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ANNUAL BIRD REPORT: 1 JULY 2002 TO 30 JUNE 2003

Canberra Ornithologists Group (COG) PO Box 301, Civic Square, ACT 2608

INTRODUCTION AND OVERVIEW

The ABR

The Annual Bird Report (ABR) is a summary of all COG's records of birds occurring in the Canberra region during the year. Its purpose is to make this information readily available to all COG members and the general public, and to draw attention to any significant changes or trends in the distribution or abundance of species in the region.

COG's area of interest ('the Canberra region') is defined as the area bound by parallels of latitude 34° 45' and 36° 00' S and meridians of longitude 148° 40' and 149° 45' E (see Map 1, p. 183). This encompasses an area of 13,675 sq km, of which the ACT, at 2,357 sq km, is only 17.2%. For COG's purposes of record collection, the area is divided into a grid of 780 cells, each of 2.5 minutes of latitude and longitude. Each cell is identified by an alpha-numeric code: A-Z across the region from west to east and 1-30 from north to south (see Map 2, p. 184). Elevations in the ACT range from 450 m above sea level to 1,911 m at the top of Mt Bimberi, and the ACT proper is about 130 km from the sea.

The records maintained by COG are categorised according to the type of survey used to collect the data, for which the methodology used may vary. The majority of records derive from general bird watching, surveying and atlassing done by COG members and are designated ABA (Australian Bird Atlas) records. Sightings made incidentally, eg while driving, or on other occasions when not specifically bird watching, can be submitted and are

designated INC. Specialised COG surveys such as the Garden Bird Survey (GBS), Woodland Survey (WOO), and Waterbird Survey (WBS) are well established; and more recently the Honeyeater Migration Survey (HMS) and Threatened Bird Survey been (THR) have initiated. COG's assistance with Greening Australia's 'Birdwatch' project provides further records designated GA. Additionally, records from COG's area of interest that are submitted to Birds Australia (BA) are provided to COG under an agreement between the two oganisations. These records are designated

In this year's ABR, a full breakdown of the contribution of each survey type (except for the GBS) to the total records collected is provided for the first time in Table 1 (p. 169). However, for the purposes of the species texts in the Systematic List, records from all these surveys are considered collectively and summarised under the heading 'General'. The GBS is, as usual, dealt with separately. The significant difference in the way in which the records are collected (on a weekly basis rather than daily), and the more systematic and statistically amenable nature of the GBS data, warrants this approach.

COG asks that any sightings of birds considered to be 'unusual° in the Canberra region (see Appendix 1, p. 187) are fully described, preferably on an Unusual Bird Report Form, and submitted for assessment by the COG Rarities Panel. Only reports accepted by the panel become endorsed COG records. All records of 'unusual' birds in this ABR have been so endorsed unless specifically indicated otherwise.

The year in context

The ABR summarises all the records held in the COG databases but can not be considered a comprehensive or necessarily accurate reflection of the real situation. For example, research being done on several species through the Australian National University and the University of Canberra clearly reveal far more extensive abundances and breeding activity than is indicated for those species in the ABR. Many factors influence the level and consistency of reporting of the many and varied bird species in the region. Several of the major variable influencing factors on this year's ABR are mentioned briefly here. The effects of these influences need to be taken into account when attempting any interpretation of the data in the ABR.

Geographical factors such as temperature, rainfall, and water levels in the main lakes of the region can have a very significant effect on bird demographics. The 2002-03 year was characterised by very dry and warmer than average conditions (see Appendix 2, p. 188). Consequently, the already low water levels in Lakes George and Bathurst continued to drop, as did the levels in some of the smaller local wetlands. These conditions had a major effect on the occurrence and numbers of many water bird species.

The horrendous bushfires of January 2003 destroyed vast tracts of habitat in the ranges in the west of the region, not to mention many homes in Canberra's western fringe suburbs, and have had a very large impact on many species. The resident wet forest species were no doubt most affected, but the impact is also to be seen in the demographics of many species in urban areas as well.

The end of the four-year Birds Australia Atlas project in July 2002 appears to have precipitated a progressive waning of observer effort in the region, resulting in a reduction in both numbers and distribution of records.

Summary and highlights

In 2002-03, 227 species of birds were recorded in our area. This total excludes unendorsed records, as well as those species such as the Cape Barren Goose which are regarded as semi-captive at Tidbinbilla NR, but includes aviary escapees.

There has again been a decrease in observer effort, after a peak in activity during the Birds Australia Atlas project. There were 114 COG contributors and 3 contributors whose data were provided to COG by Birds Australia. Records were lodged for 191 of the 780 grid cells (24.5%) (see Map 2, p. 184), the most frequently surveyed cells being L14 (includes Kellys Swamp and Fyshwick sewage ponds), M13 (Campbell Park), and K13 (ANBG and ANU). Despite the reduction in numbers of contributors, record sheets, and grid cells surveyed this year (see table below) the number of species recorded remains high.

Year	spp	grid cells	sheets	contrib
95-96	217	108	853	95
96-97	217	91	591	88
97-98	210	92	583	88
98-99	213	239	1076	115
99-00	206	288	1731	203 *
00-01	215	435	2489	203*

Presumably due to the continuing dry conditions inland, a wide variety of birds associated with wetlands were again recorded this year, including crakes and rails, Little Bittern, Freckled Duck, Pied Cormorants (all recorded last year), as well as Glossy Ibis, a Pectoral Sandpiper, Gull-billed Terns, and the first record for the ACT of a Long-toed Stint. Also another record of a Lewin's Rail, this time at Rendezvous Ck in the ranges.

White-headed Pigeon was again reported this year as was Channel-billed Cuckoo, both species that seem to be increasing their range generally down the Australian east coast and hinterland. Spotted Harrier, Black Kite and Black Falcon were also reported this year, the presence of the Black Kite possibly in connection with the bushfires. A Red-backed Kingfisher was seen for the first time since 1989. Masked and White-browed Woodswallows also made one of their irregular influxes.

Records from Tallaganda SF of Powerful Owl and Olive Whistler were made possible by the inclusion this year of contributions from NSW State Forests surveys.

This year saw the first breeding record of the Glossy Black-Cockatoo, as well as a rare breeding record for the Eurasian Coot. There were, however, no cuckoo breeding records at all this year, and the Golden Whistler was again not recorded as breeding.

The utter destruction caused by the January bushfires in the ranges in the west of the region resulted in low recording rates for many wet forest species. Post-fire records for the most part came from Tallaganda SF and other wet forest in the eastern part of the region. A miscellany of displaced birds of a variety of species was reported in Canberra's suburbs in the weeks following the fires, and Yellow-tailed Black-Cockatoos in particular were recorded much more frequently in the following months. It will presumably be a long time before many wet forest species can return to these areas.

Of the 174 species of bird reliably recorded as having bred in the COG region, 89 (51.1%) did so in 2003-03, exactly the same number as last year, but fewer than the 104 in 2000-01 and 99 in 1999-2000. However, based on university research, it is known that additional species are breeding in the COG region that do not show up in COG's records.

Garden Bird Survey overview

2002-03 was the 22nd year of the GBS. This year 58 sites were monitored (1 fewer than last year) of which **11** were new sites and 12 were not continued from last year. This included three of the seven sites that up until last year had contributed for every year of the survey. One of them was our President's site in Chapman which was destroyed in the January fires.

A total of 150 species was recorded this year, from 2376 observer weeks. Breeding was recorded for 43 of these species, from 41 sites, similar to the 42 breeding species from 47 sites of last year.

Four species were recorded as part of the GBS for the first time this year: Glossy Ibis, Australian Spotted Crake, Latham's Snipe and Bassian Thrush. The ibis, crake and snipe were all from a new site in Ngunnawal adjacent to the golf course which has a variety of ponds and wetlands. The Bassian Thrush may have been a refugee from the January fires still searching for suitable habitat.

This year the Galah displaced the Sulphurcrested Cockatoo as the most abundant GBS bird. The Silvereye remains in third place, followed by the Common Myna and the Common Starling, House Sparrow dropped from sixth to tenth place while the Australian Magpie has risen from ninth to sixth.

Woodland Survey overview

In 1998, COG began systematic monitoring of bird species and abundance in a number of high conservation value Grassy Woodland locations in the ACT. Six locations were initially selected Mulligans Flat, Mt Majura, Red Hill, Gooroo, Symonston and Castle Hill. The following sites have since been added: Majura Firing Range (1998-99); Hall/Gold Creek, Newline and Tuggeranong

Hill (all 2000); and Lambrigg (2001). A further site, Campbell Park, was added in June 2003. Surveys of the Majura Firing Range stopped due to access problems, and the Lambrigg site was discontinued after the March survey when the owner withdrew his consent.

The species recorded most frequently during 2002-03 were Australian Magpie, Crimson Rosella, Weebill, Grey Fantail, Galah and Striated Pardalote. In all cases Woodland surveys contributed 30-35% of all records, and as much as 48% in the case of the Weebill.

Part of the reason for the Woodland survey is to monitor declining and threatened birds in Yellow Box / Red Gum grassy woodlands. The following table lists the number of times birds of interest were recorded during the year and the proportion of those records that were made during the Woodland surveys.

species	total	woo	%woo
Brown Treecreeper	58	20	34.5
Jacky Winter	36	5	13.9
Scarlet Robin	214	56	26.2
Flame Robin	59	3	5.1
Hooded Robin	33	8	24,2
Varied Sittella	49	7	14,3
Crested Shrike-tit	19	5	26.3
White-winged Triller	37	4	10.8
Dusky Woodswallow	117	19	16.2
Diamond Firetail	42	2	4.8

A comprehensive analysis of the Woodland Survey will again be undertaken and the results made available to members. With this in mind, this ABR has combined the WOO records with general records.

Waterbird Survey overview

Lake George and Lake Bathurst were dry for much of the time except for the southern Morass where a small area was under water between July and September, when surveys were conducted. The only notable observations from the Morass were 13 Freckled Ducks in July and about 300 Sharptailed Sandpiper in early September. For the purposes of this ABR, Waterbird survey records have been incorporated in General accounts.

Greening Australia project

Surveys of birds in revegetation continue to be carried out as part of the Greening Australia/COG 'Birdwatch' project. Twelve of the original 132 sites are still being monitored to document changes in the bird community as the young trees and shrubs mature.

Honeyeater Migration Survey

This year's survey was conducted over two Sundays — April 6 and 13. All honeyeaters and other species were counted over a 4-5 hour period at seven locations along the Murrumbidgee River. Honeyeater numbers were counted in 20-minute blocks, all other species were recorded following standard area search procedures. A full account of the survey will be published in *Canberra Bird Notes* in due course.

SYSTEMATIC LIST FOR 1 JULY 2002 TO 30 JUNE 2003

CASUARIIDAE: emu

Emu Dromaius novaehollandiae

Uncommon, Breeding Resident

General: Two records this year is typical (average of 2.1 for previous 10 years), both records being very close to Tidbinbilla Nature Reserve and prior to the January fires. x/12 Jul 'Birrigai' GrG 17 (Harry Hines) and 3/13 Oct 'Paddys River' GrG17 opposite entrance to Tidbinbilla NR (PeH2). The latter record was of an adult with 2 half-grown dependent young.

PHASIANIDAE: quail etc

Stubble Quail Coturnix pectoralis

Uncommon, Breeding Resident

General: Just 2 records this year, the lowest count for 5 years coming just 2 years after the highest count of 43 records. This compares to an average of 13.8 records, range 2-43, over the previous 10 years. Includes one urban record, 9/2 Jul Ginninderra Dr GrJ12 (HoJ1), and one rural record, 1/8 Jul 8km S Michelago GrL25 (McD1). No breeding reported.

Brown Quail Coturnix ypsilophora

Uncommon, Breeding Resident

General: 10 records (cf an average of 5.9 records, range 2-14, over the previous 10 years) from throughout the year but mainly Jul-Sep. Apart from a record from Gigerline NR (GrJ 19), all records were from semi-urban locations, with half of them coming from around Lake Ginninderra. No breeding reported.

Domestic chicken (Gallus gallus)

General: A single record of 1/1 Dec Uriarra Crossing GrG 12 (McD1). This no doubt represents a wandering domestic bird.

ANATIDAE: ducks, swan

Blue-billed Duck Oxyura australis

Rare, Breeding Visitor

General: 20 records of up to 8 birds from throughout the year. All records from Fyshwick sewage ponds GrL14 except for 1 record from a dam near Tarago GrW9 (DeD2).

Musk Duck Biziura lobata

Uncommon, Breeding Resident

General: 8 records from throughout the year. Five of the records were from Tin Hut Dam at Googong Reservoir GrO18, 2 from the Readymix wetlands near Bungendore GrS 12, and 1 from the Fyshwick sewage ponds GrL14, all regular haunts for this species.

