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CANBERRA ORNITHOLOGISTS GROUP INC.

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(Continued inside back cover)

TERRITORIALITY AND BREEDING SUCCESS OF AUSTRALIAN MAGPIES IN A CANBERRA SUBURB

Chris Davey

The Australian Magpie *Gymnorhina tibicen* is distributed throughout most of Australia. Within the Canberra area two subspecies occur, the black-backed *G. t. tibicen* and the white-backed *G. t. hypoleuca*. The black-backed subspecies is the one most commonly seen in the area. Hybrids between the two subspecies also occur.

The social structure and territoriality of Australian Magpies living in nonurban areas has been well-documented (Robinson 1956; Carrick 1963, 1972). Magpies have readily adapted to human settlement and are common in suburban areas. In Canberra the population is stable and, according to the Canberra Ornithologists Group's garden bird survey, is one of the most commonly and widely recorded species (Canberra Ornithologists Group 1992).

Because the Australian Magpie is strongly territorial all year round (Carrick 1984) it is possible to determine the number of birds holding territories within a given area without the need to colour-mark individuals. Once territories have been identified it is possible to allocate nests to territories and then determine the number of young reared.

Aim and Methods

The aim of this study was to determine the number of territories and the breeding success of Australian Magpies in Holt, a typical Canberra suburb, and to compare this with the information obtained by Carrick from his 10-year study centred on the "Gungahlin" homestead (Carrick 1963, 1972). In 1955, when Carrick began his studies, "Gungahlin" was surrounded by grazed agricultural land, much of which is now occupied by suburbs.

The suburb of Holt was established in 1971 and covers 225 ha. Before the suburb was developed the area was open woodland and sheep were grazed over the rolling hills. From aerial photos taken in 1978 it was estimated that there was a density of 22 mature trees/km².

At the time of the survey, the suburb could be subdivided into three areas. In the south and west there was 131 ha of well-established gardens with 830 large trees (greater than 10m high per km²). Central Holt was 63 ha in size and consisted of a large shopping centre (Kippax) and a swathe of well-watered and mowed sports fields. The third area to the north and east covered 31 ha. Because this area was not developed until 1980 the gardens were less established and had few trees greater than

10m high. To the north and east of Holt lay the well-established suburbs of Macgregor, Latham and Higgins; to the south lay open grazing paddocks. To the west is a well-established public golf course.

The following questions were asked:

How many territories were there in the suburb? How many magpies were there in each territory? How many magpies were there living in the suburb? What was the sex ratio in each territory? How many territories had nests built in them? How many nests had eggs laid in them? How many nests had eggs that hatched? How many young fledged? How many young were still alive at the end of the breeding season in December? What sort of trees were used for nesting? Which territories had birds that swoop? What was the ratio of black-backed to white-backed birds?

The study was conducted from July to December 1986 by the author and three classes of Year 6 children from Holt Primary School. The children were taught by the author how to identify male, female and young magpies. Because of the difficulties of trying to identify hybrids. the children were instructed simply to record whether the birds had a back that was completely white, or a back that had a black band across it. Each day, on their way to and from school, the children noted the number, back colour, age and sex of the magpies seen. This information and the street and house number, were recorded in a book kept in the classroom. The behaviour of individual birds was also recorded. The activity was so popular with the pupils that the recording of the data started to interfere with other class activities so data sheets were provided and collected by the teacher at the end of each week. The quality of the data was checked by the author who picked sightings from the data sheets at random and checked the observation. No observations were rejected as all sightings were confirmed.

By mid-July there were sufficient data to identify individual groups. This was possible because the data were collected within a very short time twice a day; from 8.30 to 9.00 a.m. and 3.00 to 3.30 p.m. From observations of aggressive interactions between groups, parts of some territory boundaries could be defined. Once the territories and group structure had been identified the location of all nest-building activity was recorded. The success of each nest was then followed until the end of the project.

Results

Aggressive interactions between neighbouring groups allowed many territory boundaries to be identified, but some could not be determined with any accuracy. Where this occurred the boundary was placed half way between the two groups involved. Those boundaries that extended past the edge of the suburb were not identified (see Figure 1).

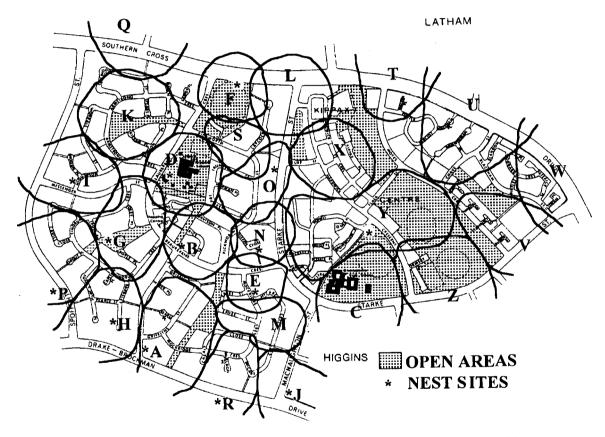


Figure 1. Approximate boundaries of 26 Australian Magpie territories in Holt, ACT.

