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EGRET NESTS AND CHERRY PICKERS: A CAUTIONARY TALE

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From 1997 to 1998 the reproductive biology of a colony of Great Egrets *Ardea alba* at the Perth Zoo, Western Australia was studied. A cherry picker was used to provide elevation so that an accurate and rapid count of the number of active nests, eggs and chicks, nesting material and the size of nests and position in the trees could be made. The presence of the cherry picker near the Great Egret colony caused seven chicks to fall to the ground, with two of the seven chicks that fell surviving.

Although some mortality occurred, the information obtained using the cherry picker could not have been obtained from observations taken from the ground, due to the height of the nests in the trees. As the colony is the only remaining Great Egret colony in the Perth metropolitan region, an accurate count was necessary to establish a baseline against which long-term fluctuations in numbers could be assessed. The cherry picker counts, although causing several deaths, have allowed the accuracy of previous and future ground counts to be estimated. Long-term monitoring of this colony can therefore be continued from the ground.

Counts of the number of active nests, clutch size and fledging success are necessary to monitor the viability of wading bird colonies. However, accurate counts of the number of nests in a colony are not easily obtained. Wading birds often nest in remote areas, in wetlands where access is difficult and sometimes in tall and thick vegetation (Recher *et al.* 1983). A variety of methods for counting nests have therefore been used, including aerial counts (Baxter 1994; Morton, Brennan and Armstrong 1993) and counts from the ground (Gosper, Briggs and Carpenter 1983). A problem with all procedures is the direct and indirect intrusion into the colony by humans and many authors have noted the adverse effects of such disturbances on wading bird colonies (King 1978; Rodgers and Smith 1995; Vos *et al.* 1985).

During 1997 and 1998, we studied the reproductive biology of a Great Egret *Ardea alba* colony at the Perth Zoo, Perth, Western Australia. As part of this work, we needed information on number of nests, size and building materials of nests, clutch size and number of chicks at different stages of development. In this paper, we report on the use of a cherry picker to collect breeding data on the zoo colony and its effect on nesting birds.

At the zoo, Great Egrets nest in tall pine trees *Pinus canariensis,* with nests ranging from 12 to 29 metres above the ground. To determine the breeding success of Great Egrets, initially the numbers of nests and of chicks within nests were counted from the ground. However, counts from the ground were difficult and inaccurate with repeated counts yielding very different estimates. Counts of eggs were not possible, while chick counts were inaccurate due to visibility difficulties. Tree climbing as an alternative method to ground counts was dismissed as dangerous and likely to be highly disturbing to the birds. As an alternative, and following discussion with persons familiar with the behaviour of nesting herons and egrets, it was decided to use a cherry picker for elevation.

The cherry picker enabled the observer to make an accurate and rapid count of the number of active nests, eggs and chicks, nesting material, and the size of nests and their position in the trees. Three counts using the cherry picker were undertaken each breeding season, for two years. The first counts were undertaken at the beginning of the breeding season in November and repeated fortnightly to mid-December. By December, some chicks were fairly large (nesting was asynchronous) and moving about on the nest and nearby branches. On each occasion, the cherry picker was positioned as far as possible from the nesting trees while still allowing good views of most, if not all, nests. This placed the cherry picker an average 10 metres from the colony. Two persons, the observer and the operator, were required, and both avoided making sudden movements or loud noises which might disturb the birds.

During 1997 and 1998, six counts using the cherry picker were made. On four counts, the presence of the cherry picker caused at least one chick to fall to the ground. In all, seven chicks fell with only two surviving. Chicks that survived needed to be handreared. On 6 December 1998, a camouflage blanket was used to cover the white front of the cherry picker, with the aim of reducing chick mortality. No difference in the behaviour of chicks was observed and three of the seven chicks fell on the occasion. Use of the cherry picker was abandoned after this experience.

