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## Lake Campion Waterbirds

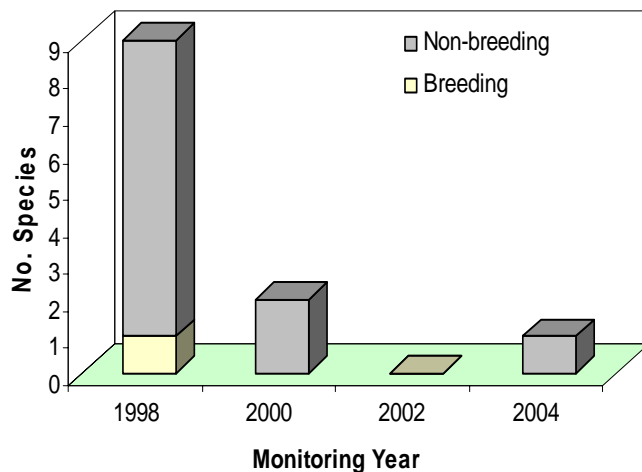
### The Wheatbelt Wetlands Monitoring Program

The Wheatbelt Wetlands monitoring program commenced in 1997 with 5 wetlands and was expanded to 25 wetlands by 1999. Lake Campion was first surveyed in 1998. Each wetland in the program is surveyed at least every second year for aquatic invertebrates and waterbirds and water chemistry and ground water parameters are measured. Waterbirds are surveyed using binoculars and spotting scope to count all birds present. When lake depth is sufficient a small boat is used to gain better access to all parts of the lake. Evidence of breeding is recorded when observed, i.e. broods or nests with eggs, however, nests are not searched for and these data will be incomplete.

Waterbirds were surveyed at Lake Campion in late Winter (August), Spring (October) and Autumn (March) of each sampling year since 1998, i.e. 1998, 2000, 2002, and 2004. A total of 9 species have been recorded since monitoring began.



### Waterbird Species Richness at Lake Campion



Lake Campion is hypersaline and waterbird species richness was strongly influenced by the related parameters of water depth and salinity. Below depths of 0.5 m no waterbirds were recorded and for depths up to 1.1 m the lake supported only one species; either Grey Teal or Australian Shelduck. At greater depths salinity was reduced, ranging from 173mS/cm (roughly three times seawater) to 96mS/cm (1.5 times seawater) and between five and eight species were recorded. In Spring 1998 water depth was 1.3 m and salinity was 120mS/cm, however, no waterbirds were recorded. It is likely that at this time, water in roadside ditches and seasonal wetlands was abundant and of more suitable quality than in the lake proper.

Australian Shelduck was the only species recorded breeding, with a single brood observed in late Winter 1998. The absence of freshwater in the vicinity of Lake Campion is likely to be a limiting factor for breeding in most waterfowl.

Except for single species only the dabbler feeding guild was able to regularly make use of Lake Campion. Diver, shore feeding and wader species were only present at high water levels (see figure overleaf).



Department of  
Environment and Conservation

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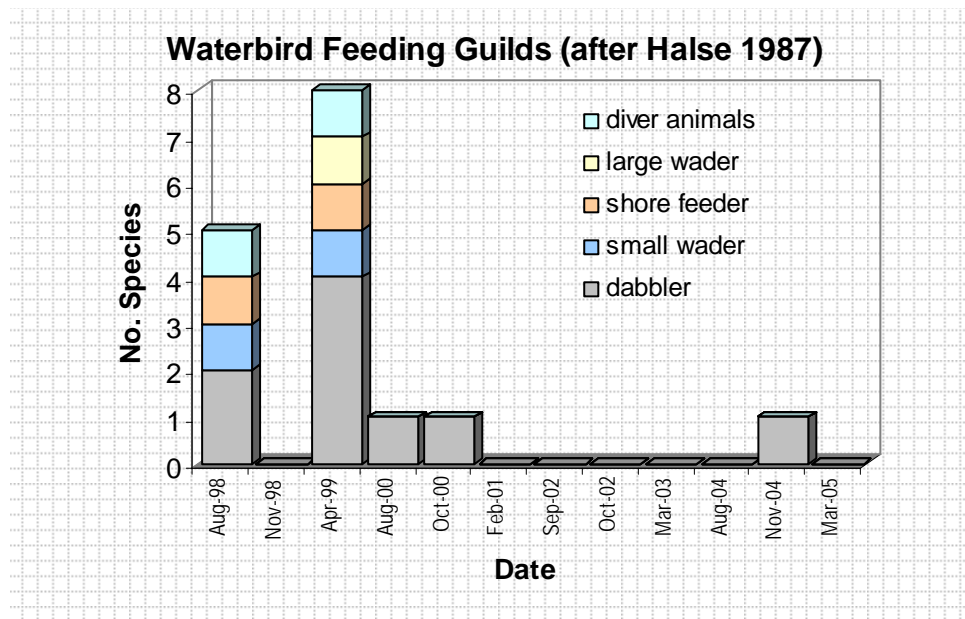


TABLE 1 Waterbird species list for Lake Campion compiled from three surveys each sampling year except 2002 when the lake was dry for the spring survey and 2004 when the lake was dry for the autumn survey. % Occurrence is the proportion of surveys, with depth greater than 0 m, for which the species was recorded

Species	1998	2000	2002	2004	% Occurrence
Australian Shelduck	√	√	0	√	40
Grey Teal	√	√	0	0	30
Hoary-headed Grebe	√	0	0	0	20
Silver Gull	√	0	0	0	20
Pacific Black Duck	√	0	0	0	10
Pink-eared Duck	√	0	0	0	10
White-faced Heron	√	0	0	0	10
Black-winged Stilt	√	0	0	0	10
Red-necked Avocet	√	0	0	0	10

### Further reading:

Cale D.J., Halse S.A. and Walker C.D. (2005) Wetland monitoring in the Wheatbelt of Western Australia: site descriptions, waterbird, aquatic invertebrate and groundwater data. *Cons. Sci. W. Aust.* **5** (1): 20-135

Halse S.A. (1987) *Probable effect of increased salinity on the waterbirds of Lake Toolibin*. Technical Report No. 15. Dept. Conservation and Land Management, Perth Western Australia.