



# Nature – What's in it For You?

This is a story about the life-support systems that we all need to keep us alive, that scientists tell us are on the edge of ruin - and how we can do something about it.

Based on the key issues raised at the International Union for Conservation of Nature (IUCN) UK Conference "Nature – What's in it For Me?", 19–20 April 2010 in Edinburgh.

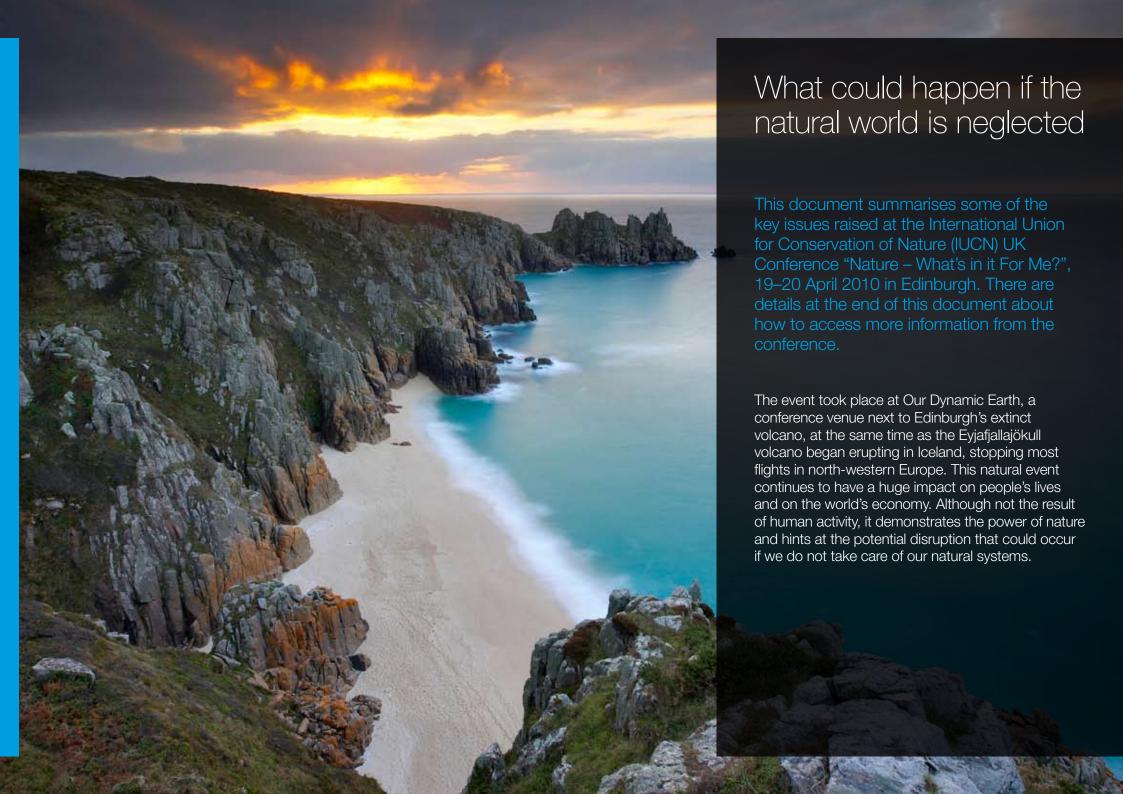
### Our life-support system

Nature may look nice, but there is more to it than just its appearance. Nature provides the life-support system for humans. Without it, we cannot survive. This is also true for businesses, as all the raw materials needed for their products, including vital items for society such as medicines, come directly or indirectly from nature. It should therefore be clear that conservation of nature is also a critical issue for all businesses, politicians and voters too.

The challenge we face is that species and their environments around the world are being damaged beyond repair, thus threatening the ecosystems that keep us alive. It is a serious issue. Two-thirds of the production capacity of the world's ecosystems has been destroyed. Humans have removed over half of the world's forests, and only 7% of the original Brazilian Atlantic temperate rainforest remains. Even in the UK's Overseas Territories, the habitat losses for the rainforest and the much rarer tropical dry forest have been severe. Our marine systems in particular are in critical danger.

