long dry season. Word spread of spectacular Mara River crossings where thousands of animals could ford the waters within minutes, leaving hundreds trampled or drowned in their wake.

In 1977, the MMNR hosted just five lodges; today, it has more than 200 camps and lodges offering

5,000 beds. The influx has brought vehicles to every corner of the reserve, all chasing “must-see” sightings—especially cats and crossings. Authorities now regulate access more closely, with rangers patrolling crossing sites and enforcing rules.

The Mara Triangle, a 510 km<sup>2</sup> section west of the river, illustrates what disciplined management can achieve. For 24 years, the Mara Conservancy has reinvested tourism revenue into anti-poaching patrols, cheetah and rhino monitoring, strict off-road policies, and road maintenance—creating one of East Africa's best-run conservation areas.

## **Mounting pressures**

Despite wildebeest numbers still hovering around 1-1.5 million, fewer now reach the Mara. Multiple pressures are to blame: expanding human settlement, erratic rainfall from climate change, overgrazing by illegal livestock incursions, and reduced river flow from deforestation in the Mau Escarpment. Hydropower and dam projects in Kenya and Tanzania could further imperil the river system that sustains the migration.

Meanwhile, costs for visitors keep rising. As of 2023, non-resident adults pay \$100-200 per 12-hour visit to the MMNR in Kenya, while Serengeti in Tanzania entry is \$70 plus a \$60 concession fee per day in peak season—still cheaper overall. With migration viewing available year-round in Tanzania, from southern calving to northern river crossings, the Serengeti now often outshines the Mara. Predictably, its lodge and camp numbers have boomed, raising concerns about repeating Kenya's mistakes.



## **Why Safari Etiquette?**

Frustration with “aggressive tourism” led us to launch Safari Etiquette in 2022 through our Sacred

Nature Initiative, in partnership with Narok County. A viral video that year of dozens of safari vehicles swarming cheetahs in the MMNR underscored the urgency.

The New York Times summed it up: “The Cheetahs Made a Kill. Then the Safari Trucks Swarmed In.”

Driver-guides face pressure to deliver every sighting in a few days, often flouting rules to get closer for photographs. For years, enforcement in the MMNR was lax, with little fear of punishment. Yet rules only work when rangers apply them impartially, without bribery, and back them with real consequences—such as job loss. Tanzanian authorities set a good example after the Kogatende incident, swiftly identifying vehicles and warning guides of disciplinary action.

Safari Etiquette is not about finger-wagging, but about explaining why respectful behaviour matters. Many visitors simply don’t know what is appropriate. A safari is neither a zoo nor a TV documentary—it is real life, and sometimes real death, on the plains.



### **The role of guides**

Kenya still lacks a mandatory national guiding certificate. Tour guides need a licence from the Tourism Regulatory Authority, and the Kenya Professional Safari Guides Association offers voluntary certifications. But inconsistent training remains an issue. Standardised, enforceable qualifications are overdue.

Good guiding is central to conservation-friendly tourism. But even the best guides can struggle against guest demands for close-ups or selfies. Photography today drives much of the pressure: the “selfie epidemic” and social media’s hunger for dramatic images encourage tourists to push

boundaries, sometimes harassing predators with cubs or disrupting a tense river crossing.

### **A richer safari experience**

The Mara-Serengeti is not only about lions and crossings. Its riches include elephants, buffalo, servals, caracals, and over 500 bird species—from Lilac-breasted Rollers to Martial Eagles. A more mindful safari means slowing down, appreciating moments through your own eyes rather than your phone lens.

Visitors themselves have a role in shaping safari culture. If your guide drives off-road illegally, uses a phone during a sighting, or crowds animals, politely insist they stop.

Report misconduct to camp management. Insist on ethical practices, like using red filters for spotlights on night drives to protect nocturnal animals’ vision. And above all, give wildlife and fellow visitors space to breathe.

### **A matter of respect**

Safari etiquette boils down to respect: for animals, guides, other visitors, and the wilderness itself. Without it, East Africa’s greatest spectacle risks being diminished by human behaviour. If we remember that a safari is about more than “getting the shot,” we stand a chance of keeping the magic alive for generations to come.



