

'World needs a barometer of life'

By Mark Kinver
Science and environment reporter, BBC News

The world needs a "barometer of life" to prevent ecosystems and species being lost forever, scientists have warned.

Existing schemes, they said, did not include enough species from groups such as fungi and invertebrates to provide a detailed picture of what is at risk.

Writing in the journal *Science*, the researchers said the barometer would increase the number of species being assessed from almost 48,000 to 160,000.

The data would help identify areas in need of urgent action, they added.

The article was penned by four leading figures in conservation, including Harvard University's Edward O Wilson and Simon Stuart, chairman of the International Union for Conservation of Nature's (IUCN) Species Survival Commission (SSC).



"Knowledge about species and extinction rates remain very poor, and species disappear before we know they existed," they wrote.

To date, about 1.9m species have been described and given scientific names, but the actual number may exceed 10m.

"As scientists are better able to assess the conservation status of the species that compose an ecosystem, the more they will understand the health of that ecosystem," they continued.

"It is time to accelerate taxonomy and scientific natural history, two of the most vital but neglected disciplines of biology."

Broader coverage

Currently, the most authoritative data on the status of at-risk species is the IUCN Red List, which has been assessing the conservation status of species around the globe for more than 40 years.

Dr Stuart, who oversees the compilation of the Red List, said it provided a good insight to the health of certain ecosystems, such as forests.

"But it is very weak in its coverage of freshwater, marine and arid land species," he told BBC News.

"There are a lot of additional species that we have to bring into the Red List."

At the moment, it evaluates almost 48,000 species, but it is acknowledged that there is a bias towards higher vertebrates, which include mammals, birds and reptiles.

"The barometer would broaden the reach of the Red List to make it representative of all life, that's what it's all about," Dr Stuart explained.

The authors hope that broadening the taxonomic base of the Red List and increasing the database to 160,000 species would deliver practical benefits.

"A representative barometer would provide a solid basis for informing decisions globally," the authors suggested.

"For example, on conservation planning, resource allocation, environmental impact assessments, monitoring biodiversity trends... and enabling countries to develop national-level biodiversity indicators."

'Not acceptable'

The authors, all of whom are leading figures in their field, decided to join forces in order to voice their concerns that the rate of progress was too slow.

"The amount that we are investing at the moment in the Red List to broaden its coverage means that it would take about 20 years to get there," Dr Stuart observed.

"At a time when everything on the planet is deteriorating, having to wait 20 years before we can measure everything properly is not acceptable."



However, the scientists acknowledge that a three-fold increase in the number of species regularly monitored by a global network of biologists would come at a price - an estimated US \$60m (£39m).

But they argued: "The barometer would, from an economic perspective, be one of the best investments for the good of humanity."

Story from BBC NEWS:

<http://news.bbc.co.uk/go/pr/fr/-/2/hi/science/nature/8609020.stm>

Published: 2010/04/09 08:02:15 GMT

© BBC MMX