There is a solution, but it will require us all to work together to restore what we can of our natural world for the future. The following pages tell the story of why nature is so important to us, and how we can help to conserve and enhance it.





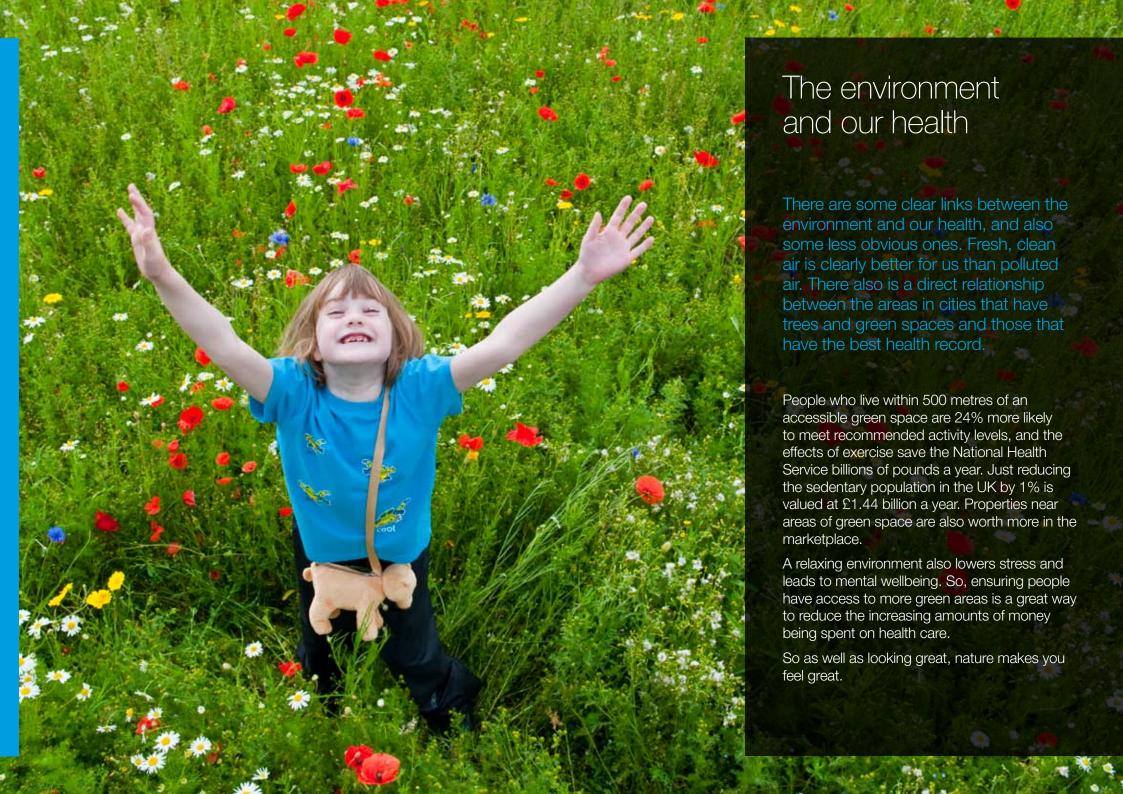


Nature gives us air to breathe, water to drink, food to eat and fuel to keep us warm. This system has worked for human societies for thousands of years. However, the world's population is currently growing at a rate of five people every two seconds. In the USA, 4.6% of the world's population consumes 40% of the world's resources – and many other growing economies around the world see this way of life as one to aspire to.

Population growth combined with damaging development currently results in environmental degradation and species driven to extinction. On a daily basis, there are more people to provide resources for, and more resources are needed to satisfy people's aspirations for a better life. So, it would seem obvious that we need to sustain nature, from where all our resources come. But we are not doing a very good job.