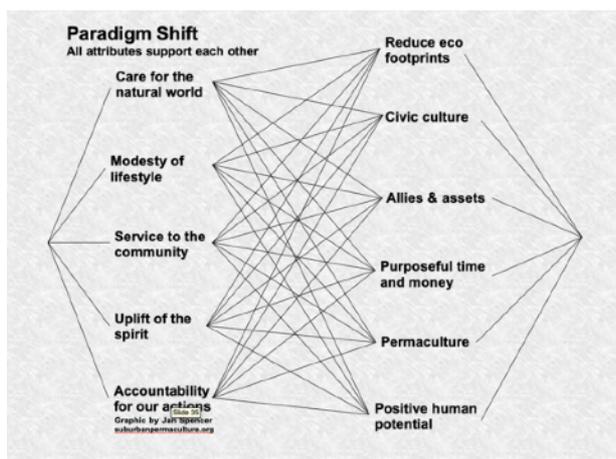
*Jonathan & Angela Scott are the only couple to have won the Overall Award in the prestigious Wildlife Photographer of the Year Competition as individuals. They have written and illustrated 40 books and presented numerous television series, the latest being Animal Planet's Big Cat Tales. In 2021 they founded the Sacred Nature Initiative, a non-profit dedicated to helping reconnect people to nature.*

# A Primer for Paradigm Shift

by Jan Spencer

The Primer For Paradigm Shift was intended to be a hard copy book, but instead, it has turned into a website and radio program. The Primer advocates the purposeful movement towards a society that takes care of its needs within the boundaries of the natural world, a society that places a high value on personal and social uplift and that society would be served by an honest and responsible economic system.

The Primer is based on a thoughtful set of ideals, vision and principles. One of the most important is the “wisdom of the world's great spiritual traditions” - care for the natural world, modesty of lifestyle, service to the community, uplift of the spirit and accountability for our actions. These values transcend history, geography and language. They are not left, right, red or blue. This wisdom calls on consumers to become citizens.

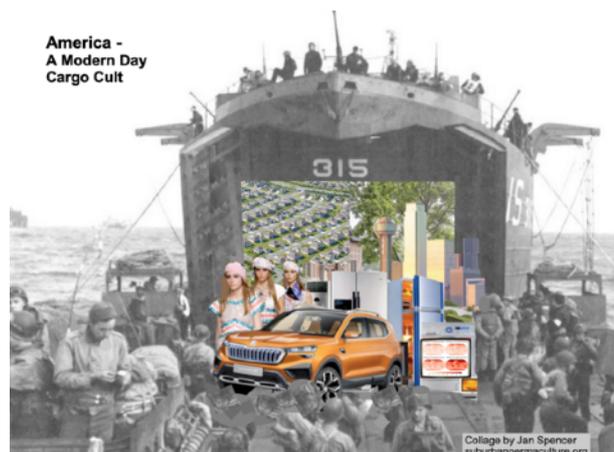


Paradigm shift is not a future utopia, it is here and now for a growing number of social, economic and environmental pioneers. As intentional paradigm shift projects connect and make common cause, the scale, capacity and ambition of transformation can grow and include thousands of existing organizations, networks and initiatives that already have attributes of paradigm shift.

An honest look at the condition of our society and world leads to only one conclusion, capitalism as we know it, is simply incapable of sustainability and social uplift. The consumer culture is highly skilled and depends on turning legitimate needs into oversized wants. We have suburbia instead of sensible places to live, we have cars instead of sensible urban planning, we have fad driven pop

culture dominated by trivial content that wastes untold billions of dollars and hours of valuable time. The System prefers growth and profits over the health and well being of people and planet.

The Primer starts with deconstructing the mythologies of capitalism - the magic hand, efficiency, informed purchase, GDP and American Exceptionalism. The affluence most Americans expect cannot exist without externalizing its costs on people and planet. The prices we pay do not tell an honest story about what we buy. The consumer culture perfectly fits the social engineering vision of Edward Bernays from almost 100 years ago - keep the masses happy with lots of distractions so the owners of the economy can add to their fortunes. We live in a cargo cult.



The Primer describes many familiar products and services that will not make the cut to sustainability.

The Primer describes actions fundamental to paradigm shift starting off with reducing eco footprints. The Primer points to a very educational footprint calculator to assess one's food choices, transportation, housing, recreation and more to learn where and how one can consume less in their own lifestyle.