A summary of the group structure, nest location and breeding success for each of the 26 territories is as follows:

- A. Three adults and one young of the previous year which was found dead on the road on 12 October. Nest in a Monterey Pine *Pinus radiata* but it was blown out of the tree on 16 September killing the one nestling.
- B. Two adults. Used the same nest in a *gum* tree *Eucalyptus* sp. as in the previous year. Eggs laid but one adult killed about 2 October. The male was a persistent "swooper".
- C. Two adults. Nest thought to be on the roof of the school, there was an old nest on a nearby power pole. Two young appeared by 19 October. but had disappeared by 29 November.
- D. Two females and one male. Nest in a gum tree. Two young were out of the nest on 29 October but one was killed by a boy sometime after 30 October. The remaining young was still alive in December. A second nest in a nearby gum tree was occasionally visited.
- E. Group size thought to be two adults. Nest in a gum tree. Two young left the nest on 19 October. Two young still present on 6 November but only one by December. Old nest in a nearby gum tree.
- F. Two adults. Nest in a Monterey Pine. Three young left the nest on about 16 October. The nest was blown down on 27 October. The male was a persistent "swooper". By 17 November there was only one young, and none survived to December.
- G. Three adults, but one died lodged in fork of a tree. Nest in a gum tree. One young left the nest on 29 October but was attacked by a dog. It was seen for the next few days but did not survive to December.
- H. Two adults. Nest in a gum tree. One young was out of the nest by 14 October. It was still alive in December.
- I. Two adults. Nest in a gum tree. One young was out of the nest by 19 October. It was seen being fed on 25 November but was not alive in December.
- J. Two adults. Nest in a gum tree in Higgins. They were feeding two young on 19 October. One of the young was dead on the road sometime before 31 October. There were no young by December.
- K. Three adults. Did not breed.
- L. Two adults Nest not found. A single young in the area by 10 October. Female has a limp. Male killed on road by 27 November. Young and limping female in December.
- M. Two adults. Nest not found. They were feeding one young by 19 October The young survived to December.
- N. Group size not known. Used the same nest as in the previous year in a gum tree. Young in nest being fed on 19 October. Two young survived to December.

- O. Group size not known. Nest in a gum tree. A single young seen briefly around 6 November.
- P. Two adults. Nest in gum tree. Young in nest being fed on 29 September. By 19 October young had left the nest.
- Q. Two adults. If they bred then it was not in Holt.
- R. Two adults. Nest in gum tree Feeding two young out of the nest on 7 November. Odd, but on 29 November two adults were feeding one young on the ground and one on the nest
- S. Little known about this territory. Male was a "swooper". Nest not found but the general locality was known. Two young out of nest by 26 November and still alive in December. A late brood.
- T. If they bred then it was not in Holt.
- U. If they bred then it was not in Holt.
- V. Two adults. Did not nest in Holt, but by 13 November there was a single young in the area. Still alive in December.
- W. If they bred then it was not in Holt.
- X. Two females and one male. One very young juvenile seen in the area on 5 December but not being minded by adults in a territory.
- Y. Area contained 11 to 20 non-breeding birds. These were mainly young birds. A half-built nest was found in the area on 29 November. The nest was never completed.
- Z. If they bred then it was not in Holt.

The following is a summary of the results. Of the 26 territories covering the area of Holt, 13 were contained entirely within the suburb. The majority of groups consisted of two adults with the occasional group of three. By December there were approximately 62 adults and 13 young using the area. Nests were found in 14 of the territories with an additional five territories with young but in which no nests were found. Seventeen groups successfully hatched a clutch. At least 25 young fledged from the nests and 13 survived until December. Of the 14 nests found, 12 were in gum trees and two, both of which were blown out of the trees, were built in Monterey Pines. Only three of the territories (B, F and S) contained birds that were regarded as nuisance swoopers; all of which were males. All birds had black-backs.

Of the 13 territories which were contained entirely within the suburb, 12 were breeding territories whilst one, territory Y, contained a flock of non-breeding birds. This territory covered an area of 20.3 ha. The remaining 12 territories covered an average of 8.1 ha, which is similar to the average territory size of 8.0 ha that Carrick found in his study centred on the "Gungahlin" homestead (Carrick, 1972). The composition of the groups differed between Holt and Gungahlin. The suburb groups were much more likely to contain a pair only, whilst the Gungahlin groups were more likely to consist of more than two birds (see Table I). With the Gungahlin study, productivity was taken as the number of young alive in February. In the Holt study the

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project finished in mid December at the end of the school term, therefore productivity was taken as the number of young alive in December. Given the two month difference in the measure of productivity between the two sites, the productivity of the two areas was similar: 0.31 young/adult or 0.56/adult female for Holt, and 0.32 young/adult or 0.56/adult female for Gungahlin.

Table 1. Composition by sex of Australian Magpie groups at Gungahlin (Carrick, 1972) and Holt, ACT

	Gungahlin	Holt
lm and f	47%	75%
lm and 2f	35%	25%
2m and 1f	5%	0%
Others	18%	0%

All of the territories that produced young were in the area of Holt (south and west) which contained the well-established gardens and many large trees. There were only two territories in central Holt, which consists of the Kippax shopping centre and the large open area of playing fields; one of these territories was based on the shopping centre and the other territory contained the large non-breeding group. There were no territories exclusively within the area of recently established gardens and few trees (north and east) and no nesting occurred within the sections of these territories that lay in the suburb.

Carrick (1963) describes five types of social units in the Australian Magpie: permanent; marginal; mobile; open; and flock. The magpies in Holt occurred as two social groups. All except one were permanent. The remaining group, territory Y, contained a single open group. Without individually marked birds it was not possible to determine the make-up of this group in any detail but observations on behaviour and plumage suggested that at the start of the breeding season there were 11 immatures with a few non-breeding adults. As the breeding season progressed, the group increased to 20 birds. The increase was probably caused by adult birds which may have been the displaced young of the previous year or adults which had lost partners.

