

GLOSSARY & REFERENCES

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6. GLOSSARY OF TERMS

Biodiversity	Biodiversity is the variety of all life forms, that is, the plants, animals and micro-organisms. It includes the genes of all species, the communities they form and the ecosystems of which they are a part.
Genetic diversity	Genes are inherited characteristics, which are packaged in different ways with each new generation. Genetic diversity is the variety of genetic material on earth. There is genetic diversity within species, and between all species. Among all Magpies, for example, no two are exactly the same, but each has a different combination of genes. Diversity in this sense ensures that some individuals are better at adapting to certain types of environment. These are the successful ones, which pass on the genes, to ensure success of their offspring. Without genetic diversity a species cannot evolve, and cannot survive changes in its environment.
Species diversity	The variety of species on the planet. A species is a group of organisms, which shares a combination of genetic variations that make its members different to all other species. Members of a species can breed only with other members of the same species; they cannot breed with members of other species. Biodiversity can be measured by counting the number of species in an area; it is described as ‘species rich’ if it contains many different species. The number of species on earth is widely estimated at 10-100 million. One of the consequences of biodiversity loss is the decline of plant and animal species. This decline leads to species becoming endangered, vulnerable or extinct, otherwise known as “threatened species”.
Ecosystem diversity	Plant and animal species interact with each other in their physical environment to form ecosystems. The many different kinds of environments, including the many different species adapted to live in them, form ecosystem diversity. An ecosystem is the plants, animals, fungi, and microorganisms, and their non-living environment interacting together as a functioning unit.
Carnivore	A flesh eating animal.
Colonisers	The first organisms to establish in a new environment.

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Corridors	Or habitat corridors. Strips of vegetation of varying width between reserves or other patches of remnant vegetation that allow migration, colonisation and interbreeding of wildlife.
Decomposer	Organism that obtains energy from the breakdown of dead organic matter to more simple substances; mostly refers to bacteria and fungi.
Diversity	Abundance in the number of species in a given location.
Ecology	Study of the relationship of living organisms with their surroundings.
Ecological sustainability	Meeting the needs of the present and future generations with little damage to the environment or loss of biodiversity.
Ecosystem	The organisms in a community and the associated non-living factors with which they interact.
Energy	Capacity to do work.
Energy cycle	The interaction of plants, animals and soil, started with energy from the sun.
Food chain	Movement of energy and nutrients from one feeding group of organisms to another in a series that begins with plants and ends with carnivores and decomposers.
Food web	The food relationships between species within a community. A diagram of who eats whom.
Habitat	A place where a plant or animal lives.
Herbivore	Organism that feeds on plant tissue.
Remnant vegetation	These are the fragments of the pre-European landscape of forest, woodland, grassland or wetland vegetation. Remnant vegetation includes single paddock trees, bushland patches, native forests and native grasslands.
Species	A group of organisms that interbreed in nature; a taxonomic grouping.
Wetland	A seasonal or permanent body of water or a waterlogged area forming a habitat for aquatic plants and animals, notably birdlife and fish.

REFERENCES AND FURTHER READING

National Parks and Wildlife Service, 2001, *Facilitator's Biodiversity Resource Kit*.

National Parks Association of NSW and NSW National Parks and Wildlife Service, 2001. *Community Biodiversity Survey Manual*.
A useful resource for full details about biodiversity survey techniques.

The Atlas of NSW Wildlife is the main database of native plants and animals for New South Wales. This database is managed by National Parks and Wildlife and the information is available to you via the NPWS web site. www.nationalparks.nsw.gov.au

NSW Agriculture, 1999. *Physical Property Planning*, Farming for the Future.

A 146 page manual with detailed, step by step instructions for preparing a physical property plan, using an aerial photo of your property.

NSW Agriculture, Department of Land and Water Conservation, National Parks and Wildlife Service, Farming for the Future 1999. *Property Management Planning Workshop Series 2nd Edition*.

This set of eight workshops explains the entire property management planning process.

NSW Agriculture 1996. *Nature conservation on farms*. Home study program.

This easy-to-follow 118 page book is designed as a home study module and provides detailed information on the value, assessment and management of nature conservation on your property.

Greening Australia (2001) *Tracking and improving vegetation projects*. A National Training Package.

This is a training package which provides monitoring and evaluation guidelines, mostly aimed at community bushcare groups.

Greening Australia, Queensland 2000. *Monitoring Farm Flora and Fauna*.

Goldney D. and Wakefield S., 1997, *Save The Bush Toolkit*. Charles Sturt University and Orange Agricultural College, University of Sydney.

This is a self-guiding package of nine "Kits" which takes the landholder through step by step assessments of the natural features and vegetation on farms with a matching kit giving management suggestions. It also has sections on wildlife surveying and farm planning. This resource was developed for the Central West region but is useful for most rural production areas in NSW.



REFERENCES AND FURTHER READING

Barrett, G. 2000. *Birds On Farms: Ecological management for agricultural sustainability*. Supplement to Wingspan 10:4, December 2000, Birds Australia, Hawthorn.

A set of ten recommendations.

Blakers M., Davies S.J.J.F, Reilly P.N., 1984 *The Atlas of Australian Birds*, Royal Australasian Ornithologists Union.

Victorian Natural Resources and Environment, 2002, *Biodiversity in Property Management Planning - Living Systems Resource Kit*.

Platt, Stephen, J. 2002. *How to plan wildlife landscapes: a guide for community organisations*. Department of Natural Resources in Victoria. See www.nre.vic.gov.au (Select Conservation and Environment theme, then Living Systems.)

A complete management information resource for property planning for biodiversity.

NSW Agriculture, 1995. *Managing Wetlands on Farms*, Home Study program.

Department of Land and Water Conservation, 1998. *Rural Production and Native Vegetation Conservation*.

An information package for Landholders consisting of Veg Notes and other information sheets.

See also the Biodiversity Conservation Management Notes in Section Seven.