The Primer explains the principle to “prioritize time and money.” This simple concept is basic to sustainability and uplift. We invest money for what we buy and time in the social realms that advance paradigm shift. This principle applies at any scale. The Primer explains how permaculture, with its people and planet friendly values and ideals, is another powerful tool for paradigm shift.

The “virtuous triangle” graphically shows the relationship between allies, assets and actions. The triangle shows how allies plus actions create more assets. Assets and actions create more allies. Allies and assets lead to actions on behalf of sustainability and uplift.

The Primer describes dozens of examples of paradigm shift in the real world, especially the 25 year transformation of my ¼ acre suburban property. Instead of a fancy kitchen remodel, I prioritized a permaculture makeover. I have gardens front and back. The garage is now a living space and the south side patio is now a 350 square foot passive solar sun room. There is edible landscaping all over and a 6500 gallon rain water system. I built a 400 square foot passive solar ADU and rent three rooms. Literally, thousands of people have visited over the years. The kitchen remains mid 50's retro while I rarely buy fruit or veggies any time of the year.



Another example of real life paradigm shift is Kailash Eco Village in Portland. A run down, drug infested apartment complex 20 years ago has become a blessing, for many reasons, to the neighborhood while there is a waiting list for new residents. The Primer describes empowering young people for healthy lifestyles and community engagement. Paradigm shift will not be free so describing how to pay for the changes, such as the double benefit, receives a lot of attention.

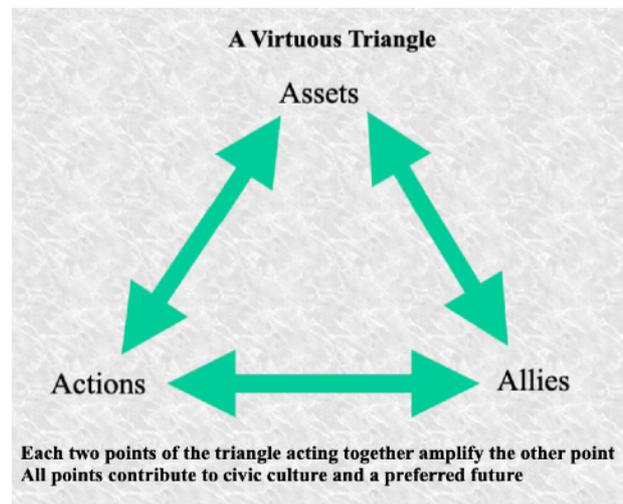
The mainstream society, with all its faults, still provides us with many tools and opportunities for paradigm shift particularly communications and media. Almost every public interest organization with care for social justice, the environment, affordable housing, public health and many more, exists to repair some kind of damage caused by

economic malpractice and over consumption. These organizations are all on the same team, an enormous horizontal Movement in waiting, ready to discover itself, ranging from the League of Women Voters to Occupy Wall Street.

The AARP already advocates healthy food choices and walkable neighborhoods. Imagine their monthly news letter explaining to its 35 million members the historical wrong doing of economic interests that have delivered junk food, cars and countless other problems. Imagine the AARP and thousands of other organizations explaining to their many millions of members the ideals, principles and actions of paradigm shift that support the goals of virtually all those organizations.

Another approach to educating on behalf of sustainability and uplift is for respected civic entities to invite capitalism to a truth and reconciliation process for coming to terms with generations of abuse to people and planet. Capitalism isn't broken, what we see is simply what it does to turn a profit.

Paradigm shift is about consumers becoming citizens. There is no shortage of expertise and finance to create the world we all deserve. Our most important need is a shift in consciousness to best prioritize our personal and collective time and money.



*Jan Spencer lives in Eugene, Oregon. Jan's interests are a convergence of care for the natural world, economics, uplift of the spirit, urban land use and paradigm shift.*

*You can contact him by way of his website, [aprimerforparadigmshift.org](http://aprimerforparadigmshift.org)*

# In Touch With Nature – Marbled Reed Frog

by Robbie Cheadle



*Isimangaliso Wetlands in St Lucia, South Africa. Home to the marbled reed frog.*

This frog is important!  
Tiny little creatures  
only 2.5 to 3.5 centimetres long  
but so very pretty  
their skins marbled  
in gorgeous patterns  
of green, brown, and white  
that change as day  
shifts into dark night  
slender, with large eyes  
on either side of its head  
females are bigger than males  
but males have a yellow throat patch  
used for vocalisation  
to advertise their presence  
and reproductive readiness  
the distinctive evening call  
of the marble reed frog  
signals approaching rainfall

and seasonal change  
they are sensitive  
to environmental change  
so declines in their numbers  
indicate deteriorating habitat conditions  
they are also important  
in controlling insect population  
especially the annoying mosquito  
These frogs must be protected  
from habitat encroachment  
and the global chytrid fungus  
a pathogen affecting amphibian populations  
This frog is important!