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ARMCHAIR BIRDING AT BARREN GROUNDS

Paul Stubbs

On the verandah of the Wardens' House, at Barren Grounds Bird Observatory, we have a couple of armchairs, where occasionally we sit and have "planning meetings". (Patrick, my fellow warden, calls the verandah "the Admiral's bridge" - in deference to my naval career, I guess, though not my final rank, unfortunately! Perhaps he is also suggesting, in an oblique way, that I spend a lot of time out there!)

Now you need to understand that Patrick and I have a lot of planning to do, and we do it at all times of the day and night, often out there where our concentration is frequently broken by the local fauna, unfortunately! But there again, it's not a good thing to spend too long working on a topic without a break, is it? Anyway. you would hardly believe some of the sights we have seen. one or the other of us, or both. Let me tell you about some.

After dark, we are nearly always able to enjoy the European cuckoo-call of the Southern Boobook *Ninox novaeseelandiae*, and often hear the dog-barking of the Sugar Glider *Petaurus breviceps*. We have even got off our bums, grabbed a torch and had a good look at them - they are usually hanging upside-down on a tree trunk. using their prehensile tail.

Although I can't hear them because of a legacy of slight deafness from my naval career, I'm told there are often Mastiff Bats *Tadarida* sp. flying around. On the ground, after dark, we have had one visit from a couple of Common Wombats *Vombatus ursinus*. and several from foxes *Vulpes vulpes*. In fact. one night a fox came up to me, as close as the bottom of the steps (about 3 m away), looked me in the

eye. turned round and continued its investigation of the front lawn. So much for my appeal!

During the day, it's mainly birds I can tell you about, though I must mention that one cold, but memorable day. I got two very fleeting glimpses of a Spotted-tailed Quoll *Dasyurus maculatus*, and on another, a Swamp Wallaby *Wallabia bicolor* slowly made its way down the road in front of me, at nine o'clock in the morning!

So, back to the birds. More times than not, we sit there (planning!) with White-browed Scrub-wrens *Sericornis frontalis* poking around between our feet, and on many occasions we have had a Laughing Kookaburra *Dacelo novaeguineae* fly up to perch on the rail not 3 m away from us. They give us a cold, hard "Don't you dare" stare, then turn their backs on us and direct their attention to other matters.

I suppose the most memorable sight was when two male Superb Lyrebirds *Menura novaehollandiae* came strutting up the road about 20 m apart. It wasn't long before one saw the other and the "inferior" one ran away as if his life depended on it. The other, obviously dominant bird. strutted around and eventually sauntered across the front lawn. not 10 m from where we were having a meeting.

And then there was also the all-too-brief glimpse of a beautiful Satin Flycatcher *Myiagra cyanoleuca as* it came in for a quick drink from the pool. The other day there were seven Satin Bowerbirds *Ptilonorhynchus vialaceus* within 10 m of me - they were probably all young birds as they looked like the female.

We have spotted, or heard, 51 species of birds from the armchairs, and a full list follows for your interest. No, I'm afraid we can't allow you to come and live with us for a while, but you could spend a few nights in "The Lodge" and I bet you that the list you could put together there would take some beating!

Armchair birds

Grey Goshawk Accipiter
novaehollandiae
Wedge-tailed Eagle Aquila audax
Brown Cuckoo-Dove Macropygia
amboinensis
Yellow-tailed Black-Cockatoo
Calyptorhynchus funereus
Gang-gang Cockatoo Callocephalon
fimbriatum

Australian King-Parrot Alisterus scapularis
Crimson Rosella Platycercus elegans
Fan-tailed Cuckoo Cacomantis flabelliformis
Horsfield's Bronze-Cuckoo Chrysococcyx basalis
Southern Boobook Ninox novaeseelandiae

White-throated Needletail Hirundapus caudacutus Laughing Kookaburra Dacelo novaeguineae Superb Lyrebird Menura novaehollandiae White-throated Treecreeper Cormobates leucophaeus Redbrowed Treecreeper Climacteris erythrops Superb Fairy-wren Malurus cyaneus Variegated Fairy-wren Malurus lamberti Spotted Pardalote Pardalotus punctatus Eastern Bristlebird Dasyornis brachypterus Pilotbird Pycnoptilus floccosus White-browed Scrubwren Sericornis frontalis Brown Thornbill Acanthiza pusilla Striated Thornbill Acanthiza lineata Red Wattlebird Anthochaera carunculata Little Wattlebird Anthochaera chrysoptera Lewin's Honeyeater Meliphaga lewinii Yellow-faced Honeyeater Lichenostomus chrysops White-naped Honeveater Melithreptus lunatus Crescent Honeyeater Phylidonyris

New Holland Honeyeater Phylidonyris novaehollandiae Eastern Spinebill Acanthorhynchus tenuirostris Rose Robin Petroica rosea Eastern Yellow Robin *Eopsaltria* australis Eastern Whipbird Psophodes olivaceus Golden Whistler Pachycephala pectoralis Grey Shrike-thrush Colluricincla hármonica Satin Flycatcher Myiagra cyanoleuca Rufous Fantail Rhipidura rufifrons Grey Fantail Rhipidura fuliginosa Willie Wagtail Rhipidura leucophrys Black-faced Cuckoo-shrike Coracina novaehollandiae Grev Butcherbird Cracticus torquatus Australian Magpie Gymnorhina tibicen Pied Currawong Strepera graculina Grey Currawong Strepera versicolor Australian Raven Corvus coronoides Satin Bowerbird Ptilonorhynchus violaceus Red-browed Finch Neochmia temporalis Beautiful Firetail Stagonopleura bella Silvereye Zosterops lateralis Bassian Thrush Zoothera lunulata

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(Since this note was written, Paul Stubbs has returned to England. The current warden at Barren Grounds is Roul Boughton who would be delighted to take your booking for a few nights at "The Lodge" (Telephone 042 36 0195).)

pyrrhoptera

IS THE PIED CURRAWONG A BIRD OF PREY?