Freckled Duck Stictonetta naevosa

Uncommon, Visitor

General: 22 records from 5 grid cells (cf 9 records from 3 grid cells last year). 18 of the records were from JWNP and the adjacent sewage ponds and Molonglo River, 3 from wetlands around Bungendore, and 1 record of 13 birds from The Morass LBath as part of the WBS. Other large counts include 37/30 Jan Readymix Wetlands GrS12 (DeD2) and 22/3 Jan Fyshwick Sewage ponds GrL 14 (McD 1); all other records of 5 or fewer birds.

Black Swan Cygnus atratus

Common, Breeding Resident

General: 67 records (including 2 from WBS) from 15 grid cells - a similar distribution to last year. 14 of the records reported breeding from 5 grid cells between 21 Aug and 30 Jan. Because of the dry conditions at LGeo and LBath, the largest counts were relatively low: 47/28 Jul The Morass GrZ8 (DoM1), 35/16 Feb Orana Bay GrK14 (SmA1).

Australian Shelduck *Tadorna tadornoides*Unommon, Breeding Migrant **General:** 17 records from 6 grid cells including a single record from LBath (WBS). Highest count: 56/30 Jan Readymix wetlands GrS12 (DeD2), Reduced distribution and number of records compared with last year (33 records from 15 grid cells) largely due to the dry conditions at LGeo and LBath.

Australian Wood Duck Chenonetta jubata

Common, Breeding Resident

General: 233 records from 62 grid cells (including 33 records from 11 WOO sites) is down on last year (308 records from 116 grid cells). Despite the reduced distribution the breeding reporting rate is similar to last year with 18 records (ih and dy) from 9 grid cells. Largest aggregation: 130/12 Nov ANU GrK13 (PeH2).

GBS: Records from 14 sites, with breeding reported from 3.

Mallard *Anas platyrhynchos*

Rare, Breeding Resident

General: 8 records from 5 grid cells covering LTug, JWNP, ANU, and Casuarina

Sands - all likely feral domestics. No breeding recorded.

GBS: A single record: 5/3wk Jun Yarralumla GrK14 (CCR1).

Domestic ducks and geese

There has for many years been inconsistent recording of domestic ducks and geese in the region. This year there were also 3 records of domestic mallard-derived ducks, 1 of a Muscovy-derived duck, and 1 record of 2 Greylag Geese.

Pacific Black Duck *Anas superciliosa*Common, Breeding Resident **General:** 193 records (including 7 WOO and 1 WBS records) from 36 grid cells (cf 188 records from 55 grid cells last year). 12 of the records reported breeding from 4 grid cells, similar to last year. Largest count: 69/14 Jun Tidbinbilla NR wetlands (McJ2).

GBS: Records from 7 sites throughout the year, breeding reported from 2 sites.

Australasian Shoveler *Anas rhynchotis* Uncommon, Breeding Visitor **General:** 65 records throughout the year from 9 grid cells. 77% of the records were from JWNP and Fyshwick sewage ponds (GrL14), others from wetlands and dams around Bungendore, LBath, and Googong Reservoir. Largest aggregation: 69/24 Jan Fyshwick sewage ponds (PeH2). Abundance and distribution similar to last year. No breeding recorded.

Chestnut Teal Anas castanea

Common, Breeding Resident

General: 32 records from 5 grid cells. A similar number of records (36) but from half as many grid cells as last year. 75% were from JWNP-Fyshwick sewage ponds (GrL14), others from LBath, Tarago, Readymix wetlands and Campbell Park. A single breeding record of dy from Campbell Park GrM13 (McD1).

Pink-eared Duck Malacorhynchus membranaceus

Common, Visitor

General: 53 records from 5 grid cells (cf 29 records from 5 cells last year). 85% of records were from JWNP-Fyshwick sewage ponds (GrL14). Greatest aggregation: 50/27 Nov Kellys Swamp GrL14 (McD1).

Hardhead Aythya australis

Uncommon, Breeding Visitor

General: 74 records from 15 grid cells, a similar situation to last year. No WBS records. No breeding records. Greatest aggregation 146/24 Jan Fyshwick sewage ponds GrL 14 (PeH2). **GBS:** 3 records of single birds in 1wk Dec, I wk Jan and 1wk Feb from a site in Curtin.

PODICIPEDIDAE: grebes

Australasian Grebe Tachybaptus novaehollandiae

Common, Breeding Resident

General: 94 records from 25 grid cells (incl 7 WOO). The number of records is similar to last year but the number of cells has dropped from 36. Unlike last year, when records were widely distributed over the region, this year the majority came from cells in or near Canberra. They were reported in all seasons: spring (38), summer (16), autumn (17), winter (23). Largest number reported: 28/30 Sep Readymix Wetlands GrS12 (DeD2). Five of the records reported breeding: first br/3 Nov Canberra Motor Village GrK13 (ScK1), last dy/16 Mar O'Connor Pond GrK13 (PeH2).

GBS: Two records: 1/1wk Jan Curtin GrJ14 (AJR I), 1/3wk Apr Ngunnawal GrK11 (ZwM1). There have been 4 previous records of this species from the GBS (COG 2000).

Hoary-headed Grebe *Poliocephalus poliocephalus*Common, Breeding Resident **General:** 58 records from 10 grid cells continues the increase in the number of records of this species during recent years. As in previous years most of the records (42) came from JWNP and the Fyshwick sewage ponds. They were reported in all seasons: spring (27), summer (9), autumn (9), winter (13). Largest numbers reported: 198/24 Jan and 106/18 Aug Fyshwick sewage ponds GrL14 (PeH2). No breeding recorded,

Great Crested Grebe *Podiceps cristatus*

Rare, Breeding Visitor

General: 5 records: 1/27 Sep Bay between Acacia Inlet and old museum site LBG GrKI3 (PeH2), 1/4 Jan and 1/6 Jan Warrina Inlet LBG GrJ14 (McD1), 2/25 Jan Acacia Inlet Park LBG GrK13 (GiM3), 6/25 May JWNP GrL14 (McI1). No breeding reported.

ANHINGIDAE: darter

Darter Anhinga melanogaster

Uncommon, Breeding Visitor

General: 29 records from 6 grid cells continues last year's high level of reporting. All records came from suburban lakes and wetlands in Canberra, the majority (25) from LBG and its environs (including JWNP), and were reported in all seasons: spring (4), summer (8), autumn

(15) winter (2). Breeding (7 records) was reported from the Molonglo River between East Basin and Dairy Road Bridge Grs L14 and M14: first ny/19 Apr (HoJ1); last dy/31 May (McJ4). Details of two earlier sightings of darters with dy at this site on 26 Mar are provided by Mackay (2003) but are not on the COG database. These are the first reports of breeding at this site for 4 years (but see Allan (2003) who provides details of the breeding of the Australian Darter in the ACT from the first record in 1972-73 through to the period covered by this report, including the sighting of 'darters with young at various ages' in autumn 2002). Largest numbers reported: 50/19 Apr and 30/31 May Molonglo River between East Basin and Dairy Road Bridge; all others were 5 or less.

PHALACROCORACIDAE: cormorants

Little Pied Cormorant *Phalacrocorax melanoleucos*

Common, Breeding Resident

General: 77 records (incl 1 WOO) from 22 grid cells. The number of records and grid cells continue the downward trend since 1999-2000 when 102 records were reported from 34 grid cells. The records were also less widely distributed than in previous years with 57 (74%) coming from suburban lakes and wetlands in Canberra. They were reported in all seasons: spring (32), summer (10), autumn (19) winter (16). Of the 57 records which provided details of the number of birds observed, there was 1 record of 20 birds, 1 of 11 and 1 of 10 from various sites, the remainder were of 7 or fewer. There were no records in the database of breeding (but see Mackay (2003) who reports two nests by the Molonglo River between East Basin and Dairy Road Bridge).

GBS: 9 records of single birds from a site in Curtin in Aug, Dec, Jan, Feb and Mar (AJR1), and 3 records of single birds from a site in Ngunnawal in Mar, Apr and May (ZwM 1).

Pied Cormorant Phalacrocorax varius

Rare, Visitor

Sightings of this rare visitor continue to be recorded.

General: 6 records: 3/7 Jul north arm LTug GrJ16 (PeH2), 2/14 Jul, 1/19 Oct, 3/27 Nov, 3/12 Jan, 1/15 Jun all LGin GrJ12 (LaJ5, GiM3, AlB1). Also 1 record which was not submitted for endorsement.

Little Black Cormorant *Phalacrocorax sulcirostris*

Common, Breeding Resident

General: 26 records from 11 grid cells which is a substantial drop from last year's 61 records from 26 grid cells and brings the reporting rate back to the level of 1997-98. Most records (20) came from suburban lakes and wetlands in Canberra. There were fewer records in winter (3) than in spring (7), summer (7) or autumn (9). Largest numbers reported: 30/19 Apr East Basin LBG and Molonglo River GrL14 (Horn, 25/16 Mar Googong Dam picnic area GrO16 (KrS1), 20/19 Mar LGin GrJ12 (GrT1), all others were 12 or less. No breeding reported. GBS: 3/2wk Apr Kambah GrJ16 (WiB1).

Great Cormorant *Phalacrocorax carbo*

Common, Breeding Resident

General: 33 records from 12 grid cells which are down from last year's high level of reporting (50 records from 25 grid cells). Most records (28) came from suburban lakes and wetlands in Canberra. There were fewer records in winter (2) than in spring (13), summer (7) or autumn (11). Largest numbers reported: 12/19 Mar, 9/27 Nov LGin GrJ12 (GrT1, AlB1), all others were 6 or less. No breeding reported.

CBS: 3 records from 3 sites (down from last year's I1 records from 4 sites): 2/4wk Nov Kambah GrJ16 (PeH2), 1/4wk Jan Kambah GrJ16 (VeP1), I/5wk Jan Curtin GrJ14 (AJR1).

PELECANIDAE: pelican

Australian Pelican Pelecanus conspicillatus

Common, Visitor

General: 66 records from 13 grid cells. This is the largest number of records in this category since 1988-89 when 86 were collected during the last full year of the ACT Bird Atlas Project (Taylor and COG, 1992). There is considerable variation in the number of records of pelicans reported from year to year caused by the movement of this species when inland lakes and waterways dry-up in times of drought 60 of the reports came from suburban lakes and wetlands in Canberra which provide the species with a permanent water habitat, of these, 45 were from LBG and its environs (including JWNP and the Fyshwick sewage ponds). There were fewer records in winter (6) than in spring (26), summer (15) or autumn (19). There were some exceptionally large aggregations: 70/27 Nov, 40/12 Oct, 30/6 Dec, 16/2 Nov all JWNP GrL14 (McD1, LaS I, McJ4), all others were 10 or less.

CBS: 12 records of up to 6 birds from 7 sites across Canberra (none in Gungahlin).

ARDEIDAE: herons, egrets, bitterns

White-faced Heron Egretta novaehollandiae

Common, Breeding Resident

General: 88 records (incl 3 WOO: 1 MUL, 1 GOO, 1 MAJ) from 34 grid cells which continues last year's drop in numbers following the high numbers in 2000-01 (155 records from 73 grid cells). The records were less widely distributed than in the previous two years and most came from Canberra and its environs. Most were reported in autumn (29), followed by spring (25), summer (22) and winter (12). Largest numbers reported: 6/19 Mar LGin GrJ12 (GrT1), the remainder were 3 birds or less.

CBS: 50 records from 13 sites which is similar to the reporting level of recent years, most (27) again came from a site in Curtin GrJ14 (AJR1) where it was recorded throughout the year. The number of birds varied from 1 to 3, with 41 of the records being for 1 bird only.

Little Egret Egretta garzetta

Rare, Visitor

No records in 2002-03. Last recorded 26 Jun 1999.

White-necked Heron Ardea pacifica

Uncommon, Breeding Visitor

General: 5 records, from 4 grid cells, is the lowest number of records since 1996-97: x/28 Jul, 1/8 Sep both Rose Lagoon GrU4 (SmA1, McJ4), 1/10 Nov JWNP GrL14 (Mcl1), 1/6 Apr Tharwa Sandwash GrJ19 (BoJ 1), 1/6 Apr Angle Crossing GrK20 (RuB1).

Great Egret Ardea alba

Uncommon, Visitor

General: 18 records, 14 of which were from JWNP from 22 Sep through to 4 May (1 of I bird, I of 3 and 12 of x birds). The remainder were: 1/10 Sep ANU GrK 13 (PeH2), 1/6 Jan Warrina Inlet LBG GrJ14 (McD1), 1/12 Jan and 1/8 Mar LGin GrJ12 (A1B1). The reporting rate is similar to the past 4 years.

GBS: Two records: 1/3wk Feb, 1/4wk Feb both from a site in Ngunnawal GrK11 (ZwM1).

Intermediate Egret Ardea intermedia

No records in 2002-03. Last recorded 1 Oct 2001.

