

Wildlife populations 'plummeting'



Over-fishing and demand for their fins as a delicacy have hit shark numbers

Between a quarter and a third of the world's wildlife has been lost since 1970, according to data compiled by the Zoological Society of London.

Populations of land-based species fell by 25%, marine by 28% and freshwater by 29%, it says.

Humans are wiping out about 1% of all other species every year, and one of the "great extinction episodes" in the Earth's history is under way, it says.

Pollution, farming and urban expansion, over-fishing and hunting are blamed.

River dolphin

The Living Planet Index, compiled by the society in partnership with the wildlife group WWF, tracks the fortunes of more than 1,400 species of fish, amphibians, reptiles, birds and mammals, using scientific publications and online databases.

DEMANDING HUMANS

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It said numbers had declined by 27% in the 35 years from 1970 to 2005. Some of the worst hit are marine species which saw their numbers plummet by 28% in just 10 years, between 1995 and 2005.

Populations of ocean birds have fallen by 30% since the mid 1990s, while land-based populations have dropped by 25%.

“ Reduced biodiversity means millions of people face a future where food supplies are more vulnerable to pests and disease and where water is in irregular or

short supply



James Leape
Director general, WWF UK

Among the creatures most seriously affected have been African antelopes, swordfish and hammerhead sharks.

Another, the baiji - or Yangtze River Dolphin - may have been lost altogether. The findings were released ahead of a meeting of the Convention on Biodiversity in the German city of Bonn.

The convention was signed in 1992 with the aim of stabilising the loss of species. In 2002, member states pledged to achieve a "significant reduction" in the current rate of biodiversity loss by 2010.

But the Zoological Society said governments had since failed to put in place policies necessary to achieve that goal.

It said that while species' decline does appear to have flattened off in recent years, it is "very unlikely" that the 2010 target will be reached.

Impact on humans

The WWF said that over the next 30 years, climate change was also expected to become a significant threat to species.



Land-based species, such as African antelopes, have fallen by 25%

Colin Butfield, head of campaigns at WWF UK, said: "Biodiversity underpins the health of the planet and has a direct impact on all our lives, so it is alarming that despite an increased awareness of environmental issues we continue to see a downward trend."

The charity also warned that a failure to stop biodiversity loss would have a direct impact on humans.

Director general James Leape said: "Reduced biodiversity means millions of people face a future where food supplies are more vulnerable to pests and disease and where water is in irregular or short supply.

"No-one can escape the impact of biodiversity loss because reduced global diversity translates quite clearly into fewer new medicines, greater vulnerability to natural disasters and greater effects from global warming."

The WWF is calling on governments meeting in Bonn to honour their commitments to put in place effective protected areas for wildlife and to adopt

a target to achieve net annual zero deforestation by 2020.

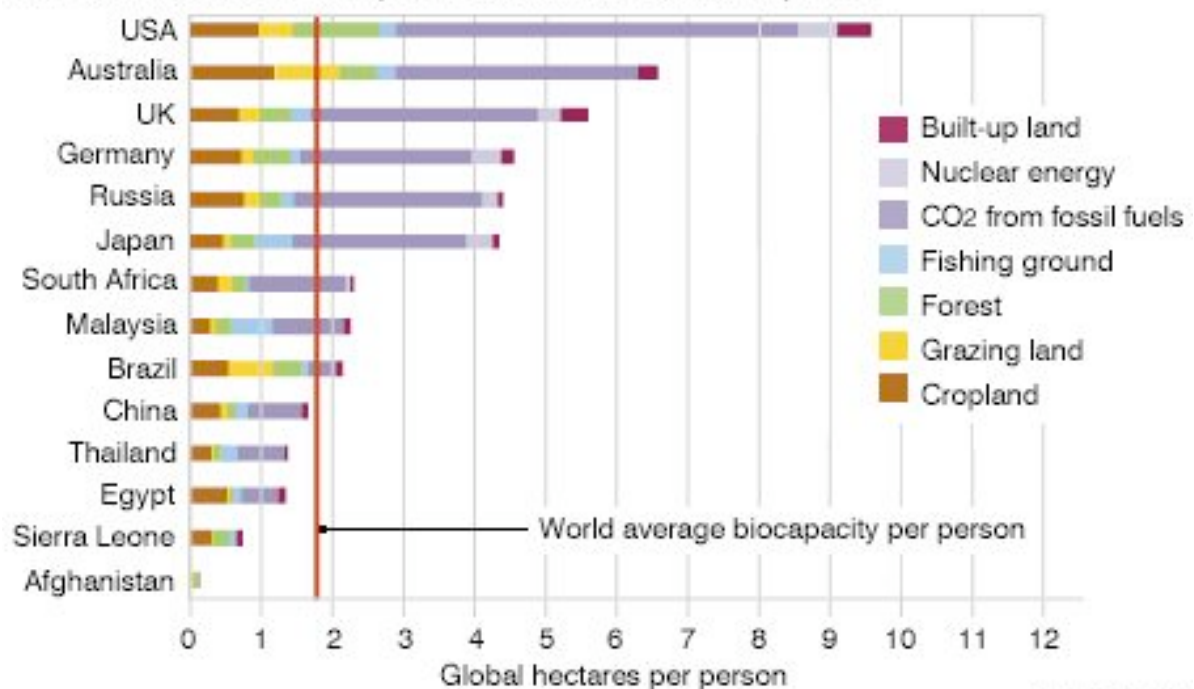
The UK's Biodiversity Minister, Joan Ruddock, said the report showed that the international community had to work together to stem the decline.