*The photographs capture three different marbled reed frogs we saw in the Isimangaliso Wetlands during our January 2026 trip to St Lucia, South Africa.*



# THE ENVIRONMENT AROUND THE BRITISH ISLES

Dr Robert Tansey FLS highlights that the coastline and ecosystems of the British Isles have been constantly reshaped by both human activity and climate change. These changes have led to shifts in the types of plant and animal species present, with some species being replaced by others that are more adaptable to the evolving conditions. This underscores the resilience and adaptability of nature, but also the ongoing loss of species less able to cope with rapid environmental change.

## Introduction

The environment surrounding the British Isles has always been dynamic, with constant changes shaping its landscape and ecosystems. In particular, the coastline has experienced significant transformation over time.

## Coastal Change and Evolution

Throughout history, the coast around the British Isles has never remained static. Since the 1800s, there have been notable alterations to these coastal areas. These changes can be attributed both to human activities and to the ongoing effects of climate change. The combined impact of these factors continues to reshape the region's coastal environment.



*Endangered species: Blue Whale, and R: Scottish Wildcat*

## Shifts in Flora and Fauna

As a result of these environmental changes, the types of plant and animal species found in the area have also shifted. Some species that once thrived in the British Isles have been replaced by others that are more adaptable to the evolving conditions. This ongoing process highlights the resilience and adaptability of nature in response to changing circumstances.

## Key Findings from Recent Research

**Significant Decline in Native Species:** Over half (53%) of native plant species, such as heather and harebell, have declined in Britain since the 1950s. This is largely due to human impacts (agricultural intensification, habitat loss) and climate change. Non-native plants now outnumber native ones, which disrupts ecosystem balance and affects insects and other wildlife dependent on native flora.

**Extinction Risk:** One in six species assessed in Great Britain is now at risk of extinction. Since 1970, the average abundance of wildlife has dropped by 19%, and 16% of all species studied are threatened with being lost from the region. Farmland birds have declined by 58%, and pollinator species distributions have decreased by 18%.

**Mountain and Meadow Plants:** Climate change is a primary cause of decline for mountain plants like alpine lady-fern and snow pearlwort, which rely on late snow cover. Damp meadows have been drained, causing substantial declines in plants such as devil's-bit scabious. Traditional grasslands have been reseeded or over-fertilized, leading to a 62% decline in ancient arable wildflowers.



Invertebrates and Small Mammals: The area occupied by more than 4,900 invertebrates (bees, ladybirds, dragonflies) dropped by 13% on average between 1970 and 2020. Small mammals like mice, voles, and shrews have seen their habitats shrink by 29%.

General Biodiversity Loss: The UK is considered one of the most nature-depleted countries in the world. The abundance of wildlife has declined by 13% since the 1970s, with woodland and farmland birds, pollinating insects, and flowering plants all showing significant decreases.

### **Drivers of Loss**

Climate Change: Rising temperatures, altered weather patterns, and increased frequency of extreme events stress species and ecosystems, leading to biodiversity loss and the spread of invasive pests and pathogens.

Human Activities: Agricultural intensification, habitat degradation, changes in grazing pressure, and unsustainable fishing and forestry practices are major contributors.



*Basking Shark (endangered species)*

# Conference of the Parties (COP)

by **Carola Huttman**

2025 was a momentous year for COP. Its thirtieth event took place in Belém do Pará, Brazil in November of that year. Delegates heralded from almost two hundred countries. Presidents, prime ministers and other world leaders and their representatives were joined by vast entourages of support staff and journalists. Previous locations where COPs have been held range from Berlin (COP1) and Paris (COP21) to Canada (COP11), South Africa (COP 17) and Glasgow, Scotland (COP26), to Egypt (COP28) and Azerbaijan (COP29). It's hard to comprehend the level of duplicity involved in the huge number of flights and thousands of air miles it takes to transport those attending to such far-flung destinations, not to mention the massive amounts of carbon dioxide released into the atmosphere ..... all in the name of debating climate change and how to reduce its harmful effects on our planet.