Rare, Visitor

Cattle Egret Ardea ibis

Uncommon, Visitor

General: 8 records which maintains last year's slight increase. 7 records came from JWNP: 1/7 Jul (2 records), x/22 Sep, x/20 Oct, x125 Oct, 6/23 Nov, 3/4 May (PeH2, FyM 1, SmAl, HoJI); and 1 record from E Basin LBG: 1/19 Apr (McD1).

GBS: 2 records: 1/1wk Jul, 1/5wk Apr both Curtin GrJ 14 (AJR1).

Nankeen Night Heron Nycticorax caledonicus Uncommon, Breeding Visitor General: 7 records: 1/12 Jul Isabella Pond silt trap GrJ17 (GrB1), 1/28 Nov Acacia Inlet and adjacent bay LBG GrKI3 (PeH2), 2/21 Dec, x/24 Dec, 1/26 Dec, x/29 Dec all JWNP GrL11 (SmA1, McJ4), 2/29 Dec Tuggeranong Ck GrJ16 (RoP1). This is a drop from last year's unusually large number of 17 records. Some sightings may have been of the same bird or birds.

Little Bittern *Ixobrychus minutus*

Rare, Visitor

General: 3 records: 2/24 Nov and 1/16 Jan Black Mt Peninsula LBG GrK14 (McD1, MoM3), 1/6 Jan Warrina Inlet LBG GrK14 (McD1). Sightings of this rare visitor have now been recorded on two successive years.

Australasian Bittern Botaurus poiciloptilus

Rare, Visitor

General: 1 unendorsed sighting. Last recorded 27 Jun 2001.

THRESKIORNITHIDAE: ibises and spoonbills

Glossy Ibis Plegadis falcinellus

Rare, Visitor

General: 16 records of which 14 were sightings of 1, 2, 3 or x birds at JWNP from 7 Nov through to 25 Jan (many may have been the same bird or birds); I of x birds at Fyshwick sewage ponds on 25 Jan; and a sighting of 18 birds at the Readymix wetlands, 4 km N of Bungendore, on 30 Jan (DeD2). Although frequently seen in large flocks within its normal distribution, 18 is a large group for our region where reports are usually of no more than 5 birds. The last time a greater number was reported was in Dec 1994 when 38 were recorded at LBath in Dec 1994 (15 were seen there the following month) (COG 1998). Other reports of large numbers include *c*. 25 at Kellys Swamp in Nov 1982 (22 were seen there the following month) (Ross 1984) and 28 at LBGE in Nov 1982 (Taylor 1984) which may have been the same birds seen by Ross.

GBS: A single record: 1/1wk Jan Ngunnawal GrK11 (ZwM1). This is the first record of this species in the GBS.

Australian White Ibis Threskiornis molucca

Common, Breeding Resident

General: 46 records (incl 2 WOO: SYM) from 12 grid cells. Although the number of records remains fairly high they have come from a reduced number of grid cells with 38 coming from suburban lakes and wetlands and their environs in Canberra. As in previous years the majority were reported in spring (23) and summer (16), with few in autumn (3) and winter (4). Largest numbers reported: 100/22 Jun and 70/21 Sep SYM GrL15 (DaG2), 100/11 Dec, 80/6 Dec, 70/2 Nov all JWNP GrL14 (McJ4, McD1), all others <50.

GBS: 48 records from 8 sites. Although slightly down on the last two years the number of records is still at a high level. Abundance has dropped to A=0.2909 from last year's high of A=0.6638 which reflects the lower group sizes being reported (particularly from Holt where large numbers had been reported in previous years). Largest: 100/3wk Aug Kambah GrJ16 (VeP1), 60/4wk Dec Curtin GrJ 14 (AJR1), remainder were 50 or less. As with the General records the majority were reported in spring (15) and summer (15), with fewer in autumn (12) and winter (6).

Straw-necked Ibis Threskiornis spinicollis

Common, Visitor

General: 48 records (incl 2 WBS) from 12 grid cells. Although this is the largest number of records ever reported in this category they came from fewer grid cells than last year (22). Unlike last year when the records were scattered over the COG region, this year the majority (39) came from suburban Canberra (compared with 6 last year). The largest numbers reported were: 260/11 Aug 'Fairlight' paddocks, Mountain Ck Rd GrF12 (FyM1), 180/31 Aug Monkman St Chapman GrI15 (HoJ1), the remainder were 30 or less. The majority of records was reported in winter (19) and spring (15), with fewer in summer (12) and autumn (2).

GBS: 91 records from 22 sites is the largest number reported since 1997-98 when 130 were reported from 22 sites. Unlike the General records the majority were reported in summer (32) and autumn (27), with fewer in winter (21) and spring (11). The records came from sites distributed over most of Canberra with the majority (25) coming from a site in Curtin. Largest: 86/1 wk Dec Holt GrI12 (HoJ3), 70/2wk Mar, 50/3wk Mar, 46/1 wk Aug all Curtin GrJ14 (AJRI), all others <31.

Royal Spoonbill Platalea regia

Uncommon, Visitor

General: 14 records, all from JWNP from 2 Nov through to 14 Jan when 9 records of

from 1 to 8 birds and 5 records of x birds were reported.

GBS: A single record: 1/2wk Feb Ngunnawal GrK11 (ZwM1).

Yellow-billed Spoonbill *Platalea flavipes*

Uncommon, Visitor

General: 20 records (incl 2 WBS and I WOO: MUL) from 5 grid cells. 12 records came from JWNP during 25 Oct to 15 Jan when from 1 to 9 birds were seen. Largest number reported: 9/3 Jan and 9/15 Jan JWNP GrL14 (McD1, PeH2).

ACCIPITRIDAE: kites, harriers, goshawks, eagles

Black-shouldered Kite *Elanus axillaris*

Uncommon, Breeding Resident

Considerably fewer records than the total of 101 in 2001-02; this year's records are comparable with the 62 of 2000-01, but from fewer locations. A species to watch.

General: 37 records, all but 2 of single birds, and almost half from sites along the Tuggeranong Parkway. Reported in all months except Feb. No breeding reported. GBS: 20 records, all but one of single birds, from 5 sites; the majority (15 records) from one *site* in Curtin GrJ14 (AJR1) which regularly records this species.

Black Kite Milvus migrans

Rare, Visitor

Continues the pattern of very occasional records of this species in our region.

General: 3 records in the weeks following the 18 January bushfires, from near fire-affected areas: 1/21 Jan Weston GrJ 15 (ScR 1), 1/13 Feb Cotter Rd/Lady Denman Dr junction GrJ 14 (LeB1) and 1/14 Feb Tuggeranong Pwy at Molonglo River GrJ14 (PeH2).

GBS: A single record from Curtin GrJ13 (AJRI), near fire-affected areas, on 12 Feb.

Whistling Kite Haliastur sphenurus

Uncommon, Breeding Resident

A considerable increase over the reporting rate of the last three years (4, 3, and 11 records respectively) possibly due to the presence of the species in a frequently surveyed location. **General:** 36 records of 1-3 birds, from all months except Mar. 78% of records came from JWNP area (GrL14); three other possible territories indicated. Anecdotal reports of breeding, which might be supported by the record of 3/5 May Yarralumla GrK 14 (LeB I).

GBS: 1 record of a single bird 2wk Feb Curtin GrJ13 (AJR1).

White-bellied Sea-Eagle Haliaeetus leucogaster

Uncommon, Breeding Visitor

General: 5 records: x/18 Aug, 1/6 Oct and 1/15 Jan all Kellys Swamp/Fyshwick sewage ponds GrL14 (SmA1, GiM3, PeH2); 1/6 Apr Casuarina Sands GrG14 (LaS1); 1/13 Apr Shepherds Lookout GrH12 (PeH2). Continues the regular but low reporting rate of this species; anecdotal evidence suggests more sightings of this species than are reported.

Spotted Harrier Circus assimilis

Rare, Visitor

General: 6 records; 4 of which came from the Kellys Swamp area (GrL14) in Sep Mar and Jun (McD1, HoS1, VeP1, SmA1); one from an outer suburb (Chapman) in Sep (HoJ1); and one from near Bredbo, where the species has been recorded previously, in Aug (OrP 1).

Swamp Harrier *Circus approximans*

Uncommon, Breeding Resident

General: 3 records, of 2-4 birds, all from Rose Lagoon GrU4, between Jul and Nov (SmA1, McJ4). Unusually, only anecdotal records from the ACT.

Brown Goshawk Accipiter fasciatus

Common, Breeding Resident

General: 27 records (including 4 WOO records) of 1-4 birds, widespread (from 23 grid cells), from most months of the year. A similar pattern to last year. Three breeding records: ny/2 Dec Newline Quarry GrM14 (DaG2), ny/15 Dec Oaks Estate GrN15 (DaG2, dy/9 Feb Campbell Park GrM 13 (LeM 1). Continues the pattern of recent years of breeding at these sites.

GBS: 35 records, all of single birds, from 15 widespread sites, mostly in the summer months.

Grey Goshawk Accipiter novaehollandiae

Rare, Visitor

General: 2 endorsed records, of a single bird (white morph), on the same day 14 Jul in or near the ANBG GrK13 (FyM1; VeP1); and 2 unendorsed records.

GBS: 1 record 1/16 Mar Hackett GrL13 (LeB1).

Collared Sparrowhawk *Accipiter cirrhocephalus* Common, Breeding Resident/Migrant **General:** 18 records (including 4 WOO: 1 MUL, 3 RED), of 1-3 birds, widespread (from 14 grid cells), from most months of the year. Breeding: dy/2 Feb Mt Ainslie GrL13 (LeM1). **GBS:** 107 records, of 1-2 birds, from 24 widespread sites. No breeding recorded.

Wedge-tailed Eagle Aquila audax

Common, Breeding Resident

General: 64 records (including 3 WOO: all LAM), of 1-5 birds, widespread (from 39 grid cells). Numbers fluctuating in recent years but within historical parameters. No breeding recorded, but records of 3 to 5 birds in the Tharwa-Point Hut area are suggestive.

GBS: 41 records, from 15 sites, of 1-3 birds, throughout the year. More urban records than in previous years may be a fire-related effect.

Little Eagle Hieraaetus morphnoides

Uncommon, Breeding Resident

General: 27 records (including 4 WOO: 3 RED, 1 SYM) of 1-2 birds from most months of the year and from both urban edge and rural locations. No breeding recorded, yet a COG field trip to East O'Malley in June observed a known nest and the presumed female owner thereof. Half the records probably relate to the East O'Malley pair.

GBS: 11 records from 7 dispersed sites, in all seasons, mostly of a single bird.

FALCONIDAE: falcons, hobby, kestrel

Brown Falcon Falco berigora

Uncommon, Breeding Resident

General: 40 records (3 WOO: GOO, SYM and TUG) of 1-4 birds, in most months of the year, from widespread rural locations and urban fringe areas. Six of the records are of the widely observed and much commented upon appearance of a group of these birds, including immatures, in Campbell Park in the last days of December. No breeding records, however. Similar number of records to last year.

GBS: 9 records of single birds from 3 sites close to open land (Curtin, Queanbeyan and Melba), between 4wk Aug and 2wk Apr.

Australian Hobby Falco longipennis

Common, Breeding Migrant

General: 20 records (2 WOO: RED, TUG) of 1-2 birds. Only one winter record. Breeding observed in the ANU in December in the course of the Lower Sullivans Creek Survey, and these records will be available to COG in due course. Much anecdotal reference to breeding of this species. Records within usual range.

GBS: 54 records of mainly single birds, from 23 widely dispersed sites, throughout the year. A marked drop from last year's 87 records from the same number of sites. The record of 3/2wk Feb Watson (WaK1), possibly suggestive of breeding.

Grey Falcon Falco hypoleucos

Rare, Visitor

General: One unendorsed record. Last recorded 1969.

Black Falcon Falco subniger

Rare, Visitor

General: 5 records, 4 of a single birds and one of 2, all from Campbell Park GrM13 and all between 19 Dec and 9 Jan (LeM 1, RuB1, VeP1). The extremely dry conditions inland no doubt contributed to this rare visit from a species last reported on 9 Jun 1996 at Uriarra Crossing (though 1 unendorsed record in 2001-02).

GBS: I endorsed record of a single bird on 20 Nov from a site in Curtin (AJR1). Also an unendorsed record from the same site in Feb, and an unendorsed record from another site.

Peregrine Falcon *Falco peregrinus*

Uncommon, Breeding Resident

General: 15 records (1 WOO: SYM) all of single birds, with one exception, 2/15 Apr, junction of Vass River and Burrunjuck Dam GrC4 (TaN1); most months, widespread locations both urban and rural. No breeding records.

GBS: 22 records of 1-2 birds, from 10 sites, mainly in summer and autumn. No breeding reported.

Nankeen Kestrel Falco cenchroides

Common, Breeding Resident

A significant drop in records compared with the three previous years' numbers of 127 (01-02), 195 (00-01) and 91 (99-00). Possibly drought-related.