Water is just one of many examples of resources under pressure. Lake Chad in Africa was full of water in 1963; today, almost all that water has gone. It is not just global water shortages though; even in south-eastern England, there is insufficient water for its growing population.





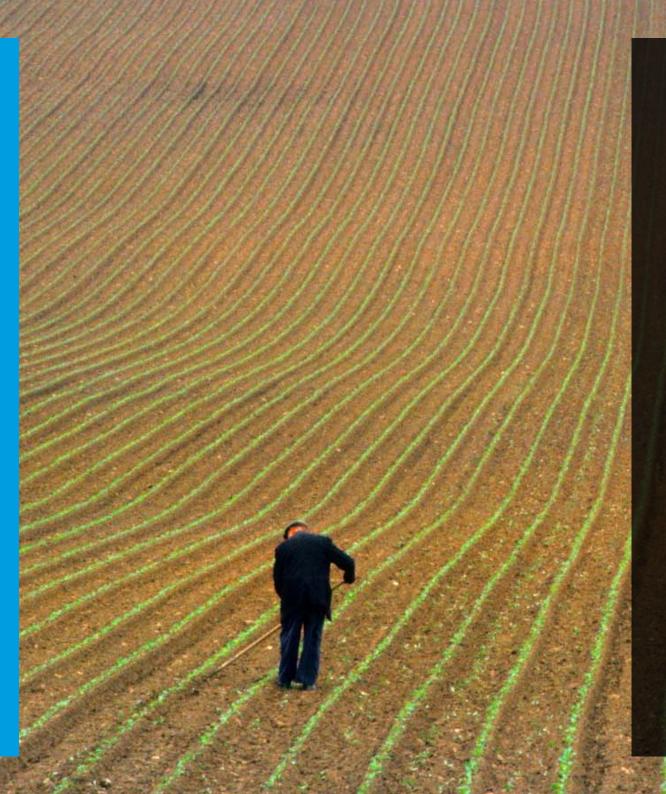
## The environment and climate change

In recent years, there has been much media focus on climate change, an important environmental issue but not the only one, despite its wide-reaching effects on us all. Climate change predictions show what can happen when we do not think enough about what we are doing to our life-support systems.

The natural environment can be very effective in helping to prevent many of the impacts of climate change. For instance, systems such as forests, peatlands and the oceans capture carbon dioxide. Trees and other elements of "green infrastructure", including green roofs, can assist with shading and cooling in urban areas, where the temperature can be up to 4°C higher than in rural areas. The natural environment, in the form of peatlands and other natural wetlands, can help to prevent flooding, and coastal mangroves can help to deal with tsunamis and storm surges.

In the UK, environmental stewardship is estimated to deliver savings of 3.46 million tonnes of carbon dioxide equivalent a year, which is valued at around  $\mathfrak{L}1.25$  billion. The 2006 Stern Review, a report commissioned by the UK Government on the economics of climate change, highlighted the huge potential costs involved. Using nature to help regulate climate and to combat the impacts of climate change could be a very cost-effective solution.





## Putting a price on nature

Despite the relentless focus politicians and businesses have on the economy rather than the environment, it is a fact that the economy is not separate from the environment; it is reliant upon it. Unless we act now, our society will not realise the value of nature until it is too late.

Much work is currently under way to put a price on the value of nature. One such study, The Economics of Ecosystems and Biodiversity (TEEB) report, will outline the growing costs of biodiversity loss and ecosystem degradation, the risks these pose to business, and the potential opportunities provided by nature-related activities. The findings so far suggest that biodiversity loss and ecosystem degradation threaten even greater economic losses than climate change.

A separate study by the UN-backed Principles for Responsible Investment initiative and the United Nations Environment Programme found that more than one-third of the profits of the world's biggest companies would be wiped out if they were to be held financially accountable for the cost of pollution and other damage imposed upon the natural environment. The estimated combined damage in 2008 was costed at £1.4 trillion. However, just as climate change has stimulated new technologies, business models and markets, so biodiversity conservation and ecosystem restoration offer opportunities for investors and entrepreneurs alike.