K.A. Wood

Birds of prey belong to the order Falconiformes which includes the eagles, hawks, kites and falcons. Their diets vary widely from carrion and small mammals, to birds, reptiles and insects, but each species has its preferred food. For example, Pacific Bazas *Aviceda subcristata* feed mainly on insects, Whistling Kites *Haliastur sphenurus* mainly on carrion, Peregrine Falcons *Falco peregrinus* mostly take birds in flight, and Square-tailed Kites *Lophoictinia isura* often rob birds' nests of young and eggs (Marchant and Higgins 1993). As Pied Currawongs *Strepera graculina* consume some quantity of all these foods, could they too be classified as birds of prey?

It is known that Pied Currawongs prefer insects and fruit (Barker and Vestjens 1989) but what proportions of the other foods do they ingest? How many nestling and free-flying birds do they take? Although these data have yet to be quantified, there are now sufficient published articles in *Canberra Bird Notes* to suggest that consumption of live birds is not just an irregular occurrence (see Appendix). In nine articles there is mention of at least 23 captured birds; 17 as either nestlings or juveniles. Eighteen birds were identified as exotic species suggesting that introduced birds were predominant in the avian prey taken in the city areas represented by these data. Birds have been reported taken in flight and at rest. Thieving of prey, previously captured by raptors. has also been reported (see Veerman 1986, E.C. Metcalf 1988).

Little is known, however, of the hunting strategies used. How do Pied Currawongs locate potential prey? Do they consciously select and hunt a particular individual in a flock? Do they attack from a concealed position? There are few accounts of successful or unsuccessful capture that discuss possible hunting strategies (see Wood 1994).

As to whether or not the Pied Currawong could be called a bird of prey, maybe it could in a general sense. After all it fits the general definition in that it is "a species that hunts and kills other animals" (Thomson 1964). Like some of the falcons, it even takes insects on the wing (Stokes 1982, KAW pers. obs.). But unlike the "true" birds of prey, Pied Currawongs are voracious consumers of fruit in winter (Mulvaney 1986, KAW pers. obs.) and their vocal repertoire is like a song bird. Moreover, their anatomical features group them with the passerines. Were it not for these characteristics, we might be entitled to classify the Pied Currawong as a bird of prey in a more rigorous sense.

Acknowledgement

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Appendix. Birds taken by Pied Currawongs: a summary of references in *Canberra Bird Notes*.

Prey Species	Age*	Comments	Reference
Brown Thornbill	J or A	Taken while singing on top of	R.A. Metcalf
Acanthiza pusilla		a shrub (currawong in flight)	(1988)
Black-faced Monarch	N	Monarcha melanopsis	Routley (1980)
		Circumstantial evidence	
Australian Magpie	N	Taken from nest	Crowe (1978)
Gymnorhina tibicen			
House Sparrow	A	Beheaded in flight	Crowe (1978)
Passer domesticus		_	
House Sparrow	J	Seen being carried	Taylor (1986)
House Sparrow	J	Seen held in bill	R.A. Metcalf (1988)
House Sparrow	A	Seen held in bill	R.A. Metcalf (1988)
House Sparrow	J or A	Captured at communal roost at dusk	Lenz (1990)
European Goldfinches	J	Quoted from Canberra Times	G. Tibicen (1978)
Carduelis carduelis			
Welcome Swallow	J or A	Captured on the wing by	Chittick (1990)
Hirundo neoxena		swooping from above	
Small green bird	J or A	Seen being carried by	R.A. Metcalf
(presumed Silvereye		currawong in flight	(1988)
Zosterops lateralis)			
Common Blackbird	J	"preyed on fledglings"	Vestjens and
Turdus merula			Vestjens (1970)
Common Blackbirds	J	Quoted from Canberra Times	G. Tibicen (1978)
Common Blackbird	N	Taken from nest	Crowe (1978)
Common Blackbird	Advanced N	Three taken from nest and killed by pecking the eyes	R.A. Metcalf (1988)
Common Blackbird	A	Captured on the wing by	Chittick (1990)
		swooping from above	, ,
Common Starling Sturnus vulgaris	N	Taken from nest	Crowe (1978)
Common Starling	Advanced N,	Disembowelled on the ground	Taylor (1986)
Common Starling	or J J	Captured in flight from above	R.A. Metcalf (1988)
Common Starling	J or A	Killed amid feeding flock by pecking on the head	Butterfield (1988)
Common Starling	Advanced N	Pulled from nest hollow	Lenz (1990)

^{*} N = nestling, J = juvenile, A = adult

ODD OB

LAUGHING KOOKABURRAS HAWKING FOR INSECTS AT NIGHT

Steve Wilson

On the evening of 25 February 1995 I was at a sporting function at the training track of the Australian Institute of Sport in Bruce, ACT. As it had become dark the second half of the match I was watching was played under bright lights on four towers.

As full darkness came, many large insects were seen over the track mostly well away from the light towers. Two Laughing Kookaburras *Dacelo novaeguineae* were seen to fly from a suitable perch, such as the branch of a tree or the edge of the verandah over the spectators' area. and take flying insects. The kookaburras succeeded in about half of their attempts. When unsuccessful the birds did not try again, probably because of their lack of agility. but returned to a perch until an insect flew within 10 m when another attempt would be made. The birds were not working together and were often at opposite ends of the track.

Long-horned Grasshoppers and Praying Mantises were seen on the ground and may have been the prey.