General: 49 records (including 8 WOO records) of 1-2 birds, widespread (from 30 grid cells), in all months but June. One breeding record: ih/7 Oct, Gooroo GrM 11 (TaN I).

GBS: 11 records of single birds from 4 sites, in Page (AIB1), Curtin (AJR1) and Kambah (WiS I, PeH2) in the colder months (1wk Jul-1wk Oct) and late summer (5wk Jan-3wk Feb).

RALLIDAE: rails, crakes, swamphen, moorhen, coot

Buff-banded Rail Gallirallus philippensis

Uncommon, Breeding Migrant

General: Back to a fairly typical reporting level of 2 records this year, after a high of 9 last year (cf average 1.9, range 0-9, from previous 10 years), making this the sixth year of the past eleven with records. Both records were from reeds beside Duntroon sports fields (GrM 14), of 3 and I birds on 3 Dec and 18 Jan (GiM3).

Lewin's Rail Rallus pectoralis

Rare, Breeding Visitor

General: A single record of this infrequently recorded bird: 1/11 Aug Rendezvous Ck GrG23 (McD1). This is the third successive year with single records of single birds, previously not recorded since Feb 1991.

Baillon's Crake Porzana pusilla

Rare, Visitor

General: 5 records this year, all of single birds, making it the sixth year in the past eleven with records. All records were from the margins of Lake Burley Griffin, with 1 from Acacia Inlet on 27 Sep (PeH2), 2 from the Jerrabomberra Wetlands area in Dec/Jan (McD1, SmA1), and 2 of probably the same bird at Black Mtn Peninsula in mid-Jan (PeH2, McD1).

Australian Spotted Crake Porzana fluminea

Rare, Breeding Resident

General: Another good reporting year with 9 records (cf average of 2.8, range 0-9 from previous 10 years). Includes 1/13 Nov ANU campus GrK13 (PeH2), 6 records of up to 4 birds from Kellys Swamp in Dec and Jan (SmA1, McD1, PeH2), and 2 records of probably the same bird in mid Jan at Black Mm Peninsula (PeH2, McD1).

GBS: A record of a single bird from a site in Ngunnawal 1wk Feb (ZwM1). This is the first time this species has been recorded in the Garden Bird Survey.

Spotless Crake Porzana tabuensis

Rare, Breeding Resident

General: 4 records this year (cf average of 1.1, range 0-6, over past 10 years with records now from 5 of the past 6 years, previously not recorded since 1990-91). x/26 Oct Fyshwick sewage ponds (SmA1) and 1/26 Dec Kellys Swamp (McJ4) (both GrL14), and 2 records of probably the same bird at Black Mm Peninsula GrK14 on 14 and 16 Jan (PeH2, McD I).

Purple Swamphen Porphyrio porphyrio

Common, Breeding Resident

General: 123 records throughout the year (up from 91 last year), generally of fewer than 20 birds with 37 being the highest number reported, All but 4 of the records were from Canberra's urban lake systems (ie 97%, cf 89% last year), the others being from Rose Lagoon (GrU4), Readymix wetlands near Bungendore (GrS12), and Uriarra Station dam (GrF13). Ten of the records reported breeding: dy between 28 Sep and 21 Jan, and on/2 Oct.

GBS: 14 records of up to 5 birds from a site in Ngunnawal between 1wk Feb and 4wk Jun.

Dusky Moorhen Gallinula tenebrosa

Common, Breeding Resident

General: 127 records throughout the year (up from 103 last year), 91% of them from Canberra's urban lake systems (cf 80% last year). Others were from Googong Dam, the Murrumbidgee River, Tidbinbilla NR, Bungendore and several other rural locations with farm dams. Most records were of fewer than 20 birds with 30 being the highest number recorded. Six of the records reported breeding (all dy) from Kellys Swamp and ANU campus between 9 Nov and 11 Dec.

GBS: 10 records of up to 3 birds from a site in Ngunnawal between 2wk Feb and 3wk May.

Black-tailed Native-hen Gallinula ventralis

Rare, Visitor

General: 11 records of a single bird at Kellys Swamp (GrL14) between 7 Nov and 29 Dec. This is the second successive year in which a single individual of this normally gregarious and flocking species has showed up at this location. The previous last records were from Jan and May of 1969, also at Kellys Swamp.

Eurasian Coot Fulica atra

Common, Breeding Resident

General: 140 records throughout the year (up from 130 last year), 9 of them with over 100 birds, the largest estimate being 250 on 16 Mar at Googong Dam GrO16 (KrS1). Of these records, 81% were from Canberra's urban lake systems (cf 65% last year), the other main locations being Googong Dam, around Bungendore, and several locations along the Murrumbidgee River. As in previous years there were surprisingly few reports of breeding, with dy/1 Dec Lake Tuggeranong GrJ17 (McD1) being the only record.

GBS: 2 records of single birds from a site in Ngunnawal 2wk and 3wk May (ZwM1).

TURNICIDAE: button-quail

Painted Button-quail Turnix varia

Rare, Breeding Resident

General: 3 records this year (cf average of 4.2, range 0-9 for previous 10 years). 1/28 Dec Mt Taylor GrJ15 (KrS1), 1/10 Apr ANBG GrK13 (LeB1), and 7/28 Apr 'Springfield' 18 km S of Goulburn GrY4 (DeD2).

SCOLOPACIDAE: snipe, sandpipers and allies

Continuing dry conditions, particularly at Lakes George and Bathurst, resulted in few waterbirds being recorded. The following species were not recorded this year. **Bar-tailed Godwit** (last recorded Oct 1996), **Little Curlew** (last recorded Oct 1997), **Common Greenshank** *Tringa nebularia* (last recorded Sep 2000), **Common Sandpiper** *Actitis hypoleucos* (last recorded Feb 2001), **Ruddy Turnstone** (last recorded Dec 1999), **Red Knot** (last recorded Nov 1999 at Fyshwick Sewage Ponds, a first record for the ACT, but last WBS

record was Oct 1996), **Curlew Sandpiper** *Calidris ferruginea* (last recorded Jan 2002) and **Buff-breasted Sandpiper** (last recorded Sep 1997).

Latham's Snipe Gallinago hardwickii

Uncommon, Migrant

General: 30 records from 4 grid cells. Kellys Swamp, JWNP (GrL14) continues to be the most commonly recorded location, but there were also 2 records from Acacia Inlet peninsula GrK13 in Sep and Mar (PeH2), 1 from Rose Lagoon GrU4 in Sep (McJ4) and 1 from Readymix wetlands GrS12 in Sep (DeD2). Earliest record was 1/24 Aug at Kellys Swamp (SmA1), last was 1/16 Mar Acacia Inlet peninsula.

GBS: A record of a single bird from a site in Ngunnawal (GrK 11) during I wk Feb (ZwM 1) represents the first record of this species in the Garden Bird Survey.

Marsh Sandpiper Tringa stagnatilis

Rare, Migrant

General: 5 unendorsed records of probably the same bird from Kellys Swamp (GrL 14) between 25 Oct and 10 Nov.

Red-necked Stint Calidris ruficollis

Rare, Migrant

General: A single WBS record: 6/25 Aug The Morass LBath GrZ8 (DoM1).

Long-toed Stint Calidris subminuta

Rare, Migrant

General: 10 records of a single bird at Kellys Swamp (GrL14) from 6-11 Dec. This is the first time this species has been reported in the ACT- see Endorsed list No 57, CBN 28(1): 42.

Pectoral Sandpiper Calidris melanotos

Rare, Migrant

General: 19 records of a bird at Kellys Swamp (GrL14) between 17 Nov and 25 Jan. Last WBS record was in 1997.

Sharp-tailed Sandpiper Calidris acuminata

Common, Migrant

General: 15 records: 300/9 Sep The Morass LBath GrZ8 (LeM1, WBS), 1/29 Sep Mulligans Flat GrL11 (AIB1, WOO), 1/30 Sep and 3/31 Oct both Readymix wetlands GrS12 (DeD2), and 11 records of up to 10 birds from Kellys Swamp GrL14 between 25 Oct and 15 Jan.

RECURVIROSTRIDAE: stilts, avocet

No records this year for either **Banded Stilt** *Cladorhynchus leucocephalus* (last recorded Feb 1998) or **Red-necked Avocet** *Recurvirostra novaehollandiae* (last recorded 29 Apr 2002).

Black-winged Stilt Himantopus himantopus

Uncommon, Breeding Visitor

General: 5 records: 9/28 Jul and 4/25 Aug The Morass LBath GrZ8 (DoM1, WBS), 4/30 Sep, 4/31 Oct and 7/30 Jan Readymix wetlands GrS12 (DeD2). from 2 grid cells. LBath, Morass GrZ8 and Readymix Wetlands GrS 12. Records and numbers well down on last year.

CHARADRIIDAE: plovers, dotterels, lapwings

No records this year for **Pacific Golden Plover** *Pluvialis fulva* (last recorded 1 Oct 2001), **Double-banded Plover** *Charadrius bicinctus* (last recorded 29 Apr 2002), or **Banded Lapwing** *Vanellus tricolor* (last recorded 29 Apr 2002).

Red-capped Plover *Charadrius ruficapillus* Common, Breeding Resident General: 3 WBS records, all from The Morass GrZ8: 60/25 Aug, 40/9 Sep and 4/23 Sep.

Black-fronted Dotterel *Elseyornis melanops* Uncommon, Breeding Resident General: 34 records throughout the year from 10 grid cells, a similar reporting rate to the previous two years. Almost half were from JWNP-Fyshwick sewage ponds (GrL14), others from various wetlands, rivers, and dams around the region. Largest counts: 8/15 Feb Tharwa Sandwash GrJ 19 (ZwM I), 8/27 Apr Kellys Swamp GrL 14 (VeP 1) and 8/11 May Tin Hut Dam GrO 18 (PeH2).

Red-kneed Dotterel Erythrogonys cinctus

Uncommon, Visitor

General: 37 records from 4 grid cells, though 31 of them (84%) were from Kellys Swamp (GrL14). Nevertheless this is a large increase in reporting rate compared to the previous few years (10 records from 3 grid cells last year, a single record from LGeo in 2000-01, and no records in 1999-2000). Other records were from Readymix wetlands GrS 12, Tin Hut Dam GrO18, Bungendore GrR13, and Rose Lagoon Gr U4. Largest counts: 16/3 Jan and 13/14 Jan at Kellys Swamp GrL14 (McD1), 12/8 Sep Rose Lagoon Gr U4 (McJ4).

Masked Lapwing Vanellus miles

Common, Breeding Resident

General: 108 records from 27 grid cells, a similar number of records to last year but distribution reduced from 6% to 3.5% of cells. Breeding was again very poorly reported with just one record: ne/30 Sep Chapman GrI15 (HoJ1). Counts of 56 and 50 birds from WBS in Jul and Aug respectively, but only 5 in Sep. Largest count: 66/18 May Kellys Swamp (PeH2). GBS: Records from 20 sites throughout the year, but only from one site in Page (AlB I) and one in Curtin (AJR1) were they from >20% of all weeks.

LARiDAE: gulls and terns

Silver Gull Larus novaehollandiae

Common, Breeding Resident

General: 56 records from 9 grid cells, 32 of the records coming from JWNP-Fyshwick sewage ponds (GrL14). Includes 3 WBS: 245/28 Jul, 51/25 Aug and 15/9 Sep. Largest count: 400/4 May Kellys Swamp GrL14 (McD1).

GBS: Occasional records from three sites in Hackett (LeB 1), Ainslie (HoS 1) and Aranda (HaL1), but also regular records from 1wk Aug to 1wk Feb from a site in Curtin (AJRI).

Gull-billed Tern

General: A single record: 2/27 Sep Kellys Swamp GrL14 (McD1). This is the first record of this species since 3 were reported from LBath on 19 Oct 1991.

Whiskered Tern Chlidonias hybridus

Rare, Breeding Visitor

General: 19 records, a large increase on the usual handful of records (average of 3.5, range 18 for previous 10 years). 17 of the records (90%) were from Kellys Swamp/Fyshwick sewage ponds (GrL14) between 27 Sep and 28 Oct. Also 5/31 Oct Readymix wetlands GrS12 (DeD1) and 1/20 Mar Fyshwick sewage ponds (GiM3).

COLUMBIDAE: pigeons and doves

Rock Dove Columba livia

Common, Breeding Resident

General: 45 records, similar to last year, all from locations within Canberra. One report of breeding: nb/18 Oct ANU GrK13 (PeH2).

GBS: Abundance (A=0.8829) is down by 26% compared to last year, though the number of sites at which this bird was recorded is similar (28). As a result the Rock Dove is now down to position 22 on the abundance table and eight places below the Crested Pigeon which first moved above it in 1999-2000. Records covered all weeks and included counts of up to 30 birds at sites in Campbell GrL13 (LJT1), Curtin GrJ14 (AJR1), and Griffith GrL I 4 (HoJ I), and 60 birds in Hackett (LeB1).

