

## Riparian Vegetation -- Methods

Following DEC's methodology for surveying salt lake vegetation in the nearby Buntine-Marchagee recovery catchment (Richardson *et al.* 2005), a 160 m-long belt transect was set up across the southern margin of the lake, extending from the samphire vegetation on a gypsiferous portion of the lake floor to fringing woodland/shrubland on the adjacent sandplain. The transect was aligned roughly north-south (181° mag.). Stations were erected at 20 m intervals, and each station was treated as the centre of a 20 × 20 m quadrat. Note that the southernmost 40 m of the transect lay outside the mining lease.

A belt transect of this kind is effectively a group of eight, contiguous, 20 × 20 m quadrats. For each quadrat, all perennial plant taxa growing within the 20 × 20 m area were identified to species or subspecies level. Taxonomy followed Paczkowski & Chapman (2000); nomenclature followed the Western Australian Herbarium's 'Florabase' website. Percentage cover for each taxon was recorded on field sheets, using a slightly modified Braun-Blanquet scale (1 = <1%; 2 = 1-10%; 3 = 10-50%; 4 = 50-90%; 5 = >90%). Structural aspects of the vegetation were described according to the Muir (1977) system.

The timing of the field survey was a compromise between three imperatives: (i) the need to catch vegetative growth on the annuals soon after the winter rain; (ii) the relative ease in recognising & identifying flowering shrubs/herbs in Spring; and (iii) the near-impossibility of identifying samphires to species or subspecies level at any time of year but Summer, when both seeds and flowering material are available.

## References

Muir, B.G. (1977) Biological survey of the Western Australian wheatbelt. Part II: Vegetation and habitat of the Bending Reserve. *Records of the Western Australian Museum*, **suppl. no. 1**.

Paczkowski, N. & Chapman, A. R. (2000) 'The Western Australian Flora: A Descriptive Catalogue'. Wildflower Society of Western Australia, Western Australian Herbarium, Department of CALM and Botanic Gardens & Parks Authority, Perth.

Richardson, J., Keighery, G. & Manson, W. 2005. A baseline of vegetation health for the Buntine-Marchagee recovery catchment. Department of Environment & Conservation, Perth.

Western Australian Herbarium (1998- ) 'Florabase – The Western Australian Flora. Department of Environment & Conservation'. <http://www.florabase.dec.wa.gov.au/> [accessed Oct-Dec, 2010]