"The fact that human activities have caused more rapid changes in biodiversity in the last 50 years than at any other time in human history should concern us all," she said.

"Supporting wildlife is critical to all our futures and the UK will continue to give strong support to international action.

"Schemes such as the Darwin Initiative have used UK expertise to help more than 490 wildlife conservation, regeneration and research projects in 146 countries."

ECOLOGICAL FOOTPRINT, PER PERSON BY COUNTRY, 2003



SOURCE: WW

Lifestyles and the consumption of resources vary widely from country to country. On average each person needs 2.2 global hectares to support the demands they place on the environment, but the planet is only able to meet consumption levels of 1.8 global hectares per person.

The latest data on the global biodiversity of vertebrates shows that it has fallen by almost one-third in the last 35 years. But experts say it may still underestimate the effect humans have had on global species counts.

The Living Planet Index (LPI) follows trends in nearly 4,000 populations of 1,477 vertebrate species and is said to reflect the impact humans have on the planet. It is based on a wide range of population datasets, such as commercial data on fish stocks and projects such as the Pan-European Common Bird Monitoring scheme.

New figures show that between 1970 and 2005, the global LPI has fallen by 27%. This suggests that the world will fail to meet the target of reducing the rate of biodiversity loss set by the 2002 Convention on Biological Diversity.

The results were released as part of a WWF report entitled 2010 and Beyond: Rising to the biodiversity challenge.

"Governments have signally failed to deliver on their biodiversity commitments, and biodiversity declines are continuing," Jonathan Loh, a researcher at the Institute of Zoology and the editor of the report, told New Scientist.

Global picture

Ground-living vertebrates have declined by 25%, with most of the slump occurring since 1980. Marine species held fairly steady until the late 1990s before falling sharply to give an overall drop of 28%. Freshwater species have decreased by 25%, primarily since the late 1980s.

Loh says the most dramatic declines have been observed in the tropics. Tropical ground-living species have seen an average population drop of 46%, while their temperate cousins have shown no overall change.

Freshwater vertebrates show different trends in different regions, leading to "no obvious signal", says Loh. European and North American populations show no overall change, but Asian-Pacific populations have declined steeply since the late 1980s.

In the world's oceans, northern vertebrate populations have held fairly steady over the entire period, but may have entered a downward trend since 1990. By contrast, southern populations have fallen precipitously, although because less data is collected there the trend is less certain.

Rose-tinted view

The LPI focuses exclusively on vertebrates, which are relatively well-monitored. Global biodiversity slumps 27% in 35 years

- * 00:01 16 May 2008
- * NewScientist.com news service
- * Michael Marshall

Loh says, "We started collecting data on invertebrates, but it's very patchy and not good enough as yet."

The survey may be "bird-biased", he adds, because their populations are well-monitored. The LPI tracks 811 bird species but just 241 fish and 302 mammals.

Fish should actually comprise the bulk of the Index. The world's 30,000 species of fish compare to just 10,000 bird species and 5,400 mammals.

Loh says this suggests that the situation is worse than the data shows. "Birds are doing better than fish," he says, "so if anything, by biasing the survey towards them

we're underestimating the global decline."
Incomplete picture

There is also a lack of good data for Latin America and Africa. Loh says that, frustratingly, "the more species there are in an area, often the less data there are on how they're doing. For instance the UK is well-monitored, but has relatively few species. It's a priority for us to find out what's happening in areas like the Amazon Basin."

The WWF report was published ahead of a worldwide conference on biodiversity, the ninth meeting of the Conference of the Parties on 19-30 May. The conference will assess what has been achieved by the Convention on Biological Diversity.

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