Although some chicks fell, the information obtained using the cherry picker could not have been obtained by observations from the ground. Ground nest counts were less accurate and underestimated numbers, sometimes by as much as 10 nests. Eggs could not be seen from the ground and chicks were often concealed, while information on the size and materials used in nests was hard to obtain by ground observations for most nests. On balance, we consider the use of the cherry picker in this colony was

justified. The Perth Zoo colony is the only remaining Great Egret colony in the Perth metropolitan region and is threatened by both development on the zoo grounds and by loss and degradation of the egret's foraging habitat. An accurate count was therefore necessary to establish a baseline against which long-term numbers could be measured. Previous counts (Jaensch and Vervest 1989) had been done from the ground, but their accuracy could not be judged. The cherry picker counts, although causing several deaths, have allowed the accuracy of ground counts carried out in the same season to be estimated. Long-term monitoring of this colony can therefore be continued from the ground. Based on our experience, a cherry picker should only be used in heronries when other census methods are not possible or where standardization of procedures is significantly important (as at the Perth Zoo) to justify possible losses of chicks.

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BOOK REVIEW

The Best of Australian Birds.

Dave Watts, 1999. New Holland Publishers, Australia. RRP $29.95.

This publication comprises a collection of over 170 species of Australian birds as photographed by Dave Watts. It is essentially a 'coffee-table' style book, showcasing his exceptional photographic talents accompanied by a limited amount of text throughout. The images themselves are divided into sections which are habitat-based, encompassing Wetlands, Coasts and Islands, Forests, Woodlands and Plains, and finally the Arid Centre.

Whilst the text is principally superficial, skimming briefly from one group of birds to another leaving snippets of information along the way, there are however a few gems of Dave Watts' personal observations recounted that make the text worthwhile and provide a small insight into what it takes to be a true wildlife photographer (as opposed to a frequenter of wildlife parks and zoos). In one such instance he recalls staking out a waterhole among the gibber plains, well before sunrise. As a male Emu and its six chicks approached for a drink, a Wedge-tailed Eagle swooped in low, scattering the chicks but was unsuccessful in its attack. Now if only there were photos! Perhaps more of these anecdotes and less of the 'skimming' would have complimented the images to greater effect.

The photos that *are* published speak for themselves, as I suspect is the very intention of the book. The irony here is that the very people who will truly appreciate just how superb some of the shots are, will also be craving a lot more information as to how they were achieved. David Holland's books on Australian Raptors, Owls, and most recently Kingfishers where he combines his wonderful photographs with personal essays so successfully comes to mind as an example of just how this book could have been developed. Never the less, Dave Watts' bird photographs combine a technical and artistic excellence and it is a great pleasure to see so many reproduced, and with such obvious care in the printing. Whilst pin-sharp focus may be an important ingredient in a 'successful' shot, the creative elements of composition, use of light, and capturing that intangible 'jizz' of each bird are what must be combined to produce truly memorable images.

My personal favourites here are the evocative, atmospheric group studies of Banded Stilts and a mixed flock of Grey-tailed Tattlers and Bar-tailed Godwits, both of them captured as if in perpetual motion, as indeed they so often are! The other portraits that seem to leap from the page are where Watts has cleverly used natural backlighting, typically early morning or late afternoon, to highlight the subject against the background. In this style we have magnificent studies of a Princess Parrot, a Wedge-tailed Eagle, a Nankeen Night Heron, and some Emu chicks. Disappointingly, there is only one image (superb though it is) of the rare Orange-bellied Parrot for which Dave Watts is perhaps best known. This is contrary to the jacket introduction informing us that several personal favourites of this species had been included.

Finally, I find the title 'The Best of Australian Birds' somewhat trite and unfortunate. Work of this quality deserves a far more specific, individual title than the commercially generic 'The Best of...'. Whilst this style of publication will no doubt appeal to a wide audience, I feel due recognition of Dave Watts' efforts and achievements is somewhat diluted here.

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