

**New South Wales
Department of
Environment and
Conservation**

Aerial Survey of Wetland Birds in Eastern Australia - October 2006 Annual Summary Report

R.T. Kingsford, J.L. Porter & S.J. Hunter

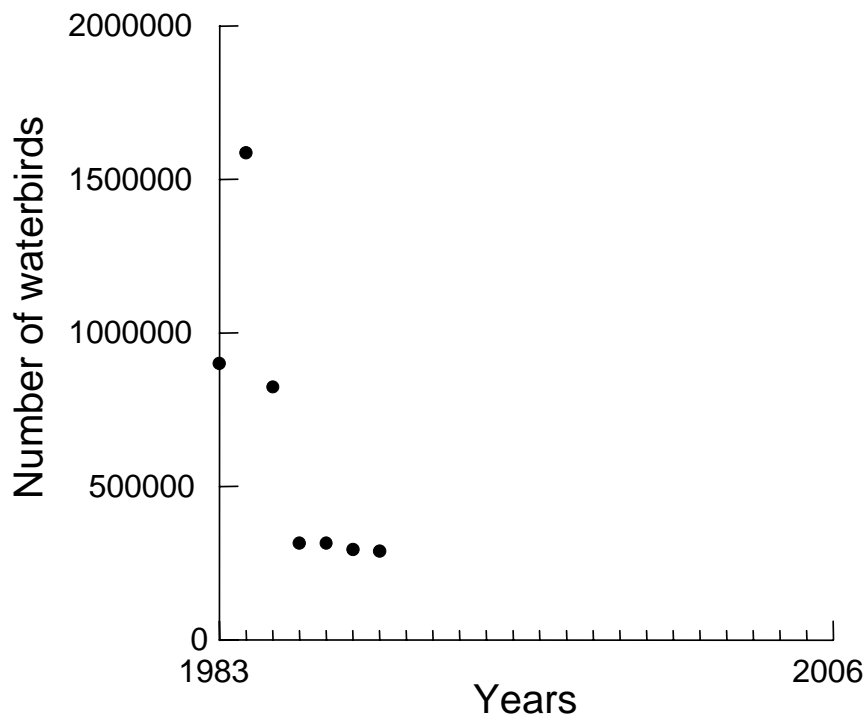
Results

1. Severe and widespread drought continues to affect wetlands, floodplains and rivers in eastern Australia.
2. This is one of the driest years on record, with limited wetland habitat available throughout the survey area (Fig.1). The southern Coorong was dry for the first time on record. The Paroo Overflow, Bulloo Overflow, Macquarie Marshes and Menindee Lakes were dry or almost dry. Most northern rivers in the Murray-Darling Basin, Lake Eyre, Cooper Creek, Gippsland Lakes and the Diamantina River were also dry.
3. Wetland area index was the lowest on record (Fig. 2). Available wetland habitat was mostly (66%) distributed in the south (Bands 2-4). Band 2 contained 18% of total wetland area; Band 3 had 31% and Band 4 had 17% (Fig. 3).
4. Total waterbird abundance was low (second lowest on record; Fig. 3) and waterbirds were strongly clustered on a few wetlands. Two northern Queensland systems had 56% of total waterbird abundance: Lake Galilee (43%, band 9) and Lake Moondarra (13%, band 10). In band 3, Fivebough Swamp held 6% of total abundance (Fig. 4).
5. Total breeding index (all species combined) was the lowest ever recorded, and concentrated (76%) in three locations (two in Band 1 and one in Band 9) (Figs 4-6). Breeding species richness was low, with two non-game species White Ibis and Black Swan comprising most of the total (56% & 38%). Breeding within all survey bands was also very low (Figs 7 & 8).
6. Low numbers of waterbirds and breeding on key wetland systems including Macquarie Marshes extends a sequence of below average years (Figs 5 & 6). A combination of severe drought and long term effects of river regulation, continues to impact on wetland area, waterbird abundance and breeding.
7. Species at or near their lowest recorded numbers in 23 years included: Plumed whistling-Duck, Australasian shoveler, Chestnut Teal, Burdekin duck, Banded Plover, Black-necked Stork, Yellow-billed spoonbill, Royal spoonbill, Musk Duck and Blue-billed Duck (Figs 9-29).