The initial framework for COP conferences (referred to as the UNFCCC or the Convention) was formed in 1992, but the germ of its concept occurred much earlier. Recognising the serious impact of human activity, Sweden had already called for an international conference to be set up back in 1968. This prompted the United Nations to initiate various studies on the state of the environment. Four years later these efforts culminated in the first United Nations Conference on the Human Environment being held in Stockholm. This, in turn, led to the establishment of the United Nations Environment Programme (UNEP).

The Programme's creation in 1972 was a landmark moment in the development of international environmental law. Essentially, the UNFCCC is the foundation for multilateral action to address climate change and its influence on humanity and the Earth's ecosystems.

The first formal COP conference was held in Berlin, in 1995. Although COP discussions are wide-ranging, and often difficult, each conference has a specific theme as its focal point. Some COPs, yielding more concrete results during the fortnight of talks than others, have therefore gone down in COP history as particularly significant events.

Primary amongst these are the so-called Kyoto Protocol adopted at COP3 in Japan in 1997. It urged developed countries to commit to reaching specific carbon emission targets. Thirty six industrialised nations and those within the European Union were now obligated to collectively reduce their emissions over the next thirty years to five percent below those of 1990.

Another significant result was achieved at COP15, in 2021 with the Paris Agreement. This advocated all countries to unify in a greater shared effort to combat climate change, keeping the rise in global average temperatures to well below 2°C of pre-industrial levels and aiming to bring them down to 1.5°C. Unlike the Kyoto Protocol, the Paris Agreement applies to all Parties, requiring each to define and communicate its own nationally determined contribution (NDC) and to update it every five years.

COP28, held in Dubai, in the United Arab Emirates, saw the largest number of delegates attending. Amongst its 85,000 participants were more than 150 Heads of State and Government as well as representatives from national delegations, civil society, business, Indigenous Peoples, youth forums, philanthropic and international organisations. Discussions revealed that progress in limiting climate change was too slow – from reducing greenhouse gas emissions, to strengthening resilience to a changing climate and bringing financial and technological support to vulnerable regions. Countries were beseeched to accelerate action across all areas by 2030. This included a call on governments to speed up the transition away from fossil fuels to renewable sources of energy, such as wind, solar and tidal power in their next round of climate commitments.

COP26, held in Glasgow, in Scotland in 2026 notably had young people at its centre of attention. Young activists travelled from all over the world to attend. Led by the Swedish climate change activist, Greta Thunberg, they went on protests through the city's streets and took to the stage with impassioned pleas to the older generations to make their world a better place by demonstrating their serious commitment to keeping temperatures to below 1.5°C of pre-industrial levels.

The focus during COP29, held in Baku, in the Republic of Azerbaijan in 2024, was on finance and increasing support for developing countries in order to protect vulnerable communities from climate-related catastrophes such as flooding, wildfires and the loss of harvests and other food sources.

Several COPs were deemed important in acting as cornerstones to what had been achieved at past conferences and formed binding assurances to progress those accords. For example, COP11, held in Montreal in 2005. Here delegates considered and approved mechanisms for ensuring the continuing implementation of the Kyoto Protocol, such as creating carbon markets and the development of a clean air strategy. It culminated in the Montreal Declaration, which reaffirmed the global determination to limit climate change.

And what of COP30, held in Brazil, in November 2025? Like COP11, its main purpose was one of reassessment, moving from pledges to action. Priorities included reinforcing multilateralism under the United Nations Framework Convention on Climate Change (UNFCCC), connecting climate action to real-world impacts and accelerating delivery of the Paris Agreement.

On the agenda for COP31 to be held in Antalya, one of Turkey's largest cities, in 2026 is what is termed the Global Stocktake (GST). These discourses will set new financial targets for countries in the developed world, known as the New Collective Quantified Goal (NCQG). The ambition, then, is to move countries from just talking about climate action to actively putting those plans into practice all over the world.

