

TONY JUNIPER

"This extraordinary book tells a powerful story that all people need to understand: Humanity needs nature to thrive. It will open your eyes to unseen connections that shape our lives and determine our wellbeing."

PETER SELIGMANN, CHAIRMAN AND CEO, CONSERVATION INTERNATIONAL



WHAT HAS NATURE EVER DONE FOR US?

HOW MONEY REALLY DOES GROW ON TREES

Foreword by HRH The Prince of Wales



What Has Nature Ever Done for Us?





“This book should be on the essential reading list at schools. Without understanding the essence of life – and this is a fantastically modern romp through it – how can our children be expected to make the right decisions? If we ever needed a book to remind us that we are part of nature, not separate from it, this is it.”

Stephanie Hilborne OBE, Chief Executive, The Wildlife Trusts

Sealed World

**Indispensable
Dirt**

Life from Light

Eco-innovation

The Pollinators

Ground Control

Liquid Assets

Sunken Billions

Ocean Planet

Insurance

**Natural Health
Service**

False Economy?





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CONTENTS

FOREWORD	HRH The Prince of Wales	viii
PROLOGUE	Sealed World	1
CHAPTER 1	Indispensable Dirt	25
CHAPTER 2	Life from Light	49
CHAPTER 3	Eco-innovation	75
CHAPTER 4	The Pollinators	101
CHAPTER 5	Ground Control	127
CHAPTER 6	Liquid Assets	149
CHAPTER 7	Sunken Billions	179
CHAPTER 8	Ocean Planet	201
CHAPTER 9	Insurance	217
CHAPTER 10	Natural Health Service	241
CHAPTER 11	False Economy?	263
	ACKNOWLEDGEMENTS	293
	INDEX	297



FOREWORD

WHAT HAS NATURE EVER DONE FOR US?

ONE OF THE GRAVEST misconceptions of the modern age, and one which has concerned me for more years than I care to remember, is the presumption that Nature can be taken for granted and her needs ignored. There are some who seem to think that only when times are good should we afford the cost of nurturing the natural environment. There are plenty more, I am afraid, who see the process of protecting natural systems as the sort of cost that should be avoided altogether, simply because it actively interferes with development, job creation and economic growth.

This prevailing attitude could not be further from the truth. Nature is, in fact, the source and very basis of our welfare and

economic prosperity. For me, this is so self-evident as to seem ridiculous even to say it. But as countries struggle to meet the enormous economic challenges they face, the biggest one of all remains largely hidden from view.

As you will discover in this book, the services and countless benefits to the human economy that come from Nature have an estimated value every year of around double the global Gross Domestic Product, and yet this colossal contribution to human wellbeing is hardly ever mentioned when countries consider how to create future growth. As I have long been trying to point out, this situation cannot remain the case for very much longer. We are reaching a critical turning point when humankind has to realize that people and the human economy are both embedded within Nature's systems and benevolence.

To some extent, this awareness is slowly starting to gain ground in the mainstream of our collective thinking. In part, this is the result of recent scientific studies and discoveries which are being translated into many inspiring examples of practical action. Our dependence on Nature is also slowly being reflected more confidently in those economic policies which enable people to achieve a better balance between keeping Nature's systems intact and creating economic development that results in more jobs. But if we are to deepen this commitment to Nature's needs, it is paramount that we adopt a different mind-set; one that veers away from the focus that has dominated the past half century or so. Essentially, we have to become far more joined-up in our thinking and behavior.

For example, the so-called "Green Revolution" which began in agriculture during the 1960s and quickly enabled global food production to expand and keep pace with the accelerating growth in population has also, among other things, caused the dangerous depletion of freshwater around the world, made a huge contribution to climate change, caused a massive loss of biodiversity and

damaged soils worldwide. Biodiversity is absolutely crucial. You cannot simplify Nature's system and expect it to carry on operating in the way it did before. There is nothing in Nature's elaborate system which is not necessary, so to take one participant out of the dance leads to the dance breaking down and, sooner or later, this will have a serious impact on the state of human health. This is why these costs have to be taken into account if we are to see what we do in its proper context, and then an approach to food production that avoids these disastrous side effects has to take its place, otherwise we are lost. It is far too easy to believe what we see at first glance – that is, that there are huge economic benefits if we use modern farming techniques and that no alternative which does not have efficiency and profit as its priorities can possibly replace it. But if we stand back, the picture quickly looks a lot less positive. In fact, it looks frighteningly bleak because the predominant approach is effectively cannibalizing its own future by degrading the natural systems it absolutely depends upon.

