

Monday, 20 March 2006, 17:06 GMT

Life's diversity 'being depleted'

By Tim Hirsch

BBC News Environment Correspondent



Virtually all indicators of the likely future for the diversity of life on Earth are heading in the wrong direction, a major new report says.

The Global Biodiversity Outlook (GBO) is published as national delegates gather in Brazil under the UN Convention on Biological Diversity.

The Convention commits governments to slow the decline in the richness of living systems by 2010.

The GBO says "unprecedented efforts" will be needed to achieve this aim.

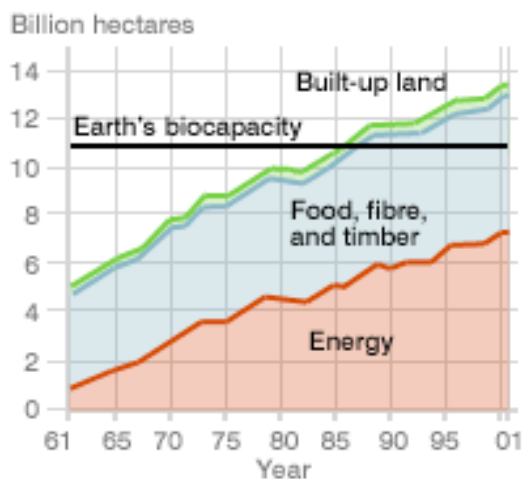
It sets out 15 indicators of progress towards the 2010 target, ranging from trends in the extent of wildlife habitats to the build-up of nutrients such as nitrogen which can harm aquatic life.

Only one of the 15 - the area of the world's surface officially

protected for wildlife - is moving in the right direction for biodiversity.

GLOBAL ECOLOGICAL FOOTPRINT

- Resource demand challenges Earth's regeneration capacity
- Fish are harvested faster than their natural replacement rate
- Water is being withdrawn faster than aquifers are replenished
- The biosphere takes one year and nearly three months to renew what humanity exploits in one year, on this analysis



SOURCE: World Wide Fund for Nature, UNEP World Conservation Monitoring Centre, Global Footprint Network 2004

Even here, however, most areas still fall far short of targets to protect 10% of each region with distinctive combinations of species.

The other indicators point to an accelerating decline, which has seen the rates of species extinctions surge to their highest levels since the demise of the dinosaurs 65 million years ago. Forests continue to be lost at a rate of six million hectares a year - that's about four times the size of the English county of Yorkshire - and similar trends are noted for marine and coastal ecosystems such as coral reefs, kelp beds and mangrove forests.

The abundance and variety of species continue to fall across the planet, according to an index measuring the percentage of species with good prospects for survival; bird variety is on the decline in every ecosystem type from the oceans to the forests. Less complete indications are available for other groups of animals and plants, but it is feared they would show a similar picture.

Within reach

The report stresses that despite the gloomy trends, the target set by the Convention - involving a stabilisation, not a reversal of these losses - is still within reach.

"Meeting the 2010 target is a considerable challenge, but by no means an impossible one," the GBO notes.

"Unprecedented additional efforts are needed, and these must be squarely focused on addressing the main drivers of biodiversity loss."

These "drivers" are identified as:

- the loss of habitat, largely through the expansion of agriculture
- climate change
- the introduction of alien species which can badly disrupt ecosystems after being carried across the world, often accidentally in ship ballast tanks
- over-exploitation of wildlife, for example through overfishing
- the build-up of nutrients through chemical fertilisers, sewage and air pollution

The great challenge in meeting the biodiversity target comes in the fact that these pressures are currently projected to remain constant or to accelerate in the near future - so slowing the extinction slide would involve major changes over wide areas of human activity.

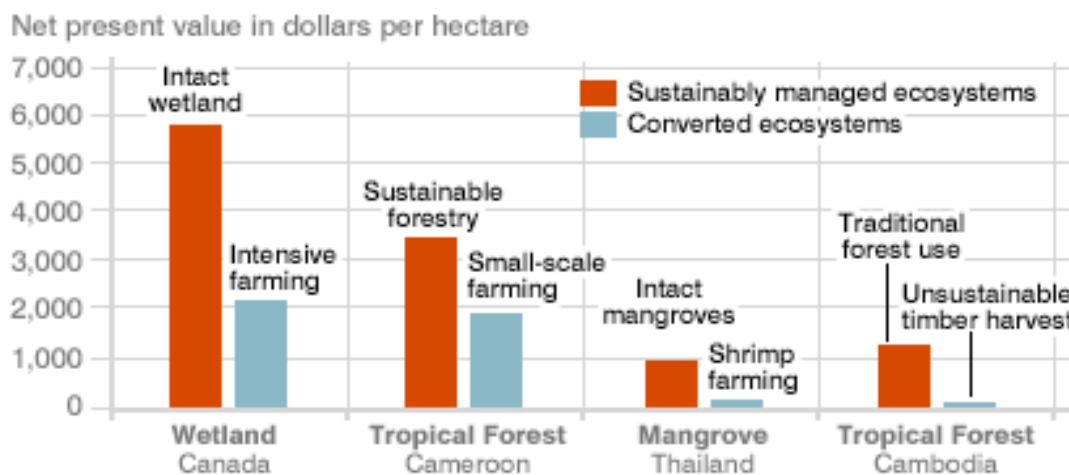
In the jargon, this requires "mainstreaming" of biodiversity concerns into areas of policy well beyond the remit of the environmental officials and ministers from more than 180

countries meeting in the Brazilian city of Curitiba over the next fortnight.

Unless they can convince their colleagues responsible for agriculture, energy, world trade and industry that losing biodiversity threatens people and economies across the planet, the decisions and pledges they make will do little to reverse the trends identified in this report.

ECONOMIC BENEFITS UNDER ALTERNATIVE MANAGEMENT PRACTICES

- The full economic value of sustainable ecosystem management is rarely recognised and frequently ignored
- Converting mangroves to shrimp farms brings immediate monetary benefit but diminishes other important 'services'
- For example, mangroves provide timber, boost fisheries and provide storm protection - all of value to a much wider community
- If these 'externalities' are properly taken into account, the benefits of ecosystem conversion look weaker



SOURCE: World Wide Fund for Nature, UNEP World Conservation Monitoring Centre, Global Footprint Network 2004