



## United Nations Environment Programme

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PROGRAMME DES NATIONS UNIES POUR L'ENVIRONNEMENT • PROGRAMA DE LAS NACIONES UNIDAS PARA EL MEDIO AMBIENTE  
ПРОГРАММА ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ ПО ОКРУЖАЮЩЕЙ СРЕДЕ

# PRESS RELEASE

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## **Wildlife Atlas underlines vital role of ecosystems in reducing poverty and delivering prosperity ahead of World Summit on Sustainable Development**

### ***30 Years UNEP: Environment for Development: People Planet Prosperity***

**London/Nairobi, 1 August 2002** - Experts estimate that, at current extinction rates of plants and animals, the Earth is losing one major drug every two years. It is estimated that less than one per cent of the world's 250,000 tropical plants has been screened for potential pharmaceutical applications.

The first 'World Atlas of Biodiversity: Earth's Living Resources for the 21st Century', launched today by the United Nations Environment Programme World Conservation Monitoring Centre (UNEP-WCMC) shows how humankind is dependent on healthy ecosystems for all its needs.

80 per cent of people in developing countries rely on medicines based largely on plants and animals. In the United States alone, 56 per cent of the top 150 prescribed drugs with an economic value of \$80 billion are linked with discoveries made in the wild.

The Atlas is the first comprehensive map-based view of global biodiversity. It provides a wealth of facts and figures on the importance of forests, wetlands, marine and coastal environments and other key ecosystems. It is the best current synthesis of the latest research and analysis by UNEP-WCMC and the conservation community world wide - providing a comprehensive and accessible view of key global issues in biodiversity.

It also highlights humankind's impact on the natural world. During the past 150 years, humans have directly impacted and altered close to 47 per cent of the global land area, it is reported in the Atlas.

Under one bleak scenario, biodiversity will be threatened on almost 72 per cent of the land area by 2032. The Atlas reveals losses of biodiversity are likely to be particularly severe in South East Asia, the Congo basin and parts of the Amazon. As much as 48 per

cent of these areas will become converted to agricultural land, plantations and urban areas, compared with 22 per cent today, suggesting wide depletions of biodiversity.

Klaus Toepfer, UNEP's Executive Director, said wise use of the Earth's natural resources was at the heart of sustainable development and a key issue for world leaders attending the crucial World Summit on Sustainable Development (WSSD) which opens in Johannesburg, South Africa, on 26 August.

"Humankind now diverts about 40 per cent of the Earth's productivity to its own ends, much of this is being carried out in a destructive and unsustainable way. It is vital that we reverse these unsustainable practises while at the same time taking advantages of the opportunities presented by the planet's natural capital, its natural wealth," he said. Mr Toepfer said the value of wild resources to the pharmaceutical industry alone highlighted the pressing need for new and more imaginative ways of exploiting plants and animals so that the benefits are shared by all.

"We must address the issue of genetic resource sharing by giving developing countries, where the majority of biodiversity remains, an economic incentive to protect wildlife by paying them properly for the plants and animals whose genes get used in new drugs or crops," he added.

Mr Toepfer said the proper and responsible use of the Earth's natural treasures could play a key role in reducing poverty and thus should be seen by world leaders at WSSD as a key area to address. Biodiversity is, along with water, energy, health and agriculture, one of the five priority areas for the United Nations as outlined by Kofi Annan, its Secretary-General.

"Biodiversity should be one of the key issues underpinning all decisions taken at the Johannesburg Summit," said Toepfer. "You cannot tackle water, energy, health, agriculture, and ultimately poverty without the conservation, wise use and proper distribution of the many benefits arising from the living world."

The new Atlas outlines some of the broad ecological relationships between humans and the rest of the material world and summarizes information on the health of the planet. More specifically it shows how "wilderness areas" are on the retreat as roads and urban centres spread into places like the Amazon basin, the Arctic and desert zones.

"There is little true wilderness left to support the expansion of the human population on this planet," says Brian Groombridge, co-author of the Atlas. "Over the last decade food supply has increased to meet the growing population through higher productivity (about 69 per cent) and exploitation of wilderness (31 per cent). But, with little wilderness area left, where will the additional capacity come from?"

"Globalisation and the pace of technological development are out-stripping our understanding of the impacts we are having on ecosystems - putting many basic services at risk, particularly for the poor," says Groombridge. "At the same, there is now enough evidence to show that we should take the precautionary approach and not interfere with the global processes that maintain our fishing, forestry, agriculture, health and climate."

The Atlas goes beyond doom and gloom scenarios and asks how irreversible current problems are. Pulling together the latest thinking on the subject it shows, through a scientific assessment of the entire range of living plants and animals, just how robust, resilient and accommodating biodiversity can be - within limits.

By using maps to show the location of biodiversity UNEP-WCMC draws together the work of researchers across the world who have identified particularly rich or vulnerable areas, including "hot spots" and "eco-regions". These are regions where it is particularly important to identify development paths that can serve humankind without reducing nature's capital.

Mark Collins, UNEP-WCMC Director, stressed the vital role of ecosystems and how they interact to provide vital resources. As an example he cited the essential role of mountain regions as providers of freshwater. "If water sources are jeopardised then this impacts human activity downstream - people will not have clean water to drink or enough to water their crops," said Collins. "Fish supplies diminish or become extinct affecting the food supply chain and trading opportunities," he said. "Further down in the cities, power from hydroelectricity would be reduced, as would supplies of water for industrial washing, cooling and the production of products. The net result is business failure, job losses and economic disaster."

"We know enough about the distribution of species and ecosystems to ensure that the world's biodiversity is managed effectively, said Collins. "Give nature half a chance and it will take care of itself" he said.

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### **Notes to Editors**

Images from the Atlas including the front cover and sample map are available on [http://www.unep-wcmc.org/information\\_services/publications/biodiversityatlas/presspack/](http://www.unep-wcmc.org/information_services/publications/biodiversityatlas/presspack/)

Interactive maps are available from 1st August 2002 on: <http://stort.unep-wcmc.org/imaps/gb2002/book/viewer.htm>

Interesting facts taken from the World Atlas of Biodiversity: Earth's Living Resources in the 21st Century:

- up to 95% of species may have disappeared during the later Permian extinction episode, some 250 mill yrs ago.
- 80% of the maize varieties used in Mexico in 1930 have been lost
- up to 500 food plant species have been recorded in home gardens of one village in Java.
- the biomass of the world's humans plus their domestic livestock is only exceeded by the estimated combined biomass of the world's bacteria.
- starting some 45,000 years ago a high proportion of larger land animals became extinct in North America, Australia, the Caribbean and elsewhere, coincident with human arrival.
- if highly variable anchoveta are excluded, the world marine fish catch appears to have been declining for more than a decade, despite intense fishing effort

Preparation of the "World Atlas of Biodiversity" was financed by the Aventis Foundation and a grant from the UK Department for Environment, Farming and Rural Affairs (DEFRA).

It is published by University of California Press.  
<http://www.ucpress.edu/books/pages/9941.html>

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