- Full
- Partially full and drying
- Dry

- 10 (20°30'S)
- 9 (22°30'S)
- 8 (24°30'S)
- 7 (26°30'S)
- 6 (28°30'S)
- 5 (30°30'S)
- 4 (32°30'S)
- 3 (34°30'S)
- 2 (36°30'S)

Figure 3. Total waterbirds



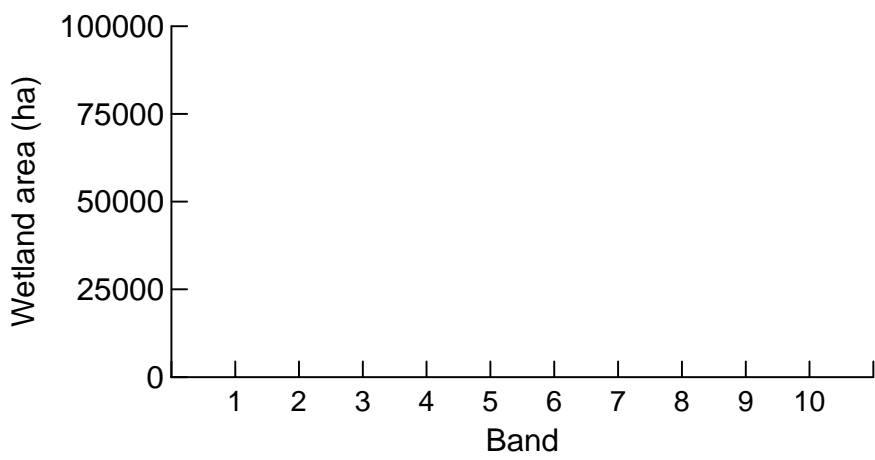
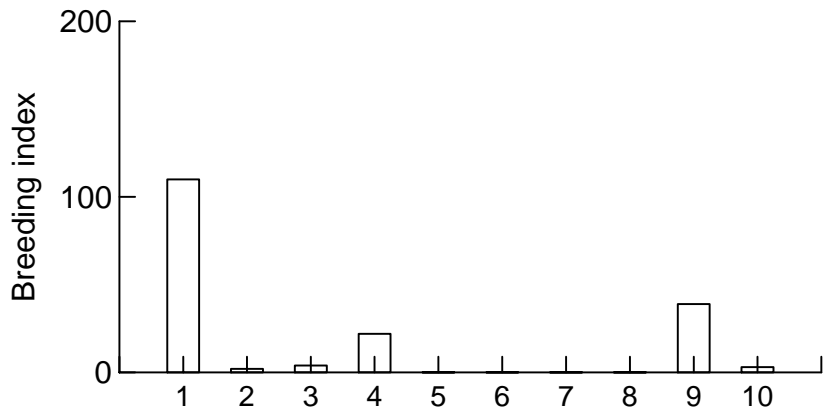
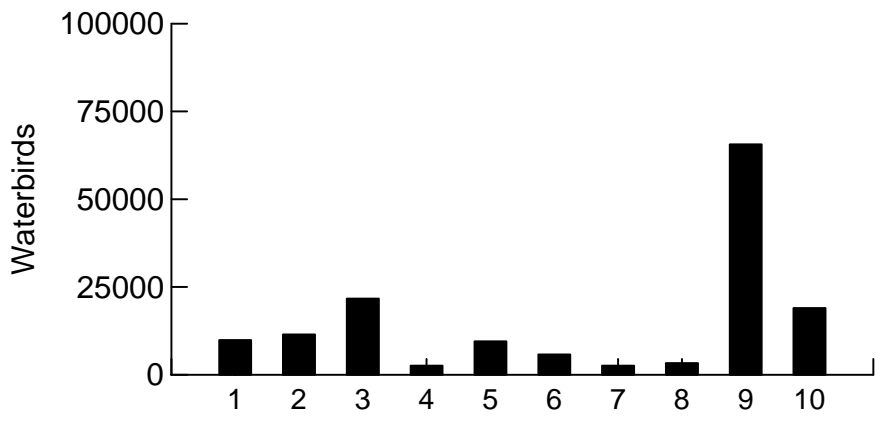
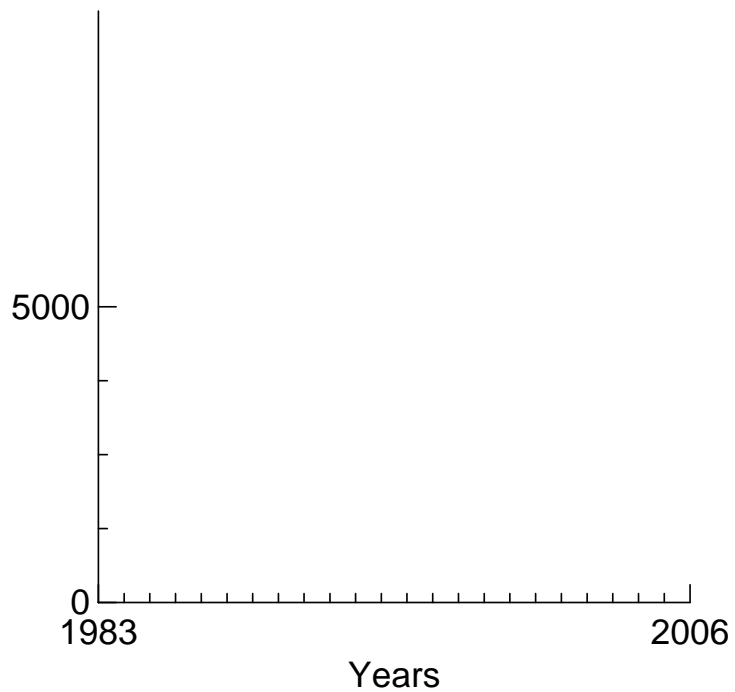


