

# **Seasonal abundance shifts by the Australian White Ibis *Threskiornis molucca* across parts of eastern Australia in 2007: a survey using questionnaires**

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The Australian White Ibis *Threskiornis molucca* has recently expanded its breeding range from inland wetlands into coastal areas of eastern Australia. Here it inhabits many urban environments and its high abundances require management. However, the lack of knowledge on large-scale abundances and movements of ibises prevents the development of appropriate management. This study investigates the abundances and distribution of ibises in New South Wales (NSW) and southern Queensland (Qld.) in two large-scale surveys – one during the non-breeding season (March–April) and the other during the early breeding season (June–July). Abundances increased significantly in coastal areas of NSW and southern Qld. during the breeding period, while they decreased in central and inland areas. The significantly higher abundances in bioregions with large coastal cities (e.g. Sydney, Brisbane) in comparison to those with towns (e.g. Eden, Ballina) suggest that ibises favour large cities for breeding. Some urban areas (e.g. Gold Coast, Sunshine Coast) had high abundances of ibises during both surveys with no significant increases during the breeding season, which suggests ibises are predominantly sedentary there. The findings support the view that ibis populations on the east coast consist of sedentary and mobile subpopulations that enter city areas for breeding. This needs to be considered in their management.

## **Evaluation of four bird survey methods for species inventory in subtropical rainforest**

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A species inventory aims to list all of the species present in an area over some period of time. Exhaustive sampling is rarely practical and estimator models can be applied to predict total species richness. Four bird survey methods have been evaluated for species inventory in a northern New South Wales subtropical rainforest. Total sampling time (360 minutes) was equal for all methods. True species richness was approximately 36. The standardised search recorded 32 species, transects 30, point counts 30 and the two-hectare search 26 species. Both standardised search and unlimited width transects delivered more accurate estimates of total species richness. This work extends a previous study (Totterman 2012) to a different habitat, with a different assemblage of birds and in a different season. It is confirmed that large area, active search methods are most suitable for bird species inventories.

## **Diet of the Sooty Owl *Tyto tenebricosa* at Blaxland, New South Wales**

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The diet of the Sooty Owl *Tyto tenebricosa* was studied at Blaxland in the lower Blue Mountains, New South Wales, by analysis of regurgitated pellet material. Small and medium-sized mammals were the most common prey, as also documented by previous studies. However, birds and reptiles contributed an unusually high proportion of the diet, especially the Pink-tongued Skink *Cyclodomorphus gerrardii*, which was the second most important prey species, by both number and biomass.

## **Nest sites and breeding estimates of the Black Noddy *Anous minutus* on Lady Elliot Island**

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The Black Noddy *Anous minutus* breeds on vegetated islands off the coast of Queensland, Australia, including Lady Elliot Island, the southern-most island in the Great Barrier Reef. An estimate of breeding pairs on Lady Elliot Island shows an increase on earlier estimates and approaches 30 000 pairs. Nests were found in ten species of tree/shrub. The highest density of nests (nests per tree) was in *Pisonia grandis* (45.2), followed by *Ficus opposita* and then *Heliotropium foertherianum* with the lowest in *Cocos nucifera* (5.9). More nests occurred in protected trees and shrubs than exposed. There was no relationship between the heights of plants and the height of nests. Nests were closest together in *H. foertherianum* but distances between nests varied with the habit of the tree/shrub.