Personally, I hope that COP organisers will eventually recognise the hypocrisy of flying delegates thousands of miles across the world to exotic destinations, which ordinary people can ill afford, in a bid to address the damaging effects of climate change. Modern technology allows conferences to be held online from delegates' offices, kitchen tables or even their bedrooms. Let's use it and by doing so take better care of our planet.

# Game Farms and their Impact

by **Esther Chilton**

I've never liked the idea of game farms, where pheasants and partridges are bred and kept in appalling conditions, only to be released into the wild and shot down – as so called 'sport'. In Britain, as many as 40-60 million pheasants and partridges are purposely bred each year by the shooting industry.

These beautiful birds don't have the chance to live as they naturally should. For example, in the wild, female pheasants live in small groups with one male to protect them. These birds are extremely adaptable, often roosting in trees, making a nest or scraping in vegetation during the breeding season.

Partridges, on the hand, choose a mate and then form a monogamous bond. They stay with their chosen partner for life. Once bonded, the male will then choose a nesting site usually near a field's edge so it has a good all-round view.



But it's not only the lives of these wonderful birds that the industry is depriving of living naturally, what they're doing is also harmful to the environment in the following ways:

- When the birds are released, their weight is greater than that of all the wild birds in Britain. They trample native plants and also compete with other animals for food, which has a devastating impact on wildlife and ecosystems.
- The lead ammunition used amounts to more than 7000 tonnes a year. This enters the environment, poisoning wildlife.
- Bird flu is a major issue, with the potential danger of birds from these farms spreading the virus to wild birds when they're released.
- Gamekeepers have been known to illegally kill other animals they consider a threat. This includes protected birds of prey. Those crimes against birds which have been recorded mainly take place on land used for shooting.

In this day and age, it seems barbaric that people will pay money to shoot innocent birds.

*Editor's note: And that millions of birds are bred and imported into the British Isles just to be shot.*

# THE LOST CONTINENT

by DR ROBERT TANSEY FLS

The continent of Antarctica, located at the southernmost point of the Earth, is one of the most expansive and remote landmasses on our planet. Over the years, it has drawn significant attention from researchers and explorers eager to uncover its secrets. This immense continent, covered almost entirely by ice, has been a focal point for scientific studies due to its unique climate, geography, and ecosystems.



Throughout history, Antarctica has also been a source of international discussion, particularly regarding territorial claims. Nations have engaged in ongoing debates and arguments over ownership and the rights to conduct activities within its borders. These disputes have made Antarctica not only a subject of scientific fascination but also a point of diplomatic contention among countries around the world.

Over millions of years, Antarctica has been home to a variety of animals and plants. The continent's long history saw different kinds of creatures inhabiting its land, adapting to changing climates and environments. Diverse animal life once thrived across Antarctica, while an array of plant species grew and evolved throughout its existence.

Fossil discoveries suggest that Antarctica was once covered with lush forests, including ancient tree species and dense undergrowth. Alongside the prehistoric ferns, palaeontologists have uncovered remains of mosses, conifers, and cycads, providing a glimpse into a world where vegetation flourished in a much milder climate. Animal fossils reveal that dinosaurs, early mammals, and a variety of marine reptiles lived on and around the continent, adapting to its evolving landscape. These findings help scientists understand how life on Antarctica changed as the continent gradually shifted to its current icy state, offering invaluable insights into the dynamic history of Earth's southernmost region.



*Glossopteris Fossil Leaf from Antarctica*

Well, what do we know of the animals that lived in those gone by times was it as varied as the scene depicted above, or was is different? We can only base our thoughts on this subject on scientific evidence.



*Could this be what Antarctica looked like in the past?*

## **What Fossil Discoveries Reveal About Antarctica's Climate History**

### 1. Fossilized Plants and Forests

**Glossopteris Fossil Leaves and Ancient Forests:** Fossils of Glossopteris leaves and other prehistoric plants found in Antarctica show that the continent was once covered by lush forests. These discoveries indicate that Antarctica had a much warmer, humid climate in the distant past, supporting dense vegetation.

**Preserved Root Systems:** In 2020, scientists discovered preserved root systems from an ancient forest, estimated to be around 90 million years old. This suggests that during the mid-Cretaceous period, Antarctica had a warm, humid climate, even though it was near the South Pole.