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OUT AND ABOUT

G. Tibicen

The views expressed in "Out and About" do not necessarily reflect the views or policy of the Canberra Ornithologists Group Inc.

The key ingredient in the preservation of our wildlife, including birds, is the retention of appropriate habitat. Without the appropriate habitat, birds cannot survive. One organisation dedicated to acquiring and managing private land of outstanding ecological significance is the Australian Bush Heritage Fund. This was established by Bob Brown in 1990 to acquire 241 ha of forest in Tasmania using as a deposit the \$39,000 he received from his Goldman environmental prize. Since then the fund has

acquired land in the Palm Valley area north of the Daintree River. Plans are under way to secure land in other states.

The fund is a nationally registered non-profit organisation governed by a board of directors with a scientific advisory panel to oversee land selection and management. Further information can be obtained from the Australian Bush Heritage Fund, 102 Bathurst Street, Hobart Tas 7000, telephone 002 31 5475, or 1 800 67 7101, fax 002 31 2491. Donations to the fund are tax deductable.

A study assessing the effects which feral Honey Bees *Apis mellifera* have on birds and mammals that use hollows for nesting in box and ironbox forest has been undertaken near Maryborough, Vic. Results **flow** the study were published in the April 1995 issue of *The Bird Observer*. They show the invasion of nest boxes by feral bees caused the failure of nests of Red-rumped Parrots *Psephotus haematonotus*, Crimson Rosellas *Platycercus elegans*. Australian Owlet-nightjar *Aegotheles cristatus* and Laughing Kookaburras *Dacelo novaeguineae*. In addition, nests of Sugar Gliders *Petaurus breviceps* and Brush-tailed Phascogales *Phascogale tapoatafa* were also affected. As an indication of the size of the problem, 22 out of 44 hollows were invaded between October 1993 and January 1994. Birds not affected are those which use hollows less than 100 mm x 100 mm x 300 mm (e.g. treecreepers and pardalotes).

Although the study was carried out using nest boxes, it would seem the results also apply to natural hollows. It shows that feral bees appear to have an adverse effect on native birds and mammals. It also shows that beehives should not be placed in forests where nature conservation is a priority.

As a matter of interest the Australian Nature Conservation Agency has commissioned an overview of the state of knowledge on the effects of feral Honey Bees on nature conservation. Dr David Paton is to carry out the task. David is known for his earlier studies on the effects of cats on native wildlife.

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REVIEW

Field Guide to the Birds of the ACT by McComas Taylor & Nicholas Day (1993). National Parks Association of the ACT: Canberra. Pp. 90, 212 mm x 105 mm, softcover. \$14.95.

This little book is an attractive, innovative. well-designed and useful contribution to the local scene. which is quite good value. though not a "must have". It is written for newcomers to bird-watching.

The unusual size of the book is well designed for the pocket, carry bag or car glove box, which is what it is made for. It begins with useful sections describing how to use the guide, local habitat types, favourite bird-watching locations and bird-watching tips. The local habitats are well summarised, with small adequate photographs and typical avian inhabitants listed in no obvious sequence. The listing of rarities only at the end of the book and listing scientific names as part of the index are acceptable space savers. The choice of species included in the main text is conservative and I suggest it would have been worth including some of the listed rarities. The main section contains most of the features of a standard field guide, with text facing the illustrations. It uses icons as pictorial representations of basic data (status, breeding status, seasons present. habitat and size). These are explained on pages 4 and 5 and cleverly repeated on an extension to the back cover which doubles as a fold-in book mark. Inside the back cover is a map with locations of basic habitat types and bird-watching locations.

The illustrations are of a high standard and do the job admirably. The only serious pictorial inadequacy is the lack of flight illustrations of ducks (and only one wader), which severely restricts the utility of the book at wetlands. Perched Brown Falcons normally look less tidy than shown. The feet on the immature White-bellied Sea-Eagle are hidden and the text omits highlighting the diagnostic (and. when seen perched, best) difference between it and the Wedge-tailed Eagle, being that the latter has legs fully feathered and the former does not (the same feature is useful for differentiating a perched Whistling Kite from a Little Eagle). The Spotted and Marsh Harrier are both much more varied than the illustrations and text (of just the adults) would imply. The kink in the neck of the Intermediate Egret makes it look quite like a picture of a Great Egret. A more frontal view of the Bronze-Cuckoos may have been better. The immature Brush and Fantail Cuckoos are illustrated as very different. I wonder if this is an exaggeration, I have certainly been baffled by these birds in the field. The text does not describe a consistent difference, so the question arises as to which to believe. The thornbills and robins, birds that many new observers find difficult, are treated very well, although more may have been achieved by group summary information at the top of the page.

The utility of information conveyed by the icons warrants comment. The five status categories, from very common to very rare, need more explanation than that given. It would be quite wrong to interpret these terms as relating to the population status of the species. They are simply an estimate of the likelihood of encountering at least one during a visit of unspecified duration and are, at best, broadly helpful. They are presumably derived from the now dated information from Birds of the Australian Capital Territory - an Atlas (Taylor, M. and Canberra Ornithologists Group (1992) Canberra Ornithologists Group and National Capital Planning Authority, Canberra) and demonstrate the flaws of attempting to translate presence or absence data into concepts of population density, especially when the data are heavily biased by several problems, such as birds differing in their conspicuousness and people failing to record common species. A good example is the Feral, Crested and Wonga Pigeons which are shown as having equal status. I find it impossible to spend five minutes within the core habitat of the Feral Pigeon (town centres), without seeing vast numbers, yet I doubt anything similar could be stated about the other two. If misunderstood, the book would also imply that the Whistling Kite has the same population status as the Blackshouldered Kite and Little Eagle and there are more Southern Boobooks in the area than Mistletoebirds, surely untenable concepts.

