

Biodiversity Q&A

What is biodiversity?

Biodiversity is the variety of life on earth.

Why is it important?

Biodiversity is essential to sustaining the living networks and systems that provide us all with health, wealth, food, fuel and the vital services our lives depend on.

Biodiversity provides solutions to the current climate change crisis. As well as providing carbon storage services, biodiversity give systems resilience, that is, **the capacity to absorb disturbance and still retain their basic function and structure.**

What is the problem?

Human activity is causing the diversity of life on Earth to be lost at a greatly accelerated rate.

In 2004 the IUCN calculated that the rate of loss had risen to 100-1,000 times the 'back ground' level of extinctions– a situation comparable to the five previous "mass extinctions" – the last of which was when the dinosaurs were wiped out about 65m years ago. These losses are irreversible, impoverish us all and damage the life support systems we rely on everyday.

Can these losses be prevented?

Yes. We need to focus on the urgency of our challenge for the future. Now is the time to act.

Is Australia important for biodiversity?

Yes. Australia is a Global biodiversity hotspot. It has almost 10% of the world's known species. It also has 10% of the world's threatened species.

About 92% of our vascular plants, 87% of our mammals, and 45% of our birds are endemic - that is, they are found no-where else in the world.

How well is Australia conserving it's biodiversity?

Australia's extinction rate is alarming and the biodiversity crisis is getting worse. Over the last 200 years Australia has suffered the largest documented decline in biodiversity of any continent.

Almost half of all worldwide mammal extinctions in the last 200 years have occurred in Australia.

1,667 species are listed as threatened under National legislation. A further 103 are listed as extinct. These figures are conservative. The situation is likely to be much worse.

What is Australia's commitment to the Convention on Biological diversity?

In response to an alarming rate of species extinctions, Australia ratified the United Nations (UN) Convention on Biological Diversity (CBD) on 18 June 1993.

The Convention on Biological Diversity (CBD) is an international legally-binding treaty.

In 2002, Australia and other parties adopted the 2010 Biodiversity Target: to reduce significantly the rate of biodiversity loss at global, regional and national levels. Australia has failed to achieve its 2010 Biodiversity Target; to significantly reduce the rate of biodiversity loss.

What mechanisms do we have to protect biodiversity in Australia?

The Australian Government's primary piece of environmental legislation is the *Environment Protection and Biodiversity Conservation Act 1999* (the EPBC Act). The EPBC Act provides a legal framework to protect and manage nationally and internationally important flora, fauna, and ecological communities as matters of national environmental significance.

The EPBC Act has recently been reviewed and the Government is currently considering substantial reform.

Australia's first national biodiversity strategy, the *National Strategy for the Conservation of Australia's Biological Diversity*, was endorsed in 1996. The National Biodiversity Strategy has recently been reviewed and a new strategy is expected in 2010.

Numerous State and Territory initiatives aimed at conserving biological diversity exist, including legislation for the protection of threatened species and policies such as State Biodiversity Strategies and native vegetation policies.

However, although numerous policies and programs contribute to the conservation of biological diversity they have not been sufficient to address the biodiversity crisis.

Why haven't these mechanisms worked?

Conservation efforts have been greatly under-resourced.

But isn't there funding available for biodiversity conservation in Australia?

Yes, but it is grossly inadequate to address the problem.

Is saving species too expensive then?

It is disappointing that in a developed, prosperous country such as Australia, that we should even have to contemplate abandoning species to extinction when it is usually human action that have created the problem. Extinction is forever. There aren't any second chances once a species is lost. The disappearance of unique species is a loss that cannot be calculated and leaves us all much poorer. The loss of iconic species is not only a cultural tragedy; it also undermines our own survival. The diversity of the natural world is being damaged as a result of human activities. It would be tragic to give up and allow our unique natural heritage to be lost because of relatively modest costs.

Perhaps more importantly, biodiversity is essential to sustaining the living networks and systems our lives depend on. Protecting biodiversity with its vast permanent carbon stores is also essential to tackling climate change. The costs of inaction will far outweigh the costs of action.

Substantial investments are required to conserve biodiversity, but it will bring significant environmental, economic and social benefits in return.

What has worked?

There are many examples of threatened species recovery in Australia. Recovery usually results from a combination of good science to diagnose and address problems, and coordinated action by committed champions and the community. Many different biodiversity conservation initiatives are taking place across the country, however they need much more support.

What can be done?

The Australian Government needs to commit to the Boobook Declaration. The Government needs to acknowledge the importance of biodiversity by increasing investment in its protection and building the capacity of the Australian community to take action. (for more detail see www.boobook.org.au)