### 2. Animal Fossils

**Dinosaurs, Marine Reptiles, and Giant Amphibians:** Fossils of dinosaurs, marine reptiles (like plesiosaurs and mosasaurs), and giant amphibians have been found. These animals thrived in Antarctica's once-mild climate, further confirming that the continent was not always frozen.

### 3. Microfossils and Sediment Cores

**Microfossils and Organic Matter:** Deep drilling beneath the ice has uncovered sediment layers containing microfossils, plant remains, and organic matter dating back 34 million years. These finds provide direct evidence of a vibrant, warmer Antarctica before global cooling blanketed it in ice.

**Ice Cores:** Ancient ice cores extracted from East Antarctica contain snapshots of Earth's climatic past, documenting temperatures and precipitation over the last 1.5 million years. These cores help scientists understand why the climate goes through warm and cold phases.

### 4. Geological Features and Climate Shifts

**Transantarctic Mountains:** The ancient Transantarctic Mountains, concealed beneath the ice, have undergone cycles of erosion and uplift. Rock samples from these mountains reveal a history of mountain-building events closely tied to tectonic movements and major glaciation events approximately 300 million years ago.

Rapid Melting Events: Sediment records show that West Antarctica's ice sheet has melted and retreated rapidly during past warming periods, such as the Pliocene Epoch (5.3 to 2.6 million years ago). These events led to dramatic changes in the continent's geology and ecosystems.

### **Why These Discoveries Matter**

Understanding Climate Transitions: Fossil and geological evidence from Antarctica provides a rare snapshot of Earth's transition from a greenhouse (warm) to an icehouse (cold) climate. This helps scientists understand how ecosystems collapsed during abrupt cooling and what pre-glacial Antarctica looked like.

Predicting Future Changes: Studying Antarctica's climate history is crucial for predicting how current global warming might affect the continent and the planet. The frozen record serves as a blueprint for understanding and potentially preventing future climate collapses.

In summary: Fossil discoveries in Antarctica reveal that the continent was once warm and teeming with life. These findings offer vital clues about ancient climate shifts, the onset of glaciation, and how life adapted to extreme changes—helping scientists predict future climate scenarios. Below one of the many animals the Elamosaur a plant eater, has been found to have existed in Antarctica in the past.



*Elamosaur one of the many animals that lived in Antarctica*

# Why We Fear the Rain

## Rethinking Floods as a Water Security Opportunity

by Obed Katukula

Every rainy season in Lusaka tells the same story. Heavy downpours bring the city to a standstill. Roads become impassable, markets flood, and movement becomes a challenge. Many of us find ourselves stranded seeking shelter in shops, marketplaces, or any nearby refuge waiting for the storm to subside.

For many residents, the rains are seen as a burden rather than a blessing. Complaints echo through communities: *“This rain only brings problems.”* Daily routines are disrupted. Businesses slow down. Some people must even pay a few Kwacha to be helped across flooded paths. Tragically, lives are sometimes lost when individuals are swept away in poorly managed drainage systems.

When the waters eventually recede and roads become usable again, relief replaces frustration. Yet only weeks later, headlines shift. The city begins to grapple with water shortages. Farmers struggle to irrigate crops. Maintaining green spaces becomes difficult. Once again, water or the lack of it becomes a crisis.

This recurring pattern forces us to ask an important question: Is rain truly a curse, or are we failing to harness an opportunity?

Across parts of North Africa, governments, NGOs, and communities are collaborating on ambitious environmental initiatives such as large-scale tree planting projects to combat desertification and prevent the Sahara from advancing southward. These efforts demonstrate how environmental challenges can be transformed into long-term solutions through coordinated planning and investment.

Here in Zambia, we are fortunate to possess rich biodiversity and favourable climatic conditions. Instead of viewing floods solely as disasters, we can

reimagine them as opportunities for structured rainwater harvesting and sustainable water management.

Strategic water harvesting systems could transform seasonal floods into reliable water reserves. Stored rainwater can support:

- Urban greening initiatives
- Sustainable fish farming
- Livestock production
- Horticulture and small-scale agriculture
- Community based irrigation schemes

Such initiatives would not only enhance water security but also create livelihoods, improve nutrition, and strengthen food security across Lusaka.