Despite all this, valuing nature is not just about money; making a contribution to people's physical and spiritual wellbeing, and their quality of life, is not something on which a precise monetary value can be placed.

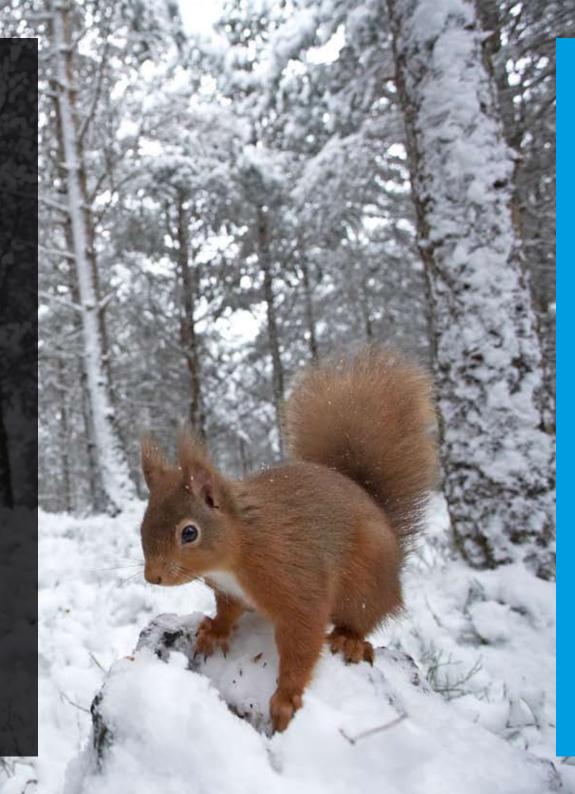
## So what can we do to prevent the loss of nature?

Although the story so far shows that there are a lot of serious and urgent challenges, there is also some good news. With better-informed management, ecosystems could be saved and restored. Many species have been brought back from the brink of extinction by targeted conservation action. Much work is being done to restore damaged environments that support a diverse range of species. In UK Overseas Territories, for example, dedicated action has prevented the world extinction of the Bermuda petrel and the Grand Cayman blue iguana, both of which were previously reduced to a few individuals.

Areas that are protected, such as national parks or other green spaces, help to conserve species and their habitats, and offer people aesthetically pleasing landscapes and places for exercise, leisure and spiritual revitalisation as well as contributing to the economy. For example, the UK has created marine protected areas and the potential benefits of these alone are valued at £7–19 billion.

Conservation works best when it is engaging all sectors of society, as people, their livelihoods and the environment are inextricably linked. The work that has been done to try to address the environmental impacts of unsustainable palm oil production shows that if people work together, progress on sustainability can be made. There is a similar story with fisheries off the coast of Scotland. The Assam Haathi Project, which is funded by Chester Zoo, shows that by working with local communities, human–elephant conflict in India can be alleviated. People, along with their individual social, cultural and economic situations around the world, need to be part of any environmental conservation process.

In today's society, where people increasingly live in urban areas and are remote from the natural environment, encouraging and enabling the participation of people in nature helps them to connect with it and value it.





## We're all in this together now...

The International Union for Conservation of Nature (IUCN) is working with its members and partners to ensure that animals, plants and their environments are restored in order to deliver essential human benefits.

The environment is a responsibility for us all, so IUCN is seeking to establish partnerships with businesses and other organisations in order to be more effective in preserving our essential life-support systems.

Some of the world's leading businesses and other institutions are already working with IUCN to help bring the Earth's life-support systems back from the brink of disaster. Do you want to help make a difference?

If so, 2010 is a good year to do it, as it is the International Year of Biodiversity.

If you are involved in a business, an academic institution, the public sector, a government or non-governmental organisation and you would like to work with IUCN to protect our life-support system for the future, please email the IUCN UK National Committee Secretariat at iucn@rzss.org.uk.

