



Biodiversity – on our agenda

Most people have heard of biodiversity these days. But it's still not a word that trips lightly off the tongue.

What is it? And why should we care?

Biodiversity – or biological diversity – is the result of millions of years of evolution. Technically, it can be defined as the variety of all living things. This includes all the planet's different plants, animals and micro organisms, plus the genetic information they contain and the ecosystems of which they are a part.

Why does it matter?

Everything in the natural world is connected. And that includes humans. This means that everything we do affects biodiversity, and biodiversity affects us.

Despite this, we do not always see or understand how important biodiversity is to the condition of our environment and the quality of our lives.

In the biological world that we're part of, the more variety the better. This provides protection against things going wrong. Diverse ecosystems, and therefore diverse species and genes, make for a healthier, more resilient planet.

Protecting biological diversity gives us the best chance of adapting to our rapidly changing world. We don't know all there is to know about genes, species and ecosystems, but we do know that they are an irreplaceable resource on which we all depend for our ever changing needs.

Genetic diversity is an important part of biological diversity. For species to flourish, let alone survive, there needs to be enough of them spread across a range of different land and sea environments. This will enable them to remain healthy and withstand threats from predators, diseases and global changes.



Maintaining genetic diversity across the globe provides a varied gene pool for us to draw on in helping overcome future threats from disease and natural events. The greater the biodiversity the more easily and quickly ecosystems can recover from stresses like disease or drought, or from natural and human pressures.



In practical terms, what does this mean for us? As human beings, we get all of our food, as well as many medicines and fibre products from the wild and domesticated species found in diverse natural systems.

Maintaining biodiversity helps support our ways of life, our economies and our mental and physical well-being. It results in benefits like clean air and water and fertile soils, helps control salinity, erosion and pests, and encourages healthy ecosystems and a livable climate.

Diverse natural environments also provide important opportunities for outdoor recreation and tourism. Less tangibly, they put us in touch with our origins, bring joy to our lives, renew our spirit and inspire our creativity.

What's special about Australia?

Australia is one of the most diverse countries on the planet. It is home to more than one million species of plants and animals, many of which are found nowhere else in the world. About 85 per cent of flowering plants, 84 per cent of mammals, more than 45 per cent of birds, and 89 per cent of inshore, freshwater fish are unique to Australia.

The country contains seven per cent of the earth's plants, animals and micro-organisms, more than twice the number of species in Europe and North America combined. It is one of the planet's 12 megadiverse countries, which contain 75 per cent of earth's total biodiversity.

But our biodiversity is under threat on many fronts.

These come from human population pressures, land clearing, unsustainable land management, and all the associated problems of feral pests, weed invasions, pollution, degraded soil and water and climate change, to name but a few.



Biodiversity encompasses the variety of all living things. Conserving biological diversity gives us the best chance of adapting to our rapidly changing world.

This leaflet is one of a series showing how farmers, Indigenous communities, local government and community groups have either initiated special biodiversity projects, or have successfully incorporated biodiversity protection into their work and daily lives.

We hope these success stories provide useful information and inspiration to others in similar situations.

For more information: www.nrm.gov.au; or freecall 1800 552 008



Getting active

The best way to conserve biodiversity is to save habitats and ecosystems in preference to trying to save a single species. This is because if a species is at risk, then the habitat that it lives in is probably under threat too. However, sometimes there has been too much change and specially targeted action is necessary to conserve particular species.

All governments now recognise the need to conserve biodiversity. And increasingly, individuals and organisations throughout Australia are finding creative and practical ways to put biodiversity conservation on their agenda.

They may do this by undertaking specific on-ground actions, collecting data on local biodiversity, developing education and information materials for schools and community groups and supporting community and industry activities. Sometimes they have government help. Sometimes they don't. But, they are all showing that conserving biodiversity is achievable and that it can be an integral part of running farms, businesses and other natural resource management programs.

Taking care of biodiversity is not only good for the environment, it's also good business practice.

We are publishing this series of Biodiversity Case Studies to share biodiversity conservation success stories, ranging from Cape York to Tasmania, from Perth to South Gippsland. These are just some of the innovative steps being taken by individuals and groups across the country. We hope they will encourage others to make biodiversity conservation part of their agenda.

For more information about protecting biodiversity and sustainable land management: www.nrm.gov.au

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