The same picture emerges if you look at the way we regard the economic benefits derived from destroying the world's tropical rainforests. The soils and minerals that lie beneath the forest and the timber that comes from the trees certainly all have tremendous market values, but what about the huge role they play in soaking up the vast quantities of carbon dioxide produced by power stations, factories, cars and planes? It is a natural service which has recently been calculated to be worth literally trillions of dollars. And remember, they are "rain" forests. Take the forests out of the equation and you very quickly affect how much rain falls from the skies – which, of course, has very serious implications for our ability to generate power and produce food. And yet, we conclude that the forests are worth more to us dead than they are alive! This is an insane example

of the kind of short-termism that dominates the present economic world view which, by definition, is obviously not going to help us succeed as a species in the long term. Sooner rather than later the wheels will start to fall off.

There are a wealth of examples of how Nature sustains our civilizations and economies – from the oxygen we breathe, to the soil, water and pollinating insects that produce nearly all of our food; from the scavengers that help control disease to the oceans that replenish fish stocks. To understand what Nature does for us every single day of our lives is clearly vital if we are to maintain our welfare and develop in the future. Yet, as I say, these and other natural assets continue to be liquidated as if they are inexhaustible. What has perplexed me for so many years is why we fail to put two and two together and see how dangerous this is. It is surely not for want of good science and reliable information.

As the book suggests, it is in part to do with that ancient, instinctive human tendency to grasp the short-term solution because, as hunter-gatherers, this was once necessary in order to stay alive. It is also perhaps to do with the seemingly impossible task of finding consensus on the kinds of national and international laws and policies that protect Nature, especially when the task depends upon a multilateral or global process. Some of the reasons are to be found on a much deeper level of human experience where there now abounds a disturbing lack of a sense of the sacred. This is very important. If nothing is sacred, most of all Nature, then we create the potential for the perfect kind of storm, to which it will be virtually impossible to adapt, let alone mitigate. This is why I was so pleased to see Tony Juniper's new book as, for me, it hits the nail firmly on the head when it explores how our economic system is so disastrously misaligned with the realities that enable it to exist in the first place.

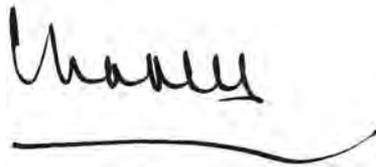
Not only does it provide readers with a clear and compelling explanation as to what Nature does for us, it also offers some very strong examples of how that misalignment can be rectified – and that includes ways in which Nature’s value can be harnessed even within our existing economic approach.

It describes simple things, like planting trees in city centers which would help to cool the air while giving city dwellers that contact with Nature which has such immediate psychological benefits. Thus, they would improve wellbeing and reduce the need for expensive air conditioning. On a larger scale, it also describes radical schemes like the one in New York, where the city has been given a modern water treatment system that relies upon water-friendly farming and good forestry practice. This is no small scheme and it depends upon the integrated cooperation of many thousands of stakeholders. The result of such joined-up thinking is the biggest unfiltered public water supply system in the United States, one that initially saved the city some eight billion dollars and has since dramatically slowed down the rise in consumers’ water bills. They have gone up by just nine percent whereas had the city installed conventional treatment systems, that figure would now be nearer one hundred percent.

On a larger scale still, the book explains how some countries have begun to integrate natural values into their national accounts. One of the pioneers is the Central American country of Costa Rica which has taken a much more integrated view of how Nature and the economy interact, seeing them as two sides of the same coin. As a result, since the 1980s, not only has Costa Rica more than doubled its forest cover, it has also doubled the per capita income of its citizens. Dramatic examples like this should encourage us to see the tremendous opportunities there are in approaching things in a much more joined-up way. All it needs is the inspiration and unlimited capacity of the human imagination to do so.

One very positive development I have been greatly moved by in recent years, and towards which I hope I have made some small contribution via the activities and projects I have initiated, is the increasingly prominent discussion about what is known in the jargon as “natural capital.” This idea defines Nature as, among other things, a set of economic assets which, if managed well, can produce dividends that flow from those assets indefinitely. This is not what generally happens at the moment. Assets such as soils and forests are often simply liquidated as if they do not need to be maintained or replenished, and it surely does not require a financial expert to point out that this is the fastest way to bankruptcy!

This shift towards seeing Nature as the provider of a set of economically vital services, rather than resources that can be used up to fuel economic growth is, for me, one of the most important conceptual shifts in history. I am pleased to say that the shift is already underway, but it needs to go much further and happen much faster. I am not so naïve as to imagine this is an easy transition to achieve, especially in such economically challenging times, but perhaps our very fraught economic circumstances at the moment offer exactly the right moment for the world to force this new attitude to break through into the mainstream.

A handwritten signature in black ink, appearing to read 'Charles', with a long, sweeping horizontal line underneath it.

HRH The Prince of Wales



Biosphere 2