Figure 5. Breeding index (all species)

Figure 6. Black Swan breeding index



Years06008

Figure 7. Breeding index 1-5

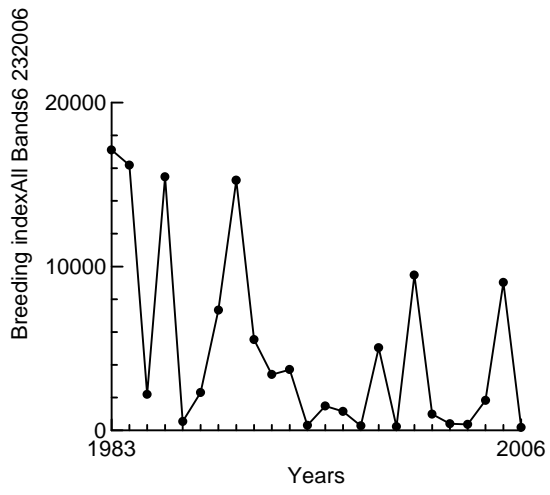


Figure 8. Breeding index 6-10

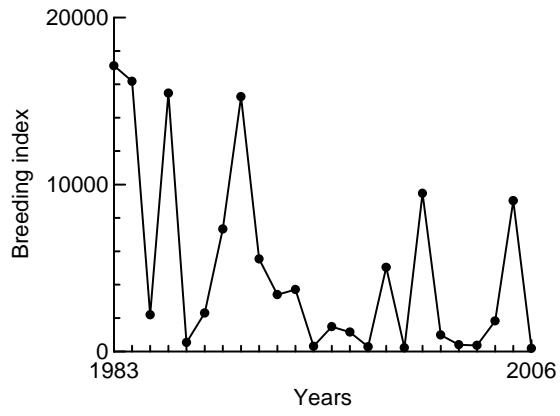


Figure 9. Pacific black duck 1-5

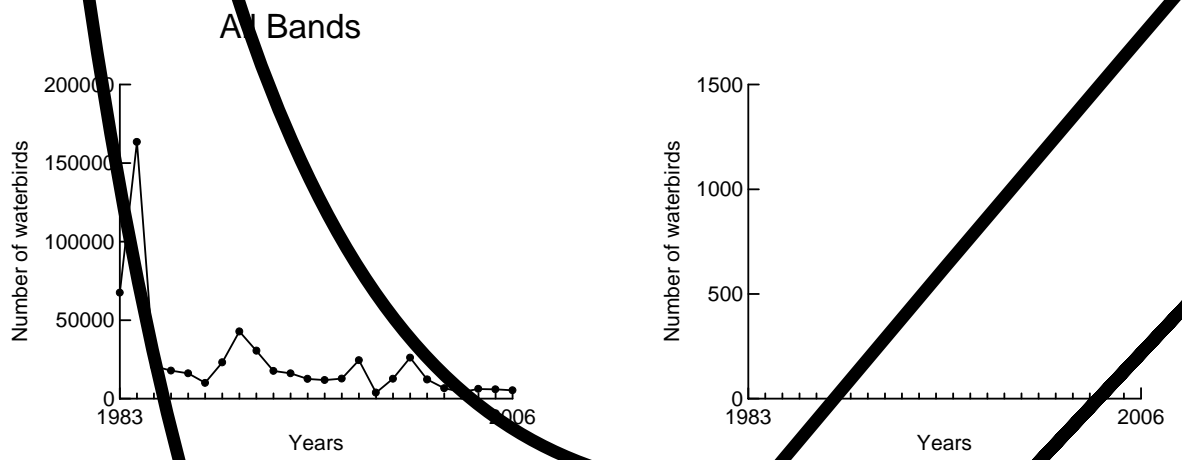


Figure 10. Pacific black duck 6-10

1-5

Band 1

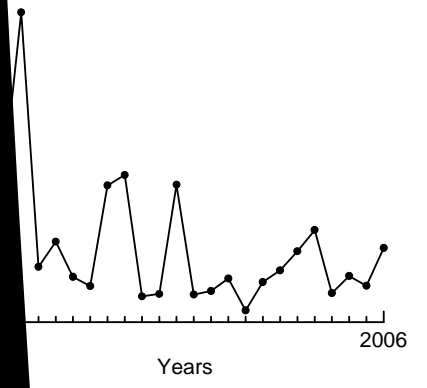


