





#### Aerial Survey of Wetland Birds in Eastern Australia - October 2011 Annual Summary Report

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#### **Results summary**

- 1. There was significant flooding throughout eastern Australia survey area. This included widespread flooding in the Murray-Darling Basin and Lake Eyre Basins. Many large wetland systems had widespread flooding. Most key wetlands were either fully flooded or partially flooded (Fig. 1). Some additional flooding has continued to occur since completion of aerial surveys across some river systems, increasing wetland habitat available in inland areas, particularly the northern part of the Murray-Darling Basin.
- 2. Wetland habitat was again extensive in the Cooper Creek Catchment as well as the Diamantina and Georgina river systems. Lake Eyre was drying and supported few waterbirds. Wetlands on the lower Cooper Creek held water for the second consecutive year, with extensive flooding.
- 3. Throughout the Murray-Darling Basin, many of the large wetlands areas had water. This included widespread waterbird habitat on the Paroo River, including the Paroo overflow lakes, Cuttaburra channels, Macquarie Marshes, Lowbidgee wetlands and Menindee Lakes. Similarly, there were relatively large flooded areas throughout Victoria and South Australia.
- 4. The wetland area index fell from 2010 levels but remained above the long term average (Fig. 2).
- 5. There was an increase in total numbers of birds estimated, the highest overall total since 1984 (Fig. 3). Waterbirds were beginning to concentrate more in 2011 than 2010 on the major wetland areas.

This survey is run by the University of NSW and the NSW Office of Environment & Heritage, with additional funding provided by the South Australian Department of Environment and Heritage, the Queensland Department of Environment and Resource Management and the Victorian Department of Sustainability and Environment.

- Full
  Partially full and drying
- o Dry

 $\begin{array}{c} 10 \ (20^{\circ} \\ 9 \ (22^{\circ} \\ 8 \ (24^{\circ} \\ 7 \ (26^{\circ} \\ 6 \ (28^{\circ} \\ 5 \ (30^{\circ} \\ 4 \ (32^{\circ} \\ 3 \ (34^{\circ} \\ 2 \ (36 \end{array} )$ 

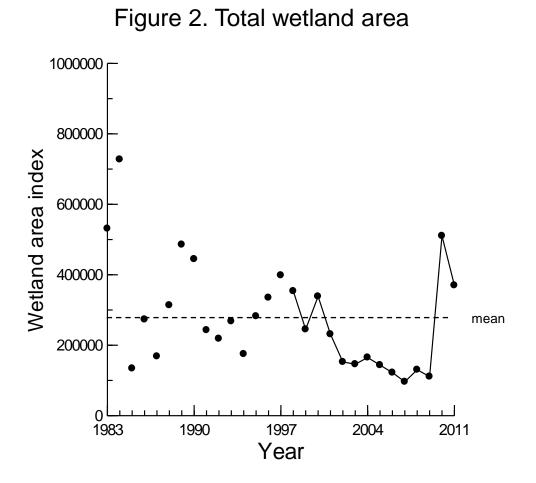


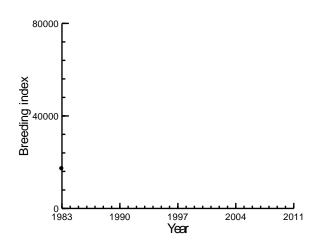
Figure 3. Total waterbirds

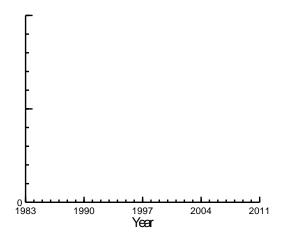
----- mean

Scales vary on graph axes

Figure 5. Breeding index (all sp()-r.r1i6s)

Figure 6.