White-headed Pigeon Columba leucomela

Rare, Visitor

This species has turned up again. Can this be the same bird moving about Canberra? In 1998 it was Waramanga, in 2001 Aranda and Richardson, and Ainslie and Aranda this year.

General: 1/2 Jan Ainslie GrL13 (LeM1). **GBS:** 1/1 5 May Aranda GrJ 13 (HaL I).

Spotted Turtle-Dove *Streptopelia chinensis*

Uncommon, Breeding Resident

Last year this species was reported from eight Canberra suburbs and from Queanbeyan. No records came from four of those suburbs this year but there were records from eight others where the bird has not been recorded previously.

General: 10 records of up to 3 birds, from Ainslie, Chapman, Melba, O'Connor, Wanniassa, Watson, Weston and Queanbeyan. One report of breeding activity: ne/9 Oct Queanbeyan GrN15 (McD1).

GBS: Two of the sites from which a considerable number of observations were recorded last year did not provide records this year and as a consequence the measure of abundance (A=0.0181) and number of weeks recorded (W=22) are down. However, the distribution level rose to 12% of sites, with a total of 33 records of 1 to 3 birds, from sites in Weetangera GrJ 13 (WoD1), Duffy GrI15 (WiM1), Fadden GrK16 (RoP1), Curtin GrJ14 (AJR1), Ainslie GrL13 (HoS1), Richardson GrK17 (VeP1) and Queanbeyan GrN15 (LuM1).

Common Bronzewing *Phaps chalcoptera*

Common, Breeding Resident

General: 79 records, including 9 WOO: I LAM, 6 MAJ and 2 NLQ (cf 77 records last year, including 12 WOO). Widely spread across the region and covering all months. Generally 1 to 3 birds but also 4/23 Jul Nelanglo TSR GrO5 (WiP 1) and 6/31 Aug Campbell Park GrM 13 (PeH2). One indication of breeding: on/23 Nov Campbell Park GrM13 (McD1).

GBS: 38 records from 7 sites, similar to last year. One of the sites from which this species was regularly reported in past years was lost in the 2002 fires. As a consequence the indicator of abundance (A=0.0295) fell by more than 70%. At another regular site in Holder GrJ 15 (AsM 1), there were records for 27 weeks, usually 1 to 3 birds but a top of 8 in the 2wk Jun.

Brush Bronzewing *Phaps elegans*

Rare, Breeding Resident

General: One record: 2/23 May Mt Majura GrM12 (TaN1).

Crested Pigeon *Ocyphaps lophotes*

Common, Breeding Resident

General: 179 records (cf 232 last year), including 24 WOO from most sites. Only 1 report of breeding: on/11 Aug Mt Ainslie GrL13 (LeM I).

GBS: The measure of abundance (A=2.2425) was fractionally lower but distribution rose with records from 57 of the 58 sites. Counts of up to 18 birds 4wk Apr Aranda GrJ 13 (HaK1), 20/2wk Jun Pearce GrK15 (KrS1), 25/5wk Oct Kambah GrJ16 (WiB 1) and 39/3wk Jun Kambah GrJ 16 (PeH2). Indications of breeding from 10 sites including nb/5wk Jul Watson GrL12 (MuT 1), dy/2wk Dec-3wk Jan O'Connor GrK13 (Ball), and nb,on/1 wk-4wk Feb Aranda GrJ13 (HaL1).

Diamond Dove Geopelia cuneata

Vagrant/Escapee

General: 1/14 Jul Lake Ginnindera GrJ12 (LaJ5), This record is endorsed with the comment that it is probably an aviary escapee. One other unendorsed record.

Peaceful Dove Geopelia striata

Rare, Breeding Resident

General: 2 WOO records of single birds from SYM GrL15 on 21 Sep and 7 Dec

(DaG2). **GBS:** 1/2wk May Hughes GrK15 (Anil)

Wonga Pigeon Leucosarcia melanoleuca

Common, Breeding Resident

General: 10 records of 1 to 3 birds. Four from the Brindabella Ranges GrD14, E13 and E14 from Jul-Sep; 2 from Tidbinbilla NR GrG 17 in Oct; 1 from Tinderry NR GrO243 in Sep, and 3 from Tallaganda SF GrU23 and W19 in Feb, Mar and May. Note the absence of records from the western ranges post-fires.

CACATUIDAE: cockatoos

Glossy Black-Cockatoo Calyptorhynchus lathami

Rare, Visitor

General: 25 records of up to 16 birds; most records (21 of them) from a site at Burra Creek where the species was recorded throughout the year. Other records were from just north of Michelago (GrL22) and the Lower Molonglo River (GrH13). One breeding record: dy/17 Aug Burra Creek GrM21 (AnII).

Yellow-tailed Black-Cockatoo *Calyptorhynchus funereus* Common, Breeding Resident This species was recorded more commonly this year, particularly in the GBS, undoubtedly as a consequence of their displacement due to the destruction of habitat by the January bushfires. **General:** 97 records (up from 72 last year), many from suburban Canberra. Includes 2 breeding records: dy/9 Jan Narrabundah Hill GrI15 (HoJ1) and dy/2 Feb Lowden Forest Park GrW19 (BoJ1). Largest flock size: 60/15 Sep Blue Range Hut GrE13 (LaS1), with another 11 records of 20 or more birds.

GBS: Abundance (A=1.3217) very much higher than 2001-2002 (A=0.1397). Recorded from 46 (79%) sites (up from 17 (29%) sites last year). Breeding records (all dy) from 4 sites in Curtin, Weston, Fadden and Richardson, between 3wk Dec and 3wk May.

Gang-gang Cockatoo *Callocephalon fimbriatum* Common, Breeding Resident **General: 88** records (cf 89 last year), from throughout the year, from 46 grid cells.

Includes a single record of possible breeding: ih/22 Sep Red Hill GrK14 (PeH2).

GBS: Abundance (A=1.0253) up on last year (A=0.7661) and near historical levels (1997-98 A=1.0325). Recorded from 42 (72%) sites. Breeding (ih and dy) recorded from 3 sites.

Galah Cacatua roseicapilla

Common, Breeding Resident

General: 473 records (cf 580 last year) from 84 grid cells. Most records were of fewer than 10 birds but there were 26 records with counts of 10-50 birds, and one record of 240/5 Apr 'Top Naas' GrJ22 (PeH2). Just 4 breeding records (on, dy, ih and br in Oct Nov, and Dec). **GBS:** Canberra's most abundant GBS bird. Abundance (A=9.3091) up from 2001-2002 (A=8.0475). Recorded from 100% of sites. Breeding recorded from 16 sites of ih from 4wk Jul to 2wk Oct and dy from 5wk Oct to 1wk Feb.

Long-billed Corella Cacatua tenuirostris

Vagrant/Escapee

General: 2 records: 1/13 Oct Chapman GrI15 (HoJ1), 2/20 June Woden GrJ15 (A1R1). Note also a record of a Long-billed Corella/Sulphur-crested Cockatoo hybrid: 1/20 Jan onwards Streeton Drive, Stirling Gr 115 MiMl.

Little Corella Cacatua sanguinea

Uncommon, Breeding Resident

General: 12 records from various locations around Canberra. Generally of 1-5 birds but also 20/21 Mar Turner GrKI3 (PeH2). One breeding record: dy/9 Jan corner Yamba and Hindmarsh Drs GrK15 (McD1).

GBS: Abundance (A=0.3166) twice that of last year (A=0.1563). Recorded from 13 sites, throughout the year but predominantly Sep-Jan.

Major Mitchell's Cockatoo Cacatua leadbeateri

Escapee

General: Three non-breeding records: 1/13 Oct Threlfall St, Chifley GrJ15 (FuD1); 1/10 May and 1/10 Jun, both Sulwood Dr, Kambah GrJ15 (PeH2).

GBS: One non-breeding record: 1/29 Mar Kambah GrJ 16 (WiS 1).

Sulphur-crested Cockatoo Cacatua galerita

Common, Breeding Resident

General: 455 records (down from 637 last year) from 107 grid cells. Generally of fewer than 20 birds, but 47 records had counts of 20-99 birds and 4 of 100 or more birds including 180/14 Feb Booroomba Homestead GrH18 (TaN1). 9 breeding records; ih and on from 28 Jul — 14 Nov, and a single dy record from 3 Feb.

GBS: Canberra's second most abundant GBS bird, down from first in 2001-2002. Abundance (A=8.8156) up from 2001-2002 (A=8.5404). Recorded from 100% of sites. Breeding recorded from 6 sites: di 3wk Sep, dy 4wk Oct through to 3wk May.

Cockatiel Nymphicus hollandicus

Vagrant/Escapee

General: One record: 1/2 Nov, Curtin GrJ14 (LeB1).

GBS: Ten records from 7 sites between 5wk Oct and 3wk Apr.

PSITTACIDAE: lorikeets, parrots

Rainbow Lorikeet *Trichoglossus haematodus*Rare, Breeding Resident **General:** 3 records: 1/9 Jan Garran GrK15 (McD1), 2/3 May and 2/1 Jun, both The Pinnacle GrI13 (AIB1).

GBS: Recorded fairly regularly from six sites in the Belconnen area (Aranda, Cook, Macquarie, Belconnen, and Page), but also 2 records, in Feb and Mar, from a site in Fadden. No breeding recorded this year but see Leavesley A (2003).

Musk Lorikeet Glossopsitta concinna

Rare Visitor

General: One endorsed record: 2/24 Nov Tuggeranong Town Centre GrJ 17 (GiM3). Apart from an unendorsed record last year, this is the first record of this species since 25 Feb 1990.

Little Lorikeet Glossopsitta pusilla

Rare, Visitor

General: A single record: 6/7 July Mitchell GrL12 (LaT1). **GBS:** Recorded from 1 site: 4/2wk Oct Watson GrL12 (MuT1).

Australian King-Parrot Alisterus scapularis

Common, Breeding Resident

General: 66 records (well down on 136 last year), all from Canberra and the ranges to the west, except for one record from near Bungendore. Includes 2 breeding records: br/3 Nov Canberra Motor Village GrK13 (ScK1), dy/28 Jan Chapman GrJ15 (WhJ1). Largest flock: 27/10 Apr ANU GrK13 (PeH2).

GBS: Abundance (A=2.5272) up slightly on 2001-2002 (A=2.4060). Recorded from 54 (93%) sites. Breeding recorded from 9 sites (all dy between 1wk Jan and 3wk Feb).

Superb Parrot Polytelis swainsonii

Uncommon, Breeding Migrant

General: 13 records, all from the northern fringes of Canberra and further north between 22 Sep and 9 Jan. Includes 2 breeding records: dy/30 Nov Gundaroo Oval GrO7 (BoJ 1), dy/15 Dec Mt Rogers Gil 11 (BlRO. Largest flock: 22/7 Dec Sutton River GrOl1 (TaN1).

GBS: Recorded from 2 sites: 1/1wk Oct Curtin GrJ14 (AIR1); 1/3wk Jul, 4/3wk Dec and 4/2wk Jan all Melba GrJ1 1 (DaT1).

Crimson Rosella Platycercus elegans

Common, Breeding Resident

General: 695 records (well down on 1042 last year) from 133 grid cells. Includes 20 breeding records, mostly of ih or on, between 18 Aug and 29 Mar. No dy recorded.

GBS: Canberra's 7th most common GBS bird. Abundance (A=3.6400) slightly down from 2001-2002 (A=3.6504). Recorded from 100% of sites. Breeding recorded from 11 sites, including ih from 5wk Jul, ne in Oct, ny in Oct-Nov, and dy from 1wk Dec to 3wk Jan.

Eastern Rosella Platycercus eximius

Common, Breeding Resident

General: 390 records (cf 533 last year) from 81 grid cells. Includes 4 breeding records, including ih in Sep and Nov, and on in Oct. No records of dy.

GBS: Abundance (A=1.5499) up from 2001-2002 (A=1.3715). Recorded from 57 (98%) sites. Breeding recorded from 9 sites, including di, ih, on, and dy, the latter mainly in Dec-Jan.

Swift Parrot Lathamus discolor

Rare, Migrant

General: One record: 2/24 Mar Higgins GrI12 (McA4).

Red-rumped Parrot *Psephotus haematonotus* Common, Breeding Resident **General:** 128 records (cf 134 last year) from 46 grid cells. Includes 4 breeding records: ih in Aug, Sep and Mar, and dy in Nov.

GBS: Abundance (A=0.2185) up from 2001-2002 (A=0.1360). Recorded from 22 (38%) sites, but no breeding recorded.

Budgerigar *Melopsittacus undulatus*

Vagrant/Escapee

GBS: Two records: 1/2wk Sep Conder GrK18 (VeP1), 2/4wk Oct Kambah GrJ16 (WiB I).