Figure 12. Black swan 6-10

Number.52 0.277 -0a01 Td(e)TP.553 0.100Shap336P.277 -0

Figure 13. Australasian shoveler 1-5

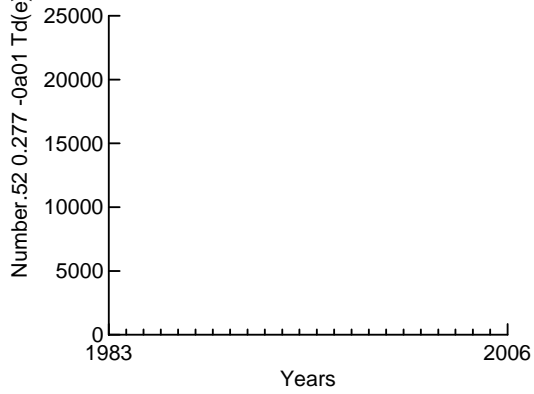


Figure 14. Australasian shoveler 6-10

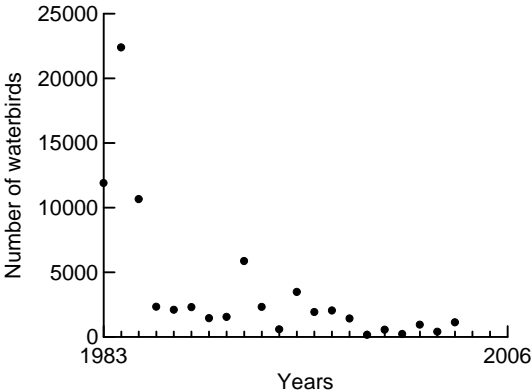


Figure 15. Chestnut teal 1-5

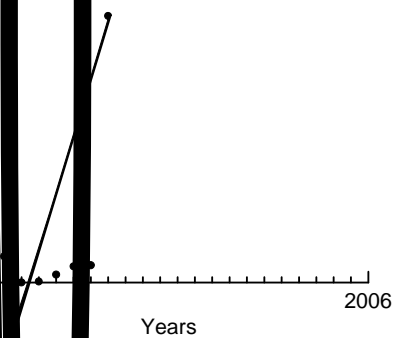
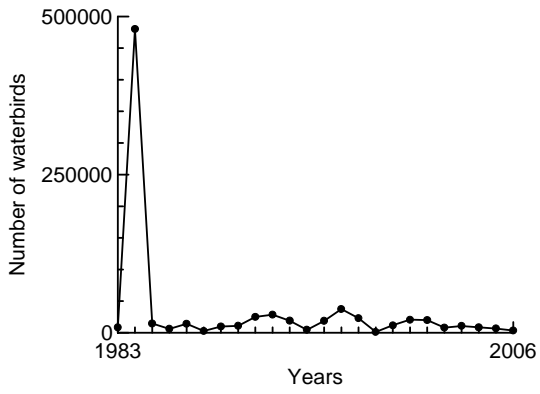
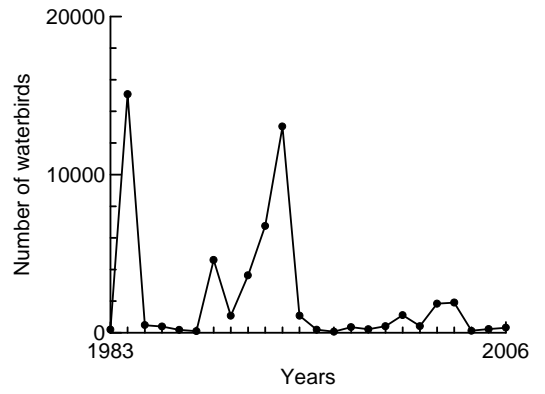