The size of the birds is shown by grouping them into size classes represented by icons, a reasonable idea but with enough limitations to not justify omitting basic measurements. For the smaller birds this grouping is quite helpful but it totally collapses for the larger birds when, for example, the Brown Goshawk, which may be indistinguishable on size from the Collared Sparrowhawk, is put in the same size class as the Wedge-tailed Eagle. I would rather have those icons used to identify similar appearance groupings rather than size. The other icons work quite well, although the aerial category could have been included for various raptors, Rainbow Bee-eaters, wood-swallows and Skylark.

My main concern is the brevity of the text, especially where there is often room for more. In the introduction the rule of thumb is stated that "if you can't see it through binoculars in the field, leave it out" (of the text). I believe that guideline has been over-used. The illustrations carry the load, the descriptions and notes giving hints comparing species are mostly adequate but many leave a lot to be desired. One striking example; the Black Falcon text misses the many distinguishing differences from the Brown Falcon but points out that the latter is much more common. This leaves the observer with no clue what to look for and repeats information conveyed by the status icon. Besides, on seeing one bird, one cannot judge whether it is common or rare, as these are attributes of populations. Similar comments apply to the White- bellied Cuckoo-shrike and Black-faced Cuckoo-shrike. There is no mention that the two crakes are perhaps most easily distinguished by the presence or absence of bars under the tail (after all they are generally seen running away).

The distinction between the words barred or banded (markings across the body axis) and striped or streaked (markings along the body axis) is well made, with some exceptions. The Pink-eared Duck has barred, not striped flanks and the Southern Whiteface has a bar or band on the forehead, not a line. There are many species described as having a bar through or near the eye, it would be more correct to describe it as a stripe, patch or line as is done for the Yellow-faced Honeyeater. The "Powerful yellow legs" should be moved from where it is given for the Black-shouldered Kite (and is hardly a major field character), down the page to the Grey Goshawk, a vastly more deserving bearer of that comment. Contrary to the statement that the Buffbanded Rail is "the largest local member of this family" (the Rallidae), three much larger members, the Eurasian Coot, Dusky Moorhen and Purple Swamphen, are on the next page.

The word usage is interesting, making it a bit more personal and intriguing than is standard for such a book. The text is also full of helpful hints on birds' manners. The harriers are "rangy", a word I agree with, yet the mind boggles at the Owlet-nightjar description as "swift-like". A good example is the Rose Robin "droops wings and cocks tail". Some are vague such as the Black Falcon has "broad shoulders and drooping wing profile". I wonder whether this refers to the bird when perched or flying. The text uses italic, bold and plain typeface generally well but comments on social groupings "solitary, pairs etc" often seem to run straight from description of young birds (where described) and is confusing in that format, as though the comment applies to young birds.

I consider there is also bad judgement in the text. The cynical shot at bird-banding at the Australian National Botanic Gardens (page 11) is inappropriate, inane and divisive. I have led many beginners' walks there and always point out the good work done through studies involving banding and the extra dimension of enjoyment that finding banded birds can add to the simple pleasure of bird-watching there. The back cover pompously declares the author as "Canberra's best-known birdwatcher". The text of a field guide should not annoy to that extent.

The concept of the book is good and the impression is pleasing. More work on the text and better editing of the ornithological information would have done much to improve it and to correct errors and shortcomings such as those noted in this review. The Gould League series of books of birds in south-east Australia also fills the need and I wouldn't say this book is better than that series, but it is clearly the best single volume field guide on the birds of the area, I would, however, recommend that beginners use it in conjunction with one of the national books, especially when they encounter anything that can't be obviously identified from what is in this book.

Philip A. Veerman

LETTERS TO THE EDITORS

DUCK HUNTING

The monthly meeting of COG held on 8 March 1995 commenced with a brief Annual General Meeting followed by a number of speakers on duck hunting. The object of the evening, which had been organised by Barbara Allan, was to canvas a variety of views on all aspects of this subject. The speakers were: Barry Baker, who spoke on the social, economic and ecological considerations on which government policies on duck hunting and conservation are based; Chris Davey, who provided a synopsis of the scientific research which has been undertaken since the 1950s and its significance to the understanding of the dynamics of wetland ecology and duck population biology; Reid McLachlan, who summarised the history and activities of the NSW Field and Game Association and pointed out the numerous benefits to wetland and duck conservation resulting from the self-interest of duck hunters in maintaining the population levels of their quarry; and Honey Meltzer, who gave a plea based on ethics, ducks' rights and an appreciation of the beauty of life, that duck hunting, as an antiquated and cruel pastime, should cease as part of our overall social development.

On the basis of the views expressed by members, the COG Committee will produce a draft policy on duck hunting. An invitation was made in the April 1995 issue of *Gang-gang* for members to provide, in writing, their views on duck hunting for consideration by the committee. As many as possible of these letters will be published in *Canberra Bird Notes* to encourage further discussion on the subject. For another view on the subject, the Letter to the Editors titled "Conservation Policy - Waterfowl Hunting" by Malcolm Fyfe and Ian Fraser (1994, *Canberra Bird Notes* 19: 71-73) should be read.

Further contributions will be welcomed, but please try to keep them to less than 250 words.

11 March 1995

After listening to the various speakers last Wednesday evening (8 March) I make the following points (my personal views) regarding duck shooting.