If you would like to find out more and meet like-minded people, come along to our next conference: "Greening the World Economy", in London in November 2010. More details will be available soon at <a href="https://www.iucn-uk.org">www.iucn-uk.org</a>.

### About IUCN UK

IUCN UK is the National Committee of the International Union for Conservation of Nature in the United Kingdom and its Overseas Territories and Crown Dependencies.

It is part of the world's largest network of environmental experts.

It is a coalition of the willing: a broad community made up of scientists, planners, communicators and many other concerned human beings with knowledge and skills to share.

What makes IUCN UK unique is its membership: government and non-governmental organisations, and individuals working to further the conservation of nature – together.

Helping public, private, voluntary, scientific and academic sector relationships to work can be challenging, but it is important work. We are always looking for synergy.

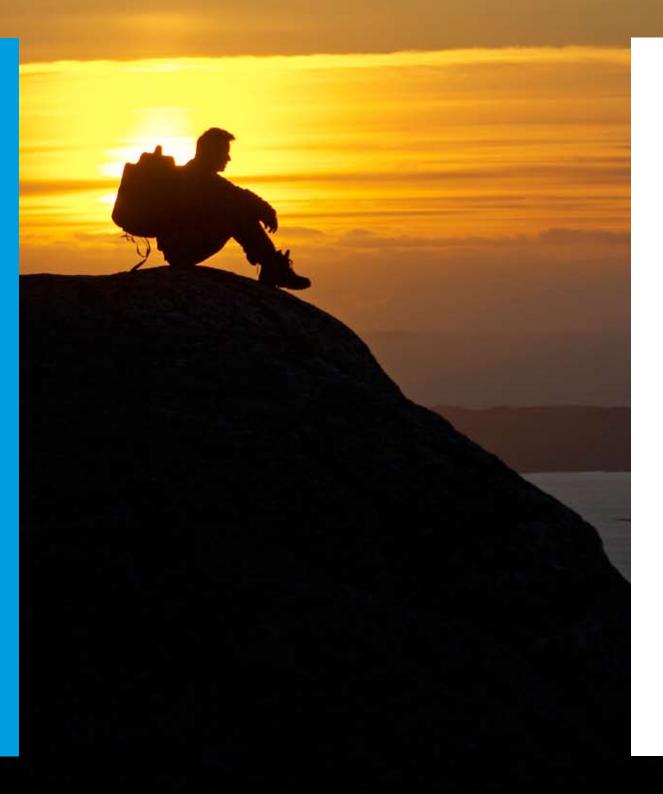
We are independent but interdependent.

We are diverse but united in our commitment to nature conservation.

And, because we are well connected to the global stage, we can use our influence to raise the issues that matter to all of us at the highest levels of decision making on the planet.

For more information on IUCN activity and membership opportunities, please see <a href="https://www.iucn-uk.org">www.iucn-uk.org</a> and <a href="https://www.iucn.org">www.iucn.org</a>.







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To become a partner in this epic communication initiative, visit: <a href="https://www.2020v.org">www.2020v.org</a>



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## Day 1 Past and present day

#### Welcome

The global context and lessons learned from UK good practice, leadership and experience



Welcome

Chris Mahon, Conference Coordinator and Chair of IUCN UK



Welcome from IUCN UK Secretariat, conference host organisation

Donald Emslie, Chairman, Royal Zoological Society of Scotland



Ministerial welcome

Roseanna Cunningham MSP, Minister for Environment, Scottish Government



Nature and climate change

Paul Gray, Director-General Rural Affairs, Environment and Services, The Scottish Government



A new vision for biodiversity conservation: IUCN's position on a new (post-2010) framework Julia Marton-Lefèvre, Director General, IUCN

Global connections 1



Restoring the world's forests – For people and nature Tim Rollinson, Director General, Forestry Commission



