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tree day

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## Planting for Biodiversity

Most of the plants that we depend on for food and other resources have been bred to select for qualities that make them suitable for agriculture. As a result there is often very little genetic diversity. Natural “wild” populations of plants, on the other hand, will vary greatly in their genetic make-up both within a given population and especially between populations growing in different areas. This is part of the diversity of living things that we describe as biodiversity.

Biodiversity encompasses not just the array of different plant and animal species found on the planet, but also the variation between different populations and individuals at the genetic level that may (though not always) be seen as physical differences.

Before climate change was the “hot” topic in the environmental debate, the loss of biodiversity was internationally recognised as being the major threat facing the future of life on our planet.

This variety in all living things is important in many ways, such as:

- Helping to safeguard against pests and disease (the Irish Potato Famine in 1845 was brought about by reliance on a single variety of potato that became susceptible to disease);
- Providing sources of new medicines and other plant-derived compounds;
- Contributing to the strength and stability of ecosystems (since a more diverse, complex ecosystem will be more stable);
- Enabling ecosystems to adapt to changing conditions.

We are currently undergoing the 6th mass extinction on the planet, the first in 65 million years and the first,

many scientists believe, to have been brought about by a single species - humans. Australia has a particularly bad record when it comes to extinctions in the past 200 years, particularly with respect to our native mammals.

With uncertainty over the future of current climatic conditions, having strong biodiversity will give the best chance for species to adapt in the future and avoid becoming extinct.

For further information see the Planting for Climate Change and Local Native Plants factsheets.

[www.wilderness.org.au/articles/biodivsum](http://www.wilderness.org.au/articles/biodivsum)

[www.environment.gov.au/biodiversity/index.html](http://www.environment.gov.au/biodiversity/index.html)

[www.science.org.au/nov/091/091key.htm](http://www.science.org.au/nov/091/091key.htm)