My general feelings are, that if COG is to adopt an opinion or policy on duck shooting, we should support hunting on the following grounds:

- We should recognise that duck shooters have played a significant role in the
 protection of wetland habitats and the preservation of aquatic ecosystems, natural
 systems vital for the survival and conservation of ducks, a host of other wildlife.
 and biodiversity in general.
- 2. Hunters provide a large amount of revenue which can be used for conservation purposes, including site restoration and management of wetland habitats.
- 3. The available scientific evidence suggests shooting has had little (possibly no) impact on population numbers of both target and non-target species of waterbirds.
- 4. Bird species which are legally shot are invariably common species, some are regarded as local pests (e.g. Wood Duck). Harvesting appears to be done in a professional and sustainable way, and none of the species harvested are in any way threatened. Of course, if it can be demonstrated that species are threatened, then I would be opposed to any shooting of those particular species.
- 5. The arguments against shooting are weak and emotive, and largely boil down to the fact that killing animals is cruel. I agree that shooting birds is a cruel process and, in an ideal world, no living organism should be killed. The reality of the real world, however, is that this planet is very cruel: we kill other plants and animals for our very survival. We harvest cattle, sheep, chickens and fish for meat for consumption, and we even spray (and kill!) mosquitoes in our bedroom with dangerous toxins. Human nature is cruel. We have to accept that killing is part of our culture and part of our survival strategy on this planet. But we must also accept that nature is beautiful and precious and our survival depends on the fine balance between preservation and exploitation.

To conclude, I would like to reiterate Chris Davey's point which was that unless it can be demonstrated that animal welfare groups and the "green movement" can maintain the pressure against government and private landholders to preserve wetlands and halt continued drainage of these important ecosystems, we should support duck hunters in recognition of the large contribution they have made as conservationists. Preservation and maintenance and of wetland habitats I believe is the single most important issue in this debate. It overrides concerns of what appears to be an insignificant loss of ducks, a group of animals which is only a small part of the total wetland ecosystem.

Michael Braby

12 March 1995

At this month's COG meeting there was a most interesting debate on the issue of duck hunting. The second talk of the night was presented by Chris Davey of the CSIRO Division of Wildlife and Ecology. Towards the end of his talk Chris concluded that duck hunters have both in the past and the present been one of the major voices demanding the preservation of wetlands. He indicated that apart from duck hunters, there were very few members of the community concerned about wetlands. Although this was true in the past. I don't believe this is the case any more. In the last five or so years there has been a major increase in the awareness of wetland values. from conservation groups, research institutions, local councils, and state and federal agencies.

An example of the increasing awareness of wetlands would be the publicity that the Macquarie Marshes has received in the last few years. A couple of years ago there was a public outcry when plans for a large cotton farm next to the marshes was proposed. The publicity was not generated by duck hunters but by environmental groups and the NSW Environment Protection Authority who were concerned about the impact cotton pesticides might have on the wildlife in the wetlands. More recently the Macquarie Marshes has received publicity about the need for environmental flows to the marsh and has resulted in an issues paper being released by the NSW Department of Water Resources. Many of the state's environmental groups, members of research institutions and government agencies such as the Environment Protection Authority will be providing comment on this paper. The Macquarie Marshes is just one example of the increasing awareness of wetlands from both government authorities and environmental groups. No longer are duck hunters the only group of people calling for wetland protection.

Not only are wetlands being recognised for their ecological values as habitat for waterbirds, but their ability to filter out suspended particles and other pollutants is now seen as a useful method of cleaning up surface runoff from both urban and rural areas before the water enters our river systems. Many local and state government agencies are now developing wetland sites for this purpose. An example of this is in the west of the state where a wetland is being developed by the NSW Department of Water Resources at Carcoar Dam to filter out nutrients and help reduce the risk of blue-green algal blooms.

There is currently a great deal of interest in wetlands fruit members of the community (other than duck hunters) and I have enclosed a selection of papers and articles for your information.*

I hope I have convinced you that duck hunters are not the only group of people interested in wetlands, and I do not believe that the preservation of wetlands is

dependent on the continuation of recreational duck hunting. I hope COG does not support recreational duck hunting on the basis that duck hunters are the only group interested in wetland protection.

Anthony Scott

* Seventeen papers and articles were included with the letter and are now held by the Conservation Subcommittee.

14 March 1995

I write this letter to urge the committee to adopt a position opposing duck hunting.

While I do not necessarily agree with all positions of the environmental lobby (whatever that is) it does seem that an organisation dedicated to the study of a key element of the natural environment should support that environment. Thus they should oppose those who are primarily interested in the despoliation (in more euphemistic terms "harvesting") of that environment.

Were the debate about feeding the hunter's family (as was the case when I clapped gun to shoulder in England in my youth) it would possibly still be defensible to argue for hunting. However, in Australia in the 1990s such arguments must be seen as bogus: in terms of value for money I am sure it is cheaper to buy ducks at the market than to expend the resources needed to kill them on the wing. What the issue is really about is persuading a minority that they have to:

- display more self-discipline;
- show more concern for the welfare of other species; and
- take a longer term view;

than is evident in the "right to blast" views of the gun lobby.

I have to conclude that should COG, or the committee, pass a motion in support of duck killing (enough euphemisms already) I would cease my membership forthwith. I don't know what effect that would have on COG (probably none) but it would be a source of great disappointment to me and a marked decrease in my personal, non-exploitative. enjoyment of the environs of Canberra.

Martin Butterfield

2 April 1995

I was sorry not to be able to attend the AGM on 8 March and the subsequent discussion on duck shooting. Several members have spoken to me on the latter and since it is a subject that interests me I would like to make my views known to members of the committee.

I have an uneasy feeling that Animal Liberation may come to play too large a part in the formulation of COG policy in regard to duck shooting. It is my understanding that Animal Liberation calls for a total ban on duck shooting in Australia. I cannot support this and I think it would be a mistake for COG to endorse it.