Turquoise Parrot Neophema pulchella

General: Two records: 1/13 Oct Mt Ainslie GrL13 (MiP1), 1/13 Oct Campbell Park GrM13

(ZwM1). These are the first records of this species since Oct/Nov 1994.

Fischer's Lovebird Agapornis fischeri

Escapee

GBS: One record: 1/1wk Feb Dunlop Grl 11 (Bat 1).

Rose-ringed Parakeet Psittacula krameri

Escapee

GBS: A single bird recorded from a site in Kambah from 4 wk Feb to 2wk Mar (PeH2).

CUCULIDAE: cuckoos, koel

Of the cuckoos recorded in the GBS this year only the Common Koel continued to maintain a reporting rate on the positive side of long term average figures. The other four species this year show measures of abundance (A) ranging between 78% and 84% and distribution (F) between 39% and 65% below average values for all years since the survey began.

Pallid Cuckoo Cuculus pallidus

Common, Breeding Migrant

General: 84 records (cf 134 last year), including 23 WOO. First: 1/31 Aug Hillgrove Rd GrL2 (FyM1), last 1/30 Mar HAL Gall (FyM1).

GBS: Records down this year with just 16 from 6 sites. First 1/1wk Sep Holt GrI12 (DaC1) and 1/1wk Sep Sutton Rd GrO12 (ScG1), last 1/1wk Dec Watson GrL12 (WaK1).

Brush Cuckoo Cacomantis variolosus

Uncommon, Breeding Migrant

General: 4 records of single birds, of which 3 were from MUL (WOO) on 24 Nov (HaK1 and BrM2), and 1 from 27 Dec Nursery Swamp GrH23 (GiM3).

Fan-tailed Cuckoo Cacomantis flabelliformis

Common, Breeding Migrant

General: Just 31 records (cf 96 last year), including just 3 from WOO. Records mostly of 1 or 2 individuals but also 8/29 Oct Glendale Depot Gr 123 and 6/3 Nov Glendale to Brandy Flat Gr123 (both LiJ 1). First 1/12 Jul Birrigai GrG17 (Harry Hines); last 1/5 Jan Moonlight Hollow Rd GrD16 (LiJ1).

GBS: 5 records from 3 sites. Not as low as 1999-2000 but these numbers represent a measure of abundance (A=0.0021) 82% below and distribution (F=5.2) 66% below the long term averages for these values. First 1/5wk Jul Aranda (RoS1), last 1/4wk Sep Watson (WaK1).

Black-eared Cuckoo Chrysococcyx osculans

Rare, Visitor

No records this year. Last endorsed record Feb 1989.

Horsfield's Bronze-Cuckoo Chrysococcyx basalis

Common, Breeding Migrant

General: This year there were 31 records, compared with 65 last year and 84 in 2000-2001. Includes 6 from WOO. First 1/11 Aug TSR 56 Yass-Wee Jasper Rd GrC7 (FyM1), last 1/15 Dec HAL GrK10 (FyM1).

GBS: 4 records of single birds from 4 sites. First 1/2wk Sep Hackett GrL13 (BoS2) and last 1/4wk Nov Ainslie GrL13 (HoS1). Measures of abundance and distribution again down

Shining Bronze-Cuckoo Chrysococcyx lucidus

Common, Breeding Migrant

General: Only 8 records compared with 36 last year. Includes only one WOO. First x/28 Sep 'Bibaringa' GrH14 (SmA1), last 1/15 Dec NLQ GrM14 (Boil).

GBS: Only 3 records, each of single birds, from Aranda (Ros1), Curtin (AJR1) and Kambah (VeP I) between 4wk Sep and 3wk Oct.

Common Koel Eudynamys scolopacea

Uncommon, Migrant

General: 2 records: 1/16 Dec Chapman GrI15 (HoJ I), 1/27 Dec Ainslie GrL13 (LeM1). GBS: 34 records (cf 20 last year) from 11 sites in 10 suburbs, including 3/3wk Dec Pearce GrK15 (KrS1). First, I /2wk Oct from each of 3 sites in Hughes and Aranda (Anil, BeR3, HaL1), last, 1 /2wk Jan Hughes (Anil).

Channel-billed Cuckoo Scythrops novaehollandiae

Vagrant

General: 2 records: 1/2 Nov Gilmore GrL16 (GrB1), 5/20 Nov confluence of Molonglo and Queanbeyan Rivers GrN15 (BlC1).

STRIGIDAE: hawk owls

Powerful Owl Ninox strenua

Rare, Breeding Resident

General: 3 records, all of single birds, from Tallaganda State Forest GrV19 and GrU23, in March and May (CrM1). These records come from NSW State Forest surveys.

Barking Owl *Ninox connivens*

Vagrant

No records this year. Last endorsed record Apr 1998.

Southern Boobook Ninox novaeseelandiae

Common, Breeding Resident

General: 7 records (including 2 WOO: 1 NLQ, 1 GOO), from 7 widely dispersed sites. No breeding records.

GBS: 75 records, mainly of single birds, from 23 sites. Regularly recorded (20 weeks) at only one site in Ainslie (HoS1). Records all from 5wk Jul to 2wk May, ie very few winter records.

TYTONIDAE: masked owls

Barn Owl Tyto alba

Rare, Visitor

General: 3 records: x/4 Oct Fyshwick sewage ponds GrL14 (SmA1), 1/31 Mar ANU GrK13 (LeM1) and 1/3 May Captains Flat Rd GrR16 (McD1).

PODARGIDAE: frogmouths

Tawny Frogmouth *Podargus strigoides*Uncommon, Breeding Resident **General:** 4 records: 1/29 Sep ANBG GrK13 (McD1), x/3 Nov Canberra Motor Village GrK13 (ScKl), 4/6 Nov ANBG GrKI3 (McD1) and 4/18 Nov 6km S Angle Crossing GrL22 (OrP 1). The latter 2 records both included dependent young.

GBS: 56 records, of 1-3 birds, from 6 sites. The Cook/Aranda area accounted for 91% of records, others coming from Watson and Griffith. No records Oct/Nov. Breeding: dy/1wk Dec to 1wk Jan Cook GrJ13 (BrM2), exactly as last year.

CAPRIMULGIDAE: nightjars

White-throated Nightjar *Eurostopodus mystacalis* Rare, Breeding Migrant **General:** 2 records of a bird with a single egg, 17 and 23 Nov, Yanununbeyan Crown Reserve GrQ20 (TaN 1), the first endorsed breeding record since Nov 1992 in Namadgi NP.

AEGOTHELIDAE: owlet-nightjar

Australian Owlet-nightjar *Aegotheles cristatus*Uncommon, Breeding Resident **General:** 15 records (WOO: 2 MUL), of 1-3 birds, between Aug and Apr. Numbers consistent with previous years. Most relate to apparently resident birds at Burra Ck, Mulligans Flat and Campbell Park. Breeding: dy/18 and 23 Nov Campbell Park GrM13 (PeH2, McD1). GBS: 9 records of 1-2 birds, from 4wk Apr to 4wk Jun, from a rural site on Sutton Rd GrO12 (ScG 1) where the species has been regularly reported in previous years.

APODIDAE: swifts

White-throated Needletail *Hirundapus caudacutus*Common, Migrant General: No records in spring but there were 17 observations of 2-90 birds from Jan to Mar, with 12 records of fewer than 10 birds. First record, 10/1 Jan Mountain Creek Rd GrE8 (McD1); last 6/30 Mar 11 km E of Bungendore GrV12 (TaN1).

GBS: A good year for these birds, with 59 records from 29 sites compared with an average of 28 records from 17 sites over the last three years. Of these records 48 (79%) were in Feb and Mar and included groups of up to 400 birds. Unusually, there were 6 sightings of up to 15 birds in Nov and Dec,

Fork-tailed Swift Apus pacificus

Rare, Migrant

General: Two endorsed records: 2+/9 Dec Lyons GrJ15 (AlR1); and 1/8 Mar National Zoo & Aquarium GrJ14 (LuN I). Also two unendorsed records.

GBS: Two unendorsed records.

ALCEDINIDAE: kingfishers

Azure Kingfisher Alcedo azurea

Rare, Visitor

No records. One unendorsed record last year, previous endorsed record was from Jun 2001.

HALCYONIDAE: kookaburra, kingfishers

Laughing Kookaburra *Dacelo novaeguineae*Common, Breeding Resident Although this species is frequently recorded, there are very few breeding records. **General:** Recorded 306 times throughout the year (including 57 WOO). Out of all those records, breeding was only recorded 3 times: cf/25 Nov Bredbo GrM29 (HoJ 1); cf/ 12 Dec The Pinnacle CNP GrI13 (AlB1); and dy/14 Jan nr Gunning GrM5 (FyM1).

GBS: 391 records from 41 (71%) sites, a similar site recording pattern to previous years. Only a single breeding record: dy/4wk Jan Hughes (BeR3). Abundance (A= 0.3229) is similar to that of 1999-2000 (0.2859) which is an increase on the 0.21-0.23 recorded in most earlier years.

Red-backed Kingfisher Todiramphus pyrropygia

Rare, Visitor

General: A single bird recorded at Addison Rd, Duntroon (GrM13) on 12 and 13 Oct (GiM3, McD1, SmA1, PeH2). The first record of this species in our region since 5 Oct 1989.

Sacred Kingfisher *Todiramphus sanctus*

Uncommon, Breeding Migrant

Record numbers relatively stable in recent years. Interestingly, this year 85% of GBS records were in Feb and Mar while only 10% of General records came from that period.

General: Recorded 52 times (including 7 WOO) between 7 Oct (Gooroo, TaN1) and 29 Mar (Red Hill, PeH2). Few records towards the end of the season - 2 in Feb; 2 in Mar. One breeding record: ih/18 Oct nr Bungendore Gr R12 (HaK1).

GBS: 19 records from 10 sites, all of single birds except for 2 records of 2 birds each. 16 of the records (85%) were in the period 1wk Feb to 2 wk Mar.

MEROPIDAE: bee-eater

Rainbow Bee-eater Merops ornatus

Common, Breeding Migrant

A considerable drop in records from previous years.

General: 12 records, 10 of which were from Sep-Nov, plus records on 12 Jan and 7 Feb. Maximum group size 4 birds. Earliest: 28 Sep 'Bibaringa' GrH14 (SmA1); latest, 7 Feb Aranda bushland (TaN1). One breeding record: ih/30 Nov nr Gunning GrN03 (BoJ1).

GBS: 3 records of 2-4 birds from 3 sites in the period 1wk to 3wk Oct.

CORACIIDAE: dollarbird

Dollarbird Eurystomus orientalis

Uncommon, Breeding Migrant

General: 41 records in the period 29 Sep (Campbell Park, SmA1) to 26 Jan (Garran, SmA1), 10 from WOO, including 6 from NLQ. Single breeding record: br/28 Dec Campbell Park GrM13 (WaJ2).

GBS: A total of 86 records from 26 sites, an increase over the last 4 years when the species was recorded from between 12-17 sites. Earliest for the year were single birds 1wk Oct at 3 sites and the latest 3wk Feb, again single birds at 3 sites in Weston (BoJI), Watson (WaK1) and Aranda (HaL1). Over half the records were from 4wk Dec to 5wk Jan. Three breeding records, all dy: 2wk Jan Watson (WaK1); 2wk and 4wk Jan Hughes (BeR3); and 5wk Jan Curtin (AJR1).

MENURIDAE: lyrebird

Superb Lyrebird *Menura novaehollandiae* Common, Breeding Resident **General:** 28 records, none between 15 Sep and 19 Feb. The 13 post-fire records largely from unburnt areas such as Tallaganda and the Tinderries. No breeding.

CLIMACTERIDAE: treecreepers

White-throated Treecreeper *Cormobates leucophaeus* Common, Breeding Resident General: 402 records from all months of the year including 99 (25%) WOO, largely from MUL (43), Similar to last year. Most records of 1-5 birds, however there were records of 20-30 birds from surveys along 4-km transects in GrL7 in Apr, and GrO5, GrK6 and GrI3 in May (DaC 1). No breeding records.

GBS: Records from 12 sites of which 10 were north of LBG. Observations were made in 49 weeks but more sites reported during the period 3wk Jan to 2wk May. Only 2 of 123 records were of more than 1 bird.

Red-browed Treecreeper *Climacteris erythrops* Uncommon, Breeding Resident **General:** 8 records spread through the year, all from the higher parts of the region. Pre-fire records from the Brindabellas. Two records of more than a single bird, 3/29 Mar Lowden Forest Park GrW19 (Boil) and 2/22 Jun Tinderry NR GrO24 (HoJ1). No breeding reported.

