GLOSSARY

Acid Sulfate Soils
Soils which contain significant amounts of iron sulfides, which can produce harmful quantities of sulfuric acid when disturbed and exposed to air.

Allometric
A change in the state of factors in which the relationship between the factors is maintained proportionally (ie. allometric growth as diameter increases, biomass increases proportionally).

Basal Area
Stand basal area is a summary of the number and the size of trees in a stand. As individual tree basal area is related to tree volume, biomass, crown parameters, etc., so too stand basal area is related to stand volume, biomass.

Biomass
The amount of living matter that is present within an ecosystem at a given time.

Closed Forest
A community of medium to tall trees forming a continuous canopy where little sunlight is able to penetrate to the forest floor directly.

Community
A natural assemblage of plants, animals and microbes found living together in a common environment and interacting with one another. A community of plants if often identified by the dominant species present.

Detritus
Fragmented particulate organic matter derived from the decomposition of plant and animal remains; organic debris.

Diameter at Breast Height (DBH)
Diameter at breast height is the diameter of the stem measured at 1.3m height above the base on the uphill side of the tree.

Ecosystem
A natural system comprising living organisms and their environment. All of the elements of the ecosystem act as an integrated unit.

Leaf Litter
The amount of living material (ie. leaves, stems, roots etc) produced by a vegetation community over a specified time.

Mangal

A term sometimes used to refer to the entire mangrove ecosystem, as opposed to a specific mangrove tree.

Mangrove

A diverse group of unrelated trees, palms, shrubs, vines and ferns that share a common ability to live in waterlogged saline soils (intertidal) subjected to regular flooding.

Open Forest
A community of medium to tall trees in which the canopy cover is 30 to 70 percent.

Productivity
A concept commonly used by scientists to describe the ecological value or function of a vegetation community

Species
A scientific unit of classification, below the level of genus. Species is the rank used to designate groups of individuals that show certain common features and are potentially capable of reproducing freely to produce offspring like themselves.

Species Diversity
Variability (species richness and abundance) of biota in an area; diversity amongst different communities in different areas.

Transect
In ecology, an imaginary line through an ecosystem along which a biological community is sampled and studied.

Trophic Levels
The sequence of steps in a food chain or pyramid from producer to primary, secondary or tertiary consumer.

Note: Definitions above have been derived from various sources all listed in the References section (see next page).

REFERENCES

Brocklehurst, P. and Edmeades, B. 1996a, *The Mangrove Communities of Darwin Harbour Technical Report No. R96/7* Resource Capability Assessment Branch, Department of Lands, Planning and Environment.

Brocklehurst, P. and Edmeades, B. 1996b *Regionalisation of Mangrove Communities along the Northern Territory Coast*, Technical Memorandum No. 96/17, Resource Capability Assessment Branch, Department of Lands, Planning and Environment.

Brocklehurst, P. and Edmeades, B. 1995. *Mangrove Survey of Darwin Harbour Northern Territory.* CCNT: Darwin, NT.

Comley, BTW. *Coastal mangrove wetland productivity and management, Darwin Harbour, Northern Territory, Australia.* Unpublished Masters Thesis, to be submitted July/August 2002.

Coupland, G. *The significance of insects to tropical mangrove communities: insect importance in mangrove reproduction, recruitment and health.* Unpublished PhD hesis, to be submitted July/August 2002.

Dames and Moore 1988. *Mangrove Delineation Study Stage 3* - Mangrove Zone Management Plan Darwin Harbour, NT. Prepared for the Conservation Commission of the Northern Territory.

Hamilton and Snedaker. 1984. *Handbook for Mangrove Area Management, Commission of Ecology*. International Union for Conservation of Nature and Natural Resources, Gland, Switzerland.

Hutchings, P. and Saenger, P. 1987 *The Ecology of Mangroves*. University of Queensland Press: Queensland.

Lear, R. and Turner, T. 1977 *Mangroves of Australia.* University of Queensland Press: St Lucia, Queensland.

Martin, J. *Use of mangroves and their resources by fish in Darwin Harbour*. PhD thesis in preparation.

Metcalfe, K. 1999. *Mangrove Litter Production Darwin Harbour, Northern Territory - A study of litter fall as a measure of primary productivity in the mangrove communities of Darwin Harbour*. Masters Thesis, NTU : Darwin, NT.

Metcalfe, K. In prep. a. *Leaf Litter Productivity in Darwin Harbour.* Journal Article.

Metcalfe, K. In prep. b. *The biological diversity, recovery from disturbance and rehabilitation of mangroves in Darwin Harbour.* PhD thesis.

Northern Territory Department of Lands and Housing 1990. *Darwin Regional Land Use Structure Plan 1990.* NT Department of Lands and Housing: Darwin, NT.

Northern Territory Government 1997a, 2001 (Update). *Managing Darwin Harbour and its Catchments.* NT Department of Lands, Planning and Environment: Darwin NT.

Northern Territory Government 1997b. *Crustacean and Molluscs Survey in Darwin Harbour. Darwin, NT.*

PWCNT. 2000. *Parks and Reserves of the NT - Map*. Produced by the Strategic Planning and Development Unit, Parks and Wildlife Commission of the Northern Territory: Darwin, NT.

Saenger, P., Hegerl, E.J. and Davie, J.D.S (Eds.) 1983. *Global Status of Mangrove Ecosystems*. Commission on Ecology Papers Number 3, International Union for Conservation of Nature: The Netherlands.

Salgado-Kent, C. *The significance of plant-animal interactions in tropical mangrove forests: how crabs affect structure and production.* Unpublished PhD thesis, to be submitted July/August 2002.

Tomlinson, P.B. 1986. *The Botany of Mangroves*. Cambridge University Press: London.

Whelan, P., Montogomery, B.L., Nowland, R.A., and Love, B.L. 1995. *Biting insect investigations Darwin South Stage 2, April 1993 – March 1994.* Unpublished report, Medical Entomology Branch, Territory Health Services Darwin NT.

Wightman, G. 1989. *Mangroves of the Northern Territory, Northern Territory botanical Bulletin No. 7*. Conservation Commission of the Northern Territory.

INTERNET SITES FOR MANGROVES

The following sites contain information on mangroves and may provide other links to related sites:

Global Mangrove Protection

http://www.agri-aqua.ait.ac.th/Mangroves/

Guide to the Mangroves of Singapore

http://mangrove.nus.edu.sg/guidebooks/

Mangrove Action Project

http://www.earthisland.org/ei/map/map.html

Mangrove Communities in Darwin Harbour

http://www.lpe.nt.gov.au/advis/LAND/mangrove/default.htm

Mangrove Ecology at NTU

http://www.ntu.edu.au/faculties/science/sbes/mangrove/

Mangrove Replenishment Initiative

http://mangrove.org/

Queensland EPA – Wetlands and Rainforests

http://www.env.qld.gov.au/environment/school/wetlands/

West Australian Mangrove Page

http://wwwscience.murdoch.edu.au/centres/others/mangrove/

NOTE: This list is by no means exhaustive and serves as a preliminary guide only.