I am not a duck shooter myself and never have been. I deplore the barrage which greets the opening of the duck season in those years when it is permitted. However, measures of control are being introduced which go some way towards reducing the more objectionable aspects of the "sport". I would be very disappointed if COG was to adopt an extremist view on the subject of duck shooting at the behest of a small minority of members. It would be counter productive, reduce the standing of COG in other directions and potentially divisive for COG membership.

I believe that COG should stick to its role of providing well informed encouragement for bird lovers and for bird study in the ACT and neighbouring areas. In so doing it is able to provide specialist advice for politicians and government bodies. It has gained very good acceptance in this role and in the media. Don't let us do anything which might prejudice its standing in public estimation. COG, for instance, should certainly seek to have its views considered in any developments of the Kingston foreshore which could easily impact harmfully on the Jerrabomberra wetlands.

Opposition to duck shooting is largely emotional. There is no evidence to show that duck shooting has adversely affected duck populations. The main factors at work here have been loss of habitat brought about by climatic variations and by drainage of wetlands - facts which are well recognised by responsible shooters.

If any members of COG feel sufficiently strongly about duck shooting to make them take part in active operations designed to frustrate shooters they have the right to do so subject to the law. But they should not be in a position to claim that their actions are endorsed by COG as a matter of COG policy. What we should endorse are moves to protect habitat, encourage the strictest possible shooting controls, require shooters to be able to recognise bird species, limit bag numbers and perhaps to call for the

elimination of lead pellets in locally available shotgun ammunition. Lead pellets provide a long lasting residual hazard for waterfowl. We need to recognise that many duck shooters are responsible people and just as interested in preserving the environment as COG members. It would be short-sighted to antagonise them by espousing emotional policies devoid of factual rationale.

Bryan FitzGerald

13 May 1995

I listened to the presentation and subsequent discussions at the March meeting with interest and admired the courage of Honey Meltzer - it would have been nice if a COG member had been able to put similar views.

While the RAOU policy had been made freely available, I found it curious that the views contained in it, in particular the accompanying statements repeated in full in the letter by Malcolm Fyfe and Ian Fraser published in the December 1994 edition of *Canberra Bird Notes*, were not given any prominence.

On the contrary, it was inferred there is sufficient evidence to show that duck hunting does not harm duck populations, implying that the RAOU has got it wrong.

As a long time member of Australia's premier ornithological organisation and leading voice in bird conservation, coupled with my great respect for its current professionalism (a far different organisation from that described by Stephen Marchant at our April meeting), I cannot accept that this is the case.

My very strong view is that COG should follow the RAOU's lead in that, "until the data are available and the programs in place to meet them", we do not support recreational waterfowl hunting - hopefully forever.

The claim by the hunting lobby that they are the "true conservationists" rings just as hollow as it does from those espousing wood chipping of native forests. To hear that the primary motivation to shoot native birds is for "a good feed" rang very offensively in my ears, as it no doubt did in the ears of many other members.

Jack Holland

RARITIES PANEL NEWS

An extremely short list this time. The Chestnut-rumped Heathwren *Hylacola pyrrhopygia* and Spotted Harrier *Circus assimilis* are the most interesting sightings.

As usual, another "crop" of Red-capped Robins *Petroica goodenovii*, two in previously recorded places (Southwells Crossing and Melba), plus a record at Lake George. Are there more to be found towards Gunning and Gundaroo?

Finally, a record of a dark morph White-bellied Cuckoo-shrike *Coracina* papuensis from 1992.

RARITIES PANEL ENDORSED LIST NO. 43

Spotted Harrier

l; 6 Apr 95; P. Taylor, Jerrabomberra Wetlands.

Chestnut-rumped Heathwren

l; 3 Nov 94; P. Taylor; Mt. Majura.

Red-capped Robin

1; 24 Oct and 13 Nov 94; E. Tulip; Southwells Crossing.

1; 26 Jan and 3 Apr 95; G. Dabb; Lake George (Federal Highway).

1; 26 Apr 95; D. Purchase; Melba District Playing Fields.

White-bellied Cuckoo-shrike

1 (dark morph); 22 May 92; I.M. Taylor; Ainslie.

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Canberra Bird Notes 20(2)

48

June 1995

(Continued from inside front cover)

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Canberra Bird Notes is published quarterly by the Canberra Ornithologists Group. Contributions are welcome. These should fit into one of the following categories: major articles (up to about 3000 words); short notes and "Odd Obs" (up to about 300 words); reviews of books and articles (up to about 500 words); and where to watch birds (up to about 800 words). The articles and notes should cover matters of the distribution, identification, and behaviour of birds occurring in the Australian Capital Territory and surrounding area (i.e. New South Wales coast north to Jervis Bay, and west to the Riverina). Contributions can be sent to the editors C/O David Purchase, 5 Orchard Place, Melba, ACT 2615 (Tel 258 2252).

CONTENTS	Canberra Bird Notes 20(2) June 19	995
Articles		
Territoriality and breeding success of a Canberra suburb. <i>Chris Davey</i> Armchair birding at Barren Ground Is the Pied Currawong a bird of pro-	ds. <i>Paul Stubbs</i>	25 31 34
Odd Obs		
Laughing Kookaburras hawking for Steve Wilson	insects at night.	37
Out and About		37
Review		
"Field Guide to the Birds of the AC and Nicholas Day	T" by McComas Taylor	39
Letters to the Editors		
Duck hunting. Letters written by I Martin Butterfield Bryan, FitzGero		42
Rarities Panel News (List No. 43)		48

(Printed June 1995)