Figure 19. Hardhead 6-10

All Bands



Band 6



Band 7

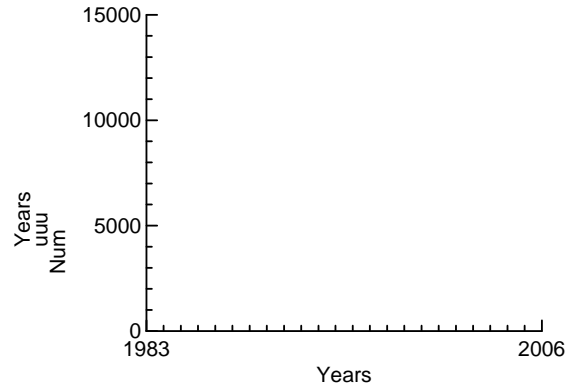
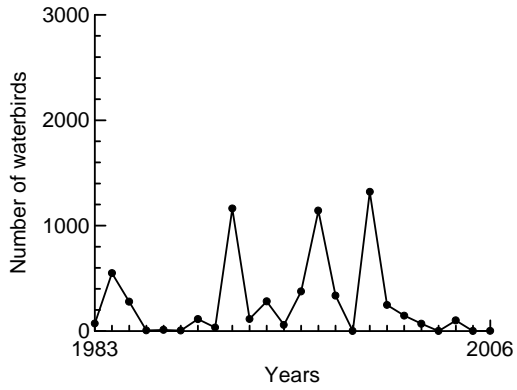