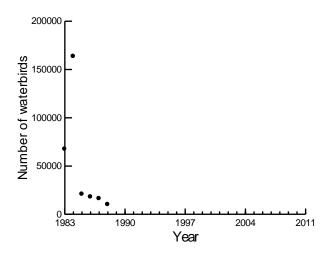
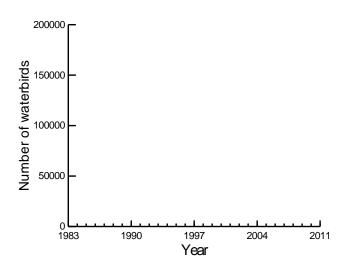
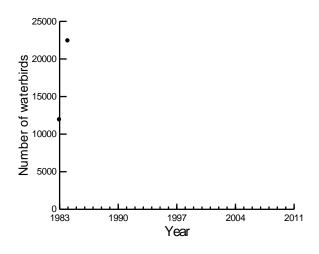


Figure 10. Pacific black duck 6-10

# Figure 11. Black swan 1-5





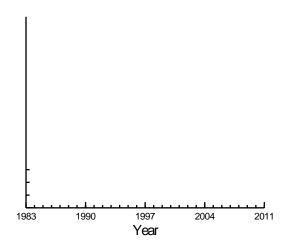
# Figure 14. Australasian shoveler 6-10

Figure 16. Grey teal 1-5

Figure 17. Grey teal 6-10

Figure 18. Hardhead 1-5

Figure 19. Hardhead 6-10



# Figure 21. Freckled duck 6-10

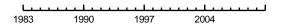
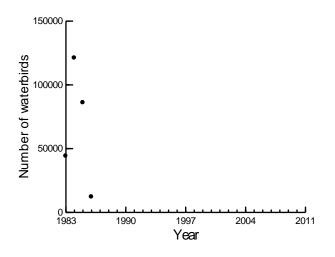


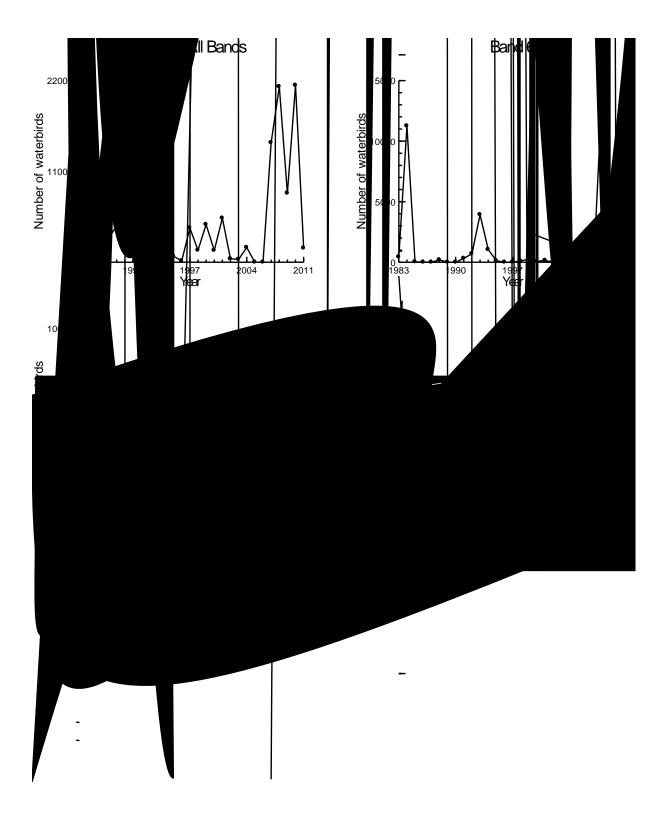
Figure 23. Australian shelduck 6-10

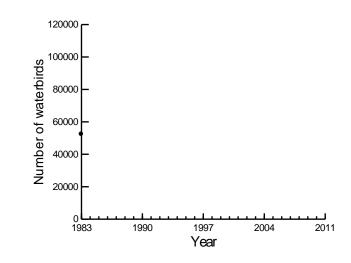


## Figure 25. Pink-eared duck 6-10

Figure 26. Plumed whistling-duck 1-5

## Figure 27. Plumed whistling-duck 6-10





### Figure 29. Australian wood duck 6-10

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