

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.

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