The solution lies in proactive urban planning and community participation. Local authorities must enforce stronger environmental regulations and integrate water harvesting systems into settlement planning. Designated spaces within residential areas, along roadsides, and in community zones can be repurposed for productive water use. We must move beyond relying solely on large farm blocks and instead maximize available urban spaces. Flood management and water harvesting are not merely environmental concerns, they are economic and social imperatives. With discipline, collaboration, and forward-thinking policies, we can convert seasonal destruction into sustainable development.

It is time to stop fearing the rain and start planning for it. The water that disrupts us today could sustain us tomorrow.



# When did Nature become so Fake?

asks Steve Shelley

The venue for our Christmas Dinner was beautifully decorated. Sprays of green leaves, holly berries, aromas of cinnamon, cascades of wisteria flowers. But wait a minute, wisteria can't be in season, can it? Well, seasons don't matter when it's all plastic.

These things, not plants, are utterly realistic but totally and utterly fake. Everywhere you go, these days. Hotels, restaurants, AirBnbs, all full of great looking, fake, plants.

I grew up in Oak Tree Avenue but it never occurred to me at the time that the only oak trees in the vicinity were those they cut down to make room for our house.

There's a new build housing estate near us here in rural North Nottinghamshire called 'Osprey View'. I don't know if the houses come with fitted telescopes but the nearest ospreys are a good hundred miles away at Rutland Water.

Even gardens, when you think about it, are merely an imitation of nature that's been banished to the periphery. Our own Sherwood Forest, the county's pride and joy and once a vast expanse, is now just a remnant patch encircled by old mine workings, farmers' fields, conifer plantations, and housing estates. In any case, the word 'forest' originally implied someone's hunting estate, not the woodlands we fondly imagine.

We've heard about fake truth, virtual reality and artificial intelligence, but plastic nature? England is reckoned to be one of the most 'nature-depleted' countries, but to judge by the ubiquitous Chinese-made greenery in pubs, shops and homes, you'd think it was alive and well. It isn't. Replacing nature's bounty with chemical derivatives doesn't sound like a strategy that will end well. Micro-plastics in the blood and brain is less appealing than natural compounds.

It made me wonder when all this started. When did we give up on nature? What would be the indicators? The invention of plastics might be one of them. Or fossil fuels, or the industrial revolution.

But I fear it goes much further than that. It may seem odd but my research into the ancient neolithic period may reveal some answers. I think it's all to do with the start of food production, settling into cities and population growth. And that can be dated reasonably precisely.

This is not the place for a full explanation – there's a film and a book I'm working on that will do that

in due course – but 11,850 years ago, a comet strike triggered a series of catastrophes which not only destroyed much of Earth's environment and drove many of its inhabitants to extinction, but plunged the planet and the survivors into a new ice age. It would be reasonable to surmise that this event, this series of

cataclysmic events often referred to as the 'Younger Dryas', persuaded people that nature, the universe and its bounty were not to be relied upon. In fact, they could be terrifyingly destructive.

In spite of our earlier ability to feed ourselves plentifully through foraging and hunting, this would no longer be such a simple proposition. The story gets climatically complex, but once the weather improved, a milder period promoted the growth of what were to become domesticated seeds and animals. Cause and effect is not clear, but at the same time, people gathered together into settlements. I guess a larger number of mouths to feed demanded a more consistent and reliable production process than the seasonal opportunism that had previously prevailed.

Archaeological sites such as Abu Hureya in Syria and Çayönü Tepesi in Turkey confirm this transition took place about two thousand years after the comet strike, say 9-10,000 years ago. You've only got to look at a map or fly over pretty much any part of the world to see for yourself just how much land has been traded since then for agriculture and for human settlement.

In all fairness, there is a problem with raw nature in that it's quite hard to live amongst it: think dirt,



mould, stings, fangs, jaws and horns, let alone the weather.

But with climate and nature off the political agenda for the moment, it's important to note that adverse environmental impacts have been commonplace throughout history. Politicians are blinkered: you can't legislate away catastrophe, any better than did our ancestors with their prayers and sacrifices.

This year's World Economic Forum's Risk Report lists as its top three concerns for the next decade:

- extreme weather events
- biodiversity loss and ecosystem collapse
- critical change to Earth systems.

Does this mean that our spiral towards doom is so rooted in the past that it's inevitable for the future too? I'll leave you to reason your way through that one.

But next time you buy plastic plants, however realistic, know that you're just hastening our trajectory.



“They paved paradise” and planted plastic seeds.