Figure 20. Freckled duck 1-5

All Bands

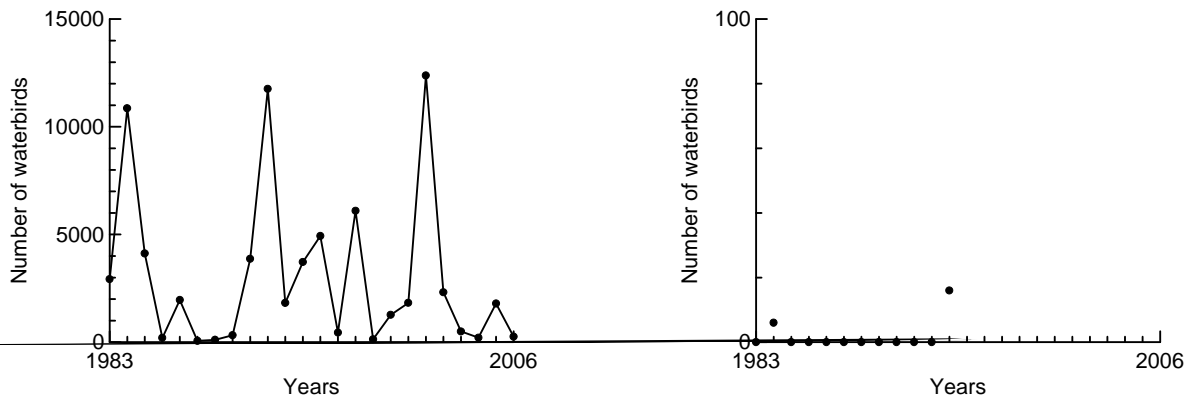


Figure 22. Australian shelduck 1-5

All Bands

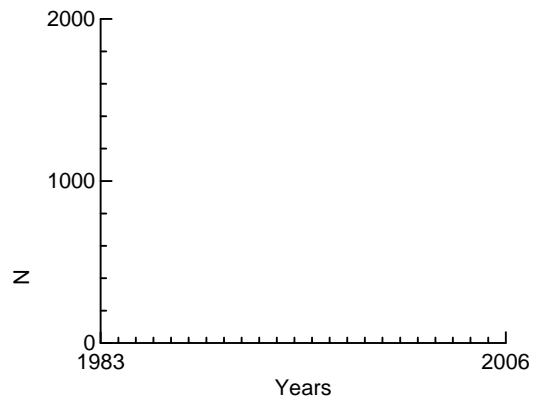
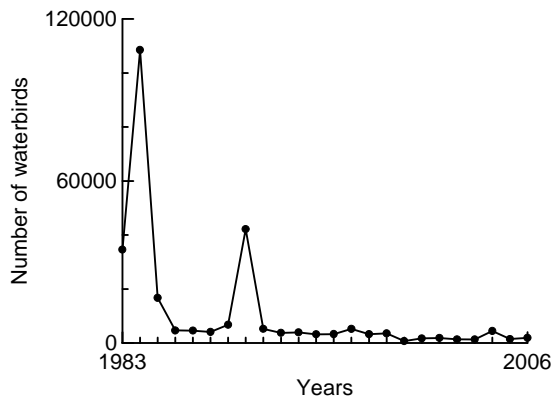
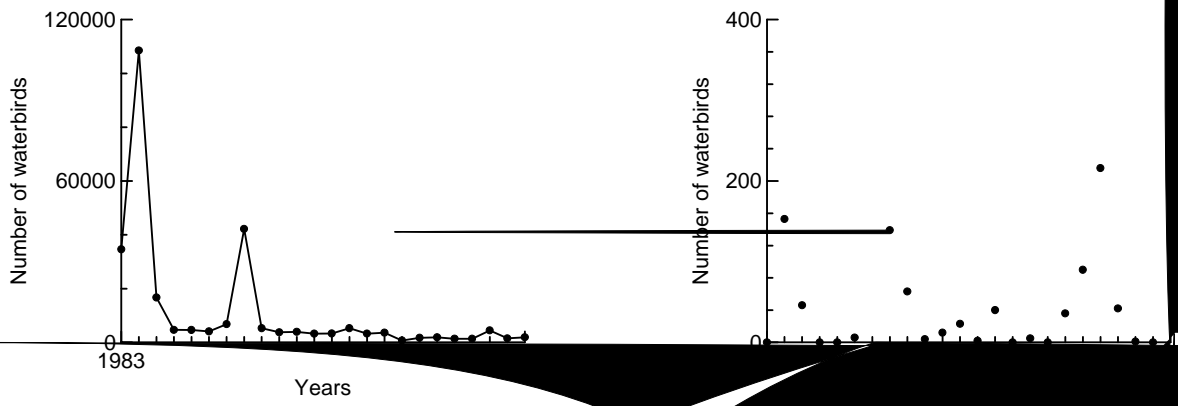


Figure 23. Australian shelduck 6-10

All Bands



1983

Figure 25. Pink-eared duck 6-10

Figure 27. Plumed whistling-duck 6-10

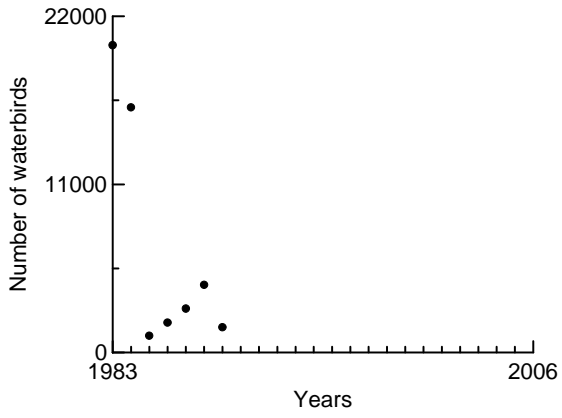
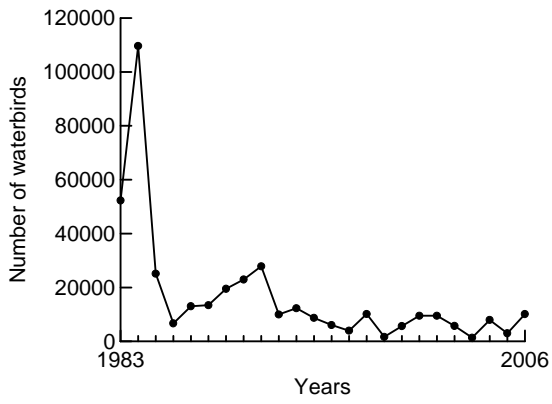


Figure 28. Australian wood duck 1-5

All Bands



Band 1

