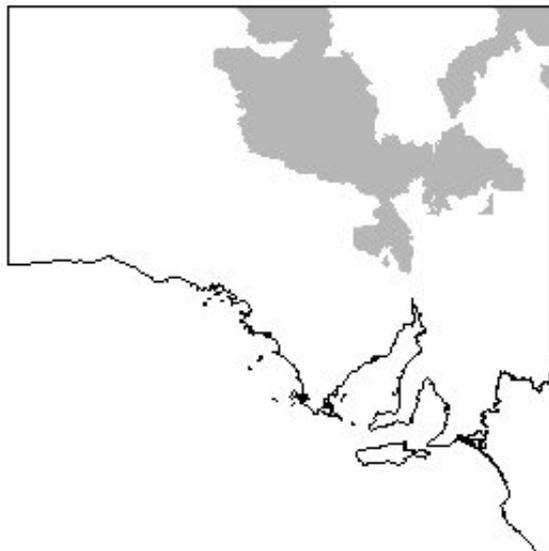


## Biological Survey of the Stony Deserts

Brandle, R. (ed) (1998). *A Biological Survey of the Stony Deserts, South Australia, 1994-1997*. Biological Survey and Research Section, Heritage and Biodiversity Division, Department of Environment, Heritage and Aboriginal Affairs & National Parks Foundation of South Australia Inc.

Surveyed in: 1994 - 1997  
 Published: 1998  
 Availability: \$38.50 (incl GST)  
 contact:  
 DEH Information  
 ph. (08) 8204 1910  
 Fac. (08) 8463 3966  
<mailto:dehinformation@saugov.sa.gov.au>



### Summary:

From September 1994, 344 sites were surveyed for flora and fauna (with a further 254 being surveyed for flora only) in the stony deserts of South Australia. This area includes the stony country of the Lake Eyre Basin extending north and north west from the Flinders Ranges to the Queensland and Northern Territory borders, and the Arcoona Plateau west of Lake Torrens.

The number of records contributing to the South Australian Biological Survey Database as a result of this survey was: 14,784 plants, 4,994 birds, 1,327 reptiles and 1,546 mammals. Site based information from 8 other survey efforts, which overlapped the study area, were included in the analyses. This resulted in the description of 29 floristically distinct plant communities. The vertebrate analyses related 18 bird, 18 reptile and 15 mammal assemblages, as well as 7 frog species, to the landform parameters and vegetation analyses.

Of the 784 plant taxa recorded for the study area:

- 6% of species were recent introductions;
- 47 species of conservation significance were identified as occurring in the study area;
- 20 were of national conservation significance and 20 were of State conservation significance;
- the other 7 nationally significant species known to occur in the survey area were not recorded at survey sites;
- 9 species are considered to be endemic to the stony deserts;
- a further 5 plant taxa, yet to be described, may be added to this list.

Of the 157 bird species recorded at sites in the study area:

- 1 species (recorded at one site) was a European introduction.
- 42 of these are rated as species of conservation significance with 4 having a national conservation rating. None are endemic to the study area but the stony deserts provide a critical area of habitat for 4 species.

The 81 reptile species recorded at sites in the study area:

- represent 80% of the total known reptile fauna.
- 3 of these are rated as being of national conservation significance;
- 4 species are considered to be endemic to the study area which also represents the bulk of suitable habitat in South Australia for a further 4 species.

Of the 40 mammal species recorded at sites in the survey area 10 were recent introductions:

- the 30 native species recorded represent 83% of the known extant mammal fauna;
- 15 species are rated as being of conservation significance of which 6 are rated at the national level;
- 3 species are considered to be endemic to the stony deserts and 2 have the bulk of their South Australian distribution within these habitats.

7 of the 10 frog species known from the study area were recorded during the surveys:

- 5 at sites and 2 opportunistically;
- the other 3 species have only rarely been recorded.

Structural vegetation groups were mapped at a scale of 1:250,000 across the study area and these are presented as 2 1:650,000 scale maps with the report.

Sites and areas containing high species richness and high diversity of conservation significant species were identified from the site survey information. This information can be used as a basis for identifying areas of high conservation significance for the various taxonomic groups. Important habitat features such as the Davenport Range were not identified by this process, because the sampling intensity did not adequately investigate the complexity of this and other local systems of minor extent. Conservation measures and National Estate values were also discussed.