Ecosystem well-being and human health Professor Sue Welburn, Global Health Academy, Edinburgh University



Providing an evidence base for the UK Marine and Coastal Access Bill – A case study for The Economics of Ecosystems and Biodiversity (TEEB) Report

Dr Salman Hussain, Coordinator TEEB Quantitative Assessment, Scottish Agricultural College, Edinburgh

#### Global connections 2



Session Chair: Dr Debbie Pain, Director of Conservation, Wildfowl and Wetlands Trust



Towards effective governance of wetland biodiversity and livelihoods – Developed and developing country perspectives

Professor Geoffrey Gooch, Professor of Political Science, Linköping University, Sweden



Professor Chris Spray, Chair of Water Science and Policy, UNESCO Centre for Water Law, Policy and Science, Dundee University



Outreach – The contribution of British zoos and aquaria to ecosystem health and sustainable livelihoods Tammy Davies, Research Assistant to the Assam Haathi Project, Chester Zoo



Ecosystem management for human well-being in the UK Overseas Territories and Crown Dependencies Dr Mike Pienkowski, Honorary Executive Director, UK Overseas Territories Conservation Forum



#### Delivering a healthy natural environment – Embedding an ecosystem approach

Robert Bradburne, Head of the Ecosystems Approach Team, Natural Environment Strategic Unit, Defra

UK domestic good practice and experience 1



Session Chair: Dr David Parker, Director Science, Countryside Council for Wales



An ecosystem approach – Contributing to human well-being and quality of life in Scotland lan Jardine, Chief Executive, Scotlish Natural Heritage



The Scottish Conservation Credits Scheme – Moving fisheries management towards conservation Richard Dixon, Head of WWF Scotland



Delivering ecosystem services in England Helen Phillips, Chief Executive, Natural England



Realising the benefits

Roger Thomas, Chief Executive, Countryside Council for Wales

#### UK good practice and experience 2



Session Chair: Diana Pound, dialogue matters



Managing wetlands for wildlife and people

Tricia Henton, Director of Environment and Business, Environment Agency



Investing in peatlands

Clifton Bain, Director, IUCN UK Peatland Project



Delivering well-being and local economic benefits through investing in biodiversity

Stuart Housden, Director, RSPB Scotland



Performance through partnership

Delia Shannon, Biodiversity and Community Engagement Manager, Aggregate Industries



Paul Wilkinson, Head of Living Landscapes, The Wildlife Trusts



#### Communicating future messages

Lucy Vincent, Director of Marketing, Education and Communications, Wildfowl and Wetlands Trust

## Day 2 Looking ahead to the future



Session Chair: Dr Deborah Long, Conservation Manager, Plantlife Scotland



The European dimension
Hans Friederich, IUCN Acting Regional Director for Pan-Europe



Oatcakes and orang-utans – WWF's work with a global industry to promote sustainable palm oil Adam Harrison, Food and Agriculture Policy Officer, WWF



Urban environments – City cooling and ecosystem services from green infrastructure Paul Nolan, Director of The Mersey Forest, Community Forests Northwest



Evidence, advocacy and delivery in repositioning the environment for sustainable futures Will Williams, Programme Director, Natural Economy Northwest



The ecosystems approach in practice Diana Pound, dialogue matters



Workshops
Coordinated by members of five IUCN commissions

#### Protected areas

Professor Roger Crofts, World Commission on Protected Areas

#### Education and communication

Keith Wheeler, Chair, IUCN Commission on Education and Communication (CEC) and CEC global panel of experts

#### Ecosystem management

Don Macintosh, Coordinator, Mangroves for the Future, and Stuart Brooks, Chief Executive, John Muir Trust

#### Species survival – Economic and social policy

Robert Kenward, Sustainable Use Specialist Group

#### Species survival

Stephan Helfer, Royal Botanic Gardens Edinburgh



Feedback from workshops Session Chair: Karen Wright, Scottish Natural Heritage



Closing remarks
Keith Wheeler, Chair, CEC