

ADDITIONAL INFORMATION – BIODIVERSITY

INFORMATION FOR EDUCATORS

What is biodiversity?

Biodiversity is a long word that can be a bit tricky to spell. It refers to all living things that form the web of life. It is the variety of plants, animals, insects and micro-organisms on earth. It is all their genes too, and the web of ecosystems that they make up.

Biodiversity is described as the combination of genetic diversity, species diversity and ecosystem diversity. This helps us understand that biodiversity is the full variety of life forms on Earth, the genes they contain and the ecosystems they are part of. One of the key elements to biodiversity is the idea that everything is interconnected and relies on each other. The survival of each species depends on the health and numbers of others. Biodiversity is like a giant jigsaw puzzle. All the pieces go together to create and support life.



Where is biodiversity?

Biodiversity is everywhere. A teaspoon of salt water can contain more than a million living creatures that we cannot see without a powerful microscope. Grab a handful of soil and you may be holding thousands of species covering more than a billion samples. It is estimated that we only know 10-20% of all species on our planet with many millions of species yet to be discovered. We have found the big stuff that we can easily see, but it is the little things that may hold secrets to life, medicines, and cures of the future.

In Australia we have around 700,000 species. Eight out of ten of our plants and mammals, and almost half our birds are found only in Australia. We are blessed with an incredible range of ecosystems, from wildflowers in the west, red sand deserts in the centre, tropical rainforests in the north and snow-capped mountains in south.

Why do we need biodiversity?

Human health and happiness is intrinsically connected to biodiversity and healthy ecosystems. Biodiversity gives us the variety of food that we currently enjoy; it gives us the range of clothes that we wear; it provides us with fresh water and clean air; it gives us medicine; and finally it provides us with sources of happiness, inspiration and pleasure.

ADDITIONAL INFORMATION – BIODIVERSITY

Looking after biodiversity

Increase biodiversity in your yard by:

- Planting habitat gardens (e.g. butterfly gardens, bird attracting plants)
- Creating habitats for native animals in your yard (e.g. frog bogs, lizard lounges, possum or bird nesting boxes)
- Planting indigenous plants (check your local council or nursery for ideas on what to plant)



Help biodiversity by:

- Reducing litter in and around your centre/service
- Avoid pouring chemicals or paint down the sink - these can enter aquatic and marine ecosystems
- Avoid using chemical sprays / insecticides / pesticides on your garden
- Buying forest friendly products
- Buying products containing sustainable palm oil
- Saving water
- Reducing energy use and switching to renewable energy
- Talking to children about what you're doing and encouraging them to get involved

Definitions:

- Biodiversity - The variety of all life on earth, including species, genes and ecosystems.
- Ecosystem - The living-things (biotic) that live in a specific area, how they interact with each other, and how they interact with the non-living (abiotic) environment around them.
- Habitat - The natural home or environment of an animal, plant, or other organism.

ADDITIONAL INFORMATION – BIODIVERSITY

INFORMATION FOR FAMILIES

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Looking after biodiversity

Increase biodiversity in your yard by:

- Planting habitat gardens (e.g. butterfly gardens, bird attracting gardens, bee attracting gardens)
- Creating habitats for native animals in your yard (e.g. frog bogs, lizard lounges, possum or bird nesting boxes, insect hotels)
- Planting indigenous plants (check your local council or nursery for ideas on what to plant)



Help biodiversity by:

- Reducing litter around your house and in your neighbourhood
- Reducing waste by considering how items are packaged when you buy them and avoiding products that are over-packaged, and by recycling all recyclable material
- Avoid pouring chemicals or paint down the sink - these can enter aquatic and marine ecosystems
- Avoid using chemical sprays / insecticides / pesticides on your garden
- Buying forest friendly products
- Buying products containing sustainable palm oil
- Saving water
- Reducing energy use and switching to renewable energy

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