Brown Treecreeper *Climacteris picumnus* Uncommon, Breeding Resident **General:** Similar level of recording to recent years, with 58 records of 1-9 birds in all months but May. Records from 25 grid cells. 20 records (34%) came from WOO surveys, with LAM (10) leading the way. No breeding records.

MALURIDAE: fairy-wren

Superb Fairy-wren *Malurus cyaneus* Common, Breeding Resident **General:** 544 records from throughout the year, including 101 WOO records, with 17 each from NLQ and SYM. The species is widespread across the region and many reports covered 10-25 individuals. Only 4 reports of breeding activity: ny/9 Oct 'Lambton' GrN7 (JoM2); and 3 records of dy: 31 Oct 'Springfield' GrY4 (DeD2); 6 Nov ANU GrK13 (PeH2); and 12 Jan Lake Ginninderra GrJ12 (AlB I).

GBS: Recorded from 45 sites (78%) in numbers ranging from 1 to 12. The measure of abundance (A=1.0274) was 43.5% above the 21-year average. Breeding records, all dy: 4wk Nov and 1wk Dec, Curtin (AJR1); 2wk Dec, Ainslie (HoS1); and 1wk Jan, Campbell (LJT1).

PARDALOTIDAE: pardalotes, scrubwrens, gerygones, thornbills and allies

Spotted Pardalote *Pardalotus punctatus* Common, Breeding Resident/Migrant **General:** 287 records, down by 28% on last year, and including a total of 64 WOO records, from all sites, Highest numbers in the spring, the usual pattern, then falling to the lowest numbers in Jan and Feb. Only two breeding records: nb/13 Sep The Pinnacle GrI13 (A1B1); and on/17 Nov 8km S of Michelago GrL25 (McD1).

GBS: The measure of abundance (A) fell slightly but remained above the average figure for all years of the survey. Distribution (F) on the other hand moved higher with records from 49 of the 58 sites. Similar to last year, smallest number of records in Nov and Dec. Indications of breeding reported from 7 sites, including: nb/1wk and 2wk Aug Cook GrJ13 (TaN1), Kambah GrJ16 (VeP1) and Curtin GrJ14 (AJR1); nb/2wk Oct Yarralumla GrK14 (CCR1); dy/2wk Oct Kambah GrJ16 (PeH2); a nest/5wk Apr O'Connor GrK13 (Ball); and a very early report of nb/1wk Jun Pearce GrK15 (KrS1).

Striated Pardalote *Pardalotus striatus* Common, Breeding Resident/Migrant **General:** 443 records, down by 31% on last year, and including a total of 145 records from all WOO sites. Records peaked in Sep (89), then fell away to Jan (17) and Feb (11), recovered to a second peak in Mar (59) then fell again. Just 6 reports of breeding activity from on/10 Sep Mt Ainslie GrM13 (ScB2) to ih/12 Dec Bruce Ridge GrK13 (McD1).

GBS: The measure of abundance (A) was down by 14%. Distribution (F) on the other hand remained steady with records from 44 sites (77%). There was an average of 53 records each month until Mar, with a high of 68 in Oct. The number fell to 22 in May and 36 in Jun. Breeding was reported from two sites: ny/3wk Oct Aranda GrJ 13 (OrP 1); and nb/2wk Sep and ny/ I wk Jan both Watson GrL12 (WaK1).

Pilotbird Pycnoptilus floccosus Uncommon, Breeding Resident Continues the low level of recording of this species from higher, damper altitudes.

General: Four records only, pre-fire from Tidbinbilla and post-fire from Tallaganda: 2/6 Oct Tidbinbilla NR GrF18 (GiM3), 1/23 Dec Tidbinbilla NR GrF18 (GiM3), 2/29 Mar Lowden Forest Pk GrW19 (BoJ1), x/6 May Tallaganda SF GrT22 (SmA1).

White-browed Scrubwren Sericornis frontalis Common, Breeding Resident General: Number of records (164) down from last year (219) and 2000-2001 (364). Spread fairly evenly over all months. Includes 2 Jun WOO records of single birds at CAS. Only one record of breeding: cf/9 Oct Bluetts Forest GrI13 (A1B1).

GBS: Abundance (A) fell this year by 14%, but still remained 157% higher than the average for all years of the survey. Distribution (F), on the other hand, rose by 24% with records from 28 sites (48%), again well above the long term average for the survey. There was a steady rise in the number of records to a maximum in Mar/Apr. Breeding reported from 2 sites: nb/2wk Jul and dy/3wk Oct and 1wk Nov Kambah GrJ16 (PeH2); nb/3wk Jul and dy/4wk Jan Cook GrJ (TaN 1).

Chestnut-rumped Heathwren *Hylacola pyrrhopygia* Uncommon, Resident

No records this year, after being recorded from Tallaganda in the past two years.

Speckled Warbler *Chthonicola sagittata* Uncommon, Breeding Resident **General:** 114 records compared with 80 last year and 108 in 2000-2001. They included 24 records from 8 of the WOO sites. Larger counts included 7/21 Aug Mt Majura NP GrM12 (ScB2), 5/17 Nov 8km S of Michelago GrL25 (McD1), 6/15 Dec Mt Majura NP GrM12 (Crl1) and 9/28 Dec Mt Taylor GrJ15 (KrS1). No indications of breeding activity were reported.

GBS: A total of 4 records from 2 sites: 1/4wk Jan Sutton Rd GrO 12 (ScG1); and 1/3wk Dec, 1/4wk Jan, 2/2wk Feb and 1/2wk Jun Ainslie GrL13 (HoS1).

Weebill Smicrornis brevirostris Common, Breeding Resident General: 361 records, a similar number to last year, representing a broad coverage of the region and from all months of the year. Included were 168 (45%) representing all WOO survey sites. Only one record of breeding activity: cf/24 Nov Mulligans Flat GrM 10 (HoJ 1). GBS: A 6% increase in the measure of abundance (A) compared with last year. Distribution (F) fell by 4% but remained above the average value for all previous years of the survey. Breeding reported from 1 site: nb/1wk Aug, on/4wk Aug, ny/4wk Sep Curtin GrJ14 (AJR1).

Western Gerygone Gerygone fusca

Uncommon, Breeding Migrant

General: 72 records (49 last year), including 33 from 5 of the WOO sites. First 1/14 Sep 'Gold Creek' GrK10 (FyM1), last x121 Apr Campbell Pk GrM13 (SmA1).

GBS: 12 records of single birds from 3 sites. First 1/2wk Oct Watson GrL12 (WaK1), last 1/2wk Mar Cook GrJ 13 (TaN1).

White-throated Gerygone Olivacea

Common, Breeding Migrant

General: 156 records, 13 fewer than last year, 61 were from 8 of the WOO survey sites. First 1/14 Sep Old Lambrigg property GrJ18 (TaN1), last x/30 Mar Campbell Pk GrM13 (SmA1). No evidence of breeding reported.

GBS: 21 records from 7 sites. First 1/2wk Sep, last 1/1wk Apr, both Watson GrLI2 (WaK1).

Brown Thornbill Acanthiza pusilla

Common, Breeding Resident

General: 276 records with a total of just 59 for the four months Nov to Feb. Only 9 records from the WOO survey. 2 reports of breeding activity: cf/18 Oct 6km NW of Bungendore GrR12 (HaK1); dy/31 Oct 18km S of Goulburn GrY4 (DeD2).

GBS: Measures of both abundance (A) and distribution (F) were just above the levels of last year and so remained well above the average figures for all years of the survey. Again the pattern of occurrence was typical with smaller numbers in spring and summer, rising to a peak in autumn and early winter. One report of breeding: dy/3wk Oct Chapman GrI 15 (HoJ 1).

Buff-rumped Thornbill Acanthiza reguloides

Common, Breeding Resident

General: 280 records, down by 15% on last year. As with last year, a high proportion of records (37%) was from the WOO survey. Reports of breeding: dy/29 Sep Mt Majura GrM 12 (CrI1); dy/31 Oct 18km S of Goulburn GrY4 (DeD2); on/5 Nov Burra Creek GrM21 (Anil); ny/19 Nov Yass Golf Course GrF3 (HaK1); and three records of dy/15 Dec Mt Majura GrM12, 'Gold Creek' Gil 11 (FyM1) and Tuggeranong Hill GrK18 (McJ4).

GBS: Reported from 16 sites with most records during the months Dec to Apr. There were significant increases in the values of abundance (A) and distribution (F). Contrary to the trend last year both values are now above the average figures for all years of the survey.

Yellow-rumped Thornbill Acanthiza chrysorrhoa

Common, Breeding Resident

General: 312 records, 25% fewer than last year. Covering all months with a peak in Sep, falling away to the lowest numbers in Jan and Feb, then rising to a second peak in Mar/Apr. A total of 64 WOO records, slightly higher than last year. 13 reports of breeding activity from nb/31 Aug Campbell Pk GrM13 (PeH2) and ny/2 Sep Ryrie Hill Rd GrM25 (HoJ1) to dy/12 Dec The Pinnacle CNP GrI13 (A1B1) and one early record from the new season, nb/29 Jun NE of Hall GrJ10 (NeG1).

GBS: A further fall (23%) in the measure of abundance (A) resulting in the value now being 30% under the average for all years of the survey. On the other hand the percentage of sites at which this species was recorded (F), rose from 86% to 93%. The pattern of occurrence shows numbers rising through spring to a peak in Jan and Feb finally falling away in May and Jun. Reports of breeding activity from 5 sites, the first being nb/2wk Jul Kambah GrJ 16 (VeP 1) and the last dy/4wk Dec Kambah GrJ16 (VeP1) and Conder GrK18 (VeP1).

Yellow Thornbill Acanthiza nana

Uncommon, Breeding Resident

General: 21 records covering all months except Sep and Mar. Only 1 WOO record (MAJ).

GBS: Reported from 4 sites with most records (6 from 3 sites in Hackett, Ainslie and

Watson) in Apr. Values generally down on last year.

Striated Thornbill Acanthiza lineata

Common, Breeding Resident

General: 250 records covering all months. Most records (32) in Sep, falling steadily to the least in Jan (11) and Feb (8). Including 61 (24%) from the WOO survey. No breeding records. **GBS:** 180 records, and a significant rise (201%) in the measure of abundance (A). Only 26 records for the 5 months Jul to Nov. Distribution (F) was also up with records from 27 sites (47%) compared with 22 last year. Few records of single birds; numbers between 10-20 regularly recorded. No report of breeding activity.

Southern Whiteface Aphelocephala leucopsis

Uncommon, Breeding Resident

General: 24 records of up to 9 birds, just 3 of which were from the WOO survey. Reports of breeding: nb/21 Sep Cnr Apollo and Naas Rd GrJ21; dy/12 Jan Caloola Farm GrJ22 (Boil).

MELIPHAGIDAE: honeyeaters, chat

Red Wattlebird Anthochaera carunculata

Common, Breeding Resident

The most commonly reported honeyeater with records throughout the year across the region. **General:** 382 records including 13 breeding records, first dy/14 Sept Lake Ginninderra GrJ12 (AlB1), last dy/21 Jan ANU GrK13 (PeH2). Largest numbers were recorded during autumn migration, 32/13 April Angle Crossing GrK20, 30/23 April Tidbinbilla Tracking Station GrH16, 40/25 April Burra Ck GrM21, 40/27 April Kellys Swamp GrL14.

GBS: Recorded at all 58 sites in all weeks with breeding at 25 sites. The abundance value (A=2.6451) was lower than the record high of 1999-2000 (3.0631) and slightly lower than last year, but still above the long term average. This is the 11th most abundant species in the GBS and the second most abundant honeyeater. First breeding: nb /3wk Aug (same as last year), last dy/2wk Feb.

Little Wattlebird Anthochaera chrysoptera

Vagrant

Very rare vagrant from coastal districts. The last confirmed record was from a garden in Cook in Aug 2000, and before that, from almost 2 decades ago (Wilson 1999) with unconfirmed reports in the 1980s (Taylor and Davey 1985) and 1996 (COG database).

General: One bird recorded in the ANBG GrK13 4 Aug (PeV1) and 24 Sep (McD1, GiM3).

GBS: One unendorsed autumn record.

Noisy Friarbird Philemon corniculatus

Common, Breeding Migrant

Common summer migrant mostly to the lowland woodland regions.

General: 162 records. First recorded arrival was relatively late, 22 Sep NLQ GrM14 (BoJ1), with many reports from WOO surveys soon after. The last record for the season was, like last year, relatively early on 6 April, Stockdill Dr GrH12 (DaC1). 12 breeding records, first ny/22 Oct Tidbinbilla Tracking Station GrH16 (LaD1), last dy/13 Jan at ANU GrK13 (PeH1).

GBS: Recorded at 52 of 58 sites. First arrivals relatively late, recorded at 2 sites 4wk Aug. Last records 4wk April. Abundance (A.5398) was higher than last year (0.7674) but well below the long term average of 0.9722. Breeding at 8 sites, first records again relatively late, nb/4wk Oct, last dy/5wk Jan.

December 2003

Little Friarbird Philemon citreogularis

Uncommon, Migrant

Rare summer migrant, recorded mostly to the north-west of the ACT. **General:** 1 endorsed record: 1/2 Feb Melba Gr J12 (PuD1).

Regent Honeyeater Xanthomyza phrygia

Rare, Breeding Visitor

No records. Last recorded Feb 2001.

Noisy Miner Manorina melanocephala

Common, Breeding Resident

General: 267 records throughout the year. 9 breeding records, the first very similar to last year, ny/28 Aug at ANU GrK13 (PeH2), last dy/5 Jan in Chapman GrI15 (HoJ1).

GBS: Recorded from 21 sites, but consistently throughout the year from only 1 site in Cook GrJ13. Abundance (A=0.2935) was well up on last year (A=0.2038) and almost double the long term average (0.1594). No breeding records.

Lewin's Honeyeater Meliphaga lewinii

Vagrant

General: 1 record from Tallaganda National Park GrT22, 6 May.

Yellow-faced Honeyeater *Lichenostomus chrysops*Common, Breeding Migrant **General:** 279 records from across the region but more from forested mountain areas. Most records from late Aug to early May. Highest number recorded during the spring return migration, 7500/22 Sep near Warragandra Homestead GrW23 (BrM2). Highest number recorded during the autumn outward migration, 7511/6 April Angle Crossing GrK20 (PeV 1). No breeding records.

GBS: Recorded from 46 of 58 sites in all weeks. Very few records during July and August with sudden increase from 2wk Sep until 3wk Oct, then very few records through Nov, Dec and Jan. Slight increase during Feb then abrupt increase from 2wk Mar with hundreds of birds recorded at some sites through Apr. Small numbers during May, but very few during Jun. Abundance (A=3.3520) was higher this year than the last few years and well above the long term average (2.6592), making this the 9th most abundant species in the GBS and the most abundant honeyeater. No breeding records.

White-eared Honeyeater *Lichenostomus leucotis* Common, Breeding Resident **General:** 187 records mostly from forested mountain areas, throughout the year. For a solitary bird, a relatively large number, 25, were recorded at Glendale depot GrI23, 6 Apr (NeG 1), an area severely burnt in the January bushfires. No breeding records.

GBS: Recorded at 24 of 58 sites, but the only regular records all year were from a rural property on Sutton Rd GrO12. At all other sites there were almost no records from 5wk Jul to 4wk Feb. Abundance (A=0.0876) was higher than last year (A=0.0686) but still below the long term average of 0.1054. No breeding records.

Yellow-tufted Honeyeater *Lichenostomus melanops* Uncommon, Breeding Visitor Uncommon in the region, usually found along drier mountain valleys, typically in Apple Box woodland.

General: 4 records, 2 of these from the upper Queanbeyan River GrQ21 (BrM2): 8/10 Jan and 6/7 Mar. Also 3/29 Apr in Yanununbeyan Reserve GrQ20 (DeD2), and 1/3 May at Googong dam GrO16 (CoE1). No breeding records.

Fuscous Honeyeater *Lichenostomus fuscus* Common, Breeding Resident **General:** 41 records, those in Jul and Aug from suburbs. All records from Oct-Apr were from mountain areas to the south-east and south-west of Canberra. The few records May and Jun again from the suburbs. 3 breeding records, nb/29 Oct Glendale depot GrI23 (Lin), and co and nb both 18 Nov Kelly Rd GrL22 & M22 (HoJ I).

GBS: Recorded at 20 of 58 sites. Almost no records from 3wk Sep until 2wk Apr. Abundance levels over the years have fluctuated greatly. This year's abundance (A=0.0699) was well below last year's (A=0.1332) and the long term average (0.1588). No breeding records.

White-plumed Honeyeater Lichenostomus penicillatus Common, Breeding Resident

General: 176 records from throughout the year in urban and rural areas, commonly recorded in WOO surveys. Highest numbers reported at Lake Ginninderra GrJ12 23/14 Sep (A1B1) and Hall TSR GrJ10 20/14 Jan (FyM1). 5 breeding records, first, nb/14 Sep Lake Ginninderra GrJ12 (AlB1), last dy/14 Jan at Hall TSR GrJ10 (FyM1).

GBS: Records from 20 of 58 sites scattered across 31 weeks of the year. Very few records at any site between 1wk Aug and 3wk Jan. Abundance has fluctuated over the years but this year (A=0.0451) was half that of last year and well below the long term average (0.1596). No breeding records.

Brown-headed Honeyeater *Melithreptus brevirostris* Common, Breeding Resident

General: 100 records throughout the year, nearly one third of these from a rural property at Burra Creek GrM21 (Anil). Highest number 20/28 May at Mundoonen NR GrI3 (DaC1). 1 breeding record: nb/24 Nov Mt Ainslie East GrL13 (LeM1).

GBS: Irregular records from 4 urban sites in Holt, Weston, Kambah, and Ainslie, and one rural site on Sutton Rd (GrO12). Abundance (A=0.0177) was similar to last year (A=0.0130) but below the long term average of 0.0284. No breeding records.

White-naped Honeyeater *Melithreptus lunatus* Common, Breeding Migrant General: 84 records from all months but mostly from late Aug to late Apr. Highest number recorded 906/6 Apr during the autumn migration at Angle Crossing GrK20 (PeV1). No breeding records.

GBS: Records from 20 of 58 sites. Very few records during the return migration in Sep. Almost no records from 3wk Oct until 2wk Mar, then a sudden increase in numbers through Apr to 2wk May. Almost no records in Jun. Abundance (A=0.1398) was below last year's (A=0.1941) and well down on the long term average (0.7020). No breeding records.

Painted Honeyeater Grantiella picta Status (eds to complete) Very rare vagrant making a spectacular influx to the region.

General: 29 records, 10 from Campbel1 Park GrM13, 3 from Hall GrJ11, 5 from Mulligans Flat, 5 from woodlands near Gunning GrN3, N4, O5. First reported 26 Oct at Hall GrJ11 (ZwM1), last report 18 Jan from Mt Taylor GrJ 16 (McD1), No database breeding records, but breeding described in Lenz and Dabb (2003), first nb/7 Nov, last dy/5 Jan at Campbell Park.

Crescent Honeyeater *Phylidonyris pyrrhoptera*

Uncommon, Breeding Resident

General: 11 records, 3 from ANBG GrKI3, 30 Apr, 24 May and 26 Jun, the remainder from mountain areas. No breeding records.

GBS: Records from only 2 sites, both in Aranda GrJ 13 and only in Jun, Long term annual Abundance is highly variable. This year (A=0.025) was only one-tenth that of last year (A=0.0288) and the long term average (0.0277). No breeding records.

New Holland Honeyeater *Phylidonyris novaehollandiae* Uncommon, Breeding Resident **General:** 17 records throughout the year. 8 from ANBG GrK13, others from Canberra Motor Village GrK13, Jerrabomberra Wetlands GrL14 and Lake Tuggeranong GrJ17, the remaining 5 from Namadgi NP, Tidbinbilla NR, Tinderry and Tallaganda Ranges. No breeding.

GBS: Recorded at 8 sites, most regularly from Kambah-Weston area (GrI15, 116, J15, J16), occasional records in Holt (GrI12), Belconnen and Aranda (GrJ13). No records from 4wk Oct to 3wk Feb. Abundance for this species fluctuates and this year (A=0.0156) was below last year (A=0.0240) and only one-third of the long term average (0.0461). No breeding records.

Tawny-crowned Honeyeater Phylidonyris melanops

Vagrant

No records this year. Last recorded Sep 2000.

Eastern Spinebill Acanthorhynchus tenuirostris

Common, Breeding Resident

General: 139 records throughout the year from both mountain and lowland areas, but no breeding recorded.

GBS: Recorded from 53 of 58 sites, in all weeks but less commonly from 3wk Sep to 4wk Dec. Abundance (0.6699) was slightly down on last year (0.7056) but above the long term average (0.5613). Breeding recorded at only 1 site in Isaacs GrK16: dy/1-2wk Jan (MaC2).

Pied Honeyeater *Certhionyx variegatus*

Vagrant

A very rare vagrant to the region from the inland. Never recorded in the ACT (Wilson 1999). Nearest records usually western NSW (Barrett *et a1*2003). First record for the COG region. **General: 1** endorsed record; 1 male 16 Oct Sheehans Rd Hoskinstown GrS17 (KaJ1).

Scarlet Honeyeater Myzomela sanguinolenta

Rare, Migrant

Rare spring-summer visitor. Last records in Feb-Mar 2002, Sept 1999 and Oct 1995.

General: 1 endorsed record; 1/2 Feb Duffy St Ainslie GrL13 (HoS1).

White-fronted Chat Epthianura albifrons

Uncommon, Breeding Resident

Uncommon resident, now rarely reported except at Lakes George and Bathurst.

General: 3 records; 2 from Tharwa Sandwash GrJ19, 1/15 Feb (ZwM1) and 2/6 April (BoJ1), and 1 record from Readymix wetlands on the shores of Lake George GrS12, 7/28 April (DeD2). No records from WBS.

PETROICIDAE: Australasian robins

Jacky Winter *Microeca fascinans*

Uncommon, Breeding Resident

A slight increase over recent years and the first GBS records since 1998.

General: 36 records of 1-3 birds but only 3 after Dec (1 in Apr and 2 in Jun). Two breeding records: br/12 Nov Currango GrA24 (Joan Adams); and ny/1 Dec Campbell Park GrM13 (LeM1).

GBS: 5 records, 4 of which were from the same site in Aranda (HaK1), all in the period 2wk Apr to 4wk Jun.

Scarlet Robin Petroica multicolor

Common, Breeding Resident

General: 214 records, of 1-12 birds, from 66 grid cells, and in all months of the year; includes 56 WOO records (26%). A slight increase over last year's 192 records but still below earlier levels. Three breeding records: cf/26 Sep Namadgi GrH25 (DeD2); on/11Sep Orroral Valley GrG21 (Id 1); and dy/6 Jan Bungendore GrR12 (DeD2).

GBS: 21 records from 8 (13%) sites with an abundance of A=0.0101. This is a similar figure to the last 5 years, apart from 2000-01 when it was recorded from 30% of sites with an abundance of A=0.0252.

Red-capped Robin Petroica goodenovii

Rare, Breeding Visitor

General: Recorded 16 times throughout the area, from Tidbinbilla to Googong to Mulligans Flat. An increased reporting rate over recent years. No records in Jul-Aug. One breeding record: dy/09 Jan Mulligans Flat GrL11 (DeD2). Five records were from the Woodland Survey, from Gooroo, Mulligans Flat and Red Hill.

Flame Robin Petroica phoenicea

Common, Breeding Resident

General: A total of 59 records, compared with last year's 61; but no breeding recorded. Only 4 records between Oct and Feb.

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GBS: Records of up to 6 birds for 9 weeks of the year from a site in Curtin (AJR1), 6 times from 1wk Jul to 1wk Sep, and 3 times from 1wk to 4wk Jun.

Rose Robin Petroica rosea

Uncommon, Breeding Migrant

General: Recorded 15 times. No records from Oct-Feb and Apr-Jul. No breeding.

GBS: The increase in recording rates for this species seems to have plateaued. There were 55 records from 18 sites with an abundance of A=0.0253, compared with 58 from 12 and similar abundance last year. No records again in the warmer months from 2wk Sep to 4wk Mar.

Pink Robin Petroica rodinogaster

Rare, Breeding Migrant

No records. Last recorded 13 Aug 2001.

Hooded Robin Melanodryas cucullata

Uncommon, Breeding Resident

General: Recorded 33 times of which 8 (24%) were Woodland Survey records. A decrease over the 38 (2001-02) 55 (2000-01) and 43 (1999-2000) records. Two breeding records: ny/7 Oct Gooroo GrM11 (TaN1); and dy/18 Nov Kelly Rd GrL22 (Boil).

Eastern Yellow Robin *Eopsaltria australis*

Common, Breeding Resident

General: 72 records, in most months of the year, and from 43 grids. First breeding for 3 years: dy/28 Dec nr Mt Taylor GrJ15 (KrS1).

GBS: Two records: 2/4wk Jan Aranda (GeJ1); and 1/5wk Apr Fadden (RoP1).

CINCLOSOMATIDAE: whipbird, quail-thrush

Eastern Whipbird Psophodes olivacea

Uncommon, Breeding Resident

General: 6 records from higher and wetter areas, in Sep, Mar and May. This is a similar number of records to last year but lower than in some recent years. Post-fire records all from Tallaganda, including 5/29 Mar Lowden Forest Park GrW19 (BoJ1). No breeding recorded.

Spotted Quail-thrush Cinclosoma punctatum

Uncommon, Breeding Resident

General: 9 records of 1-3 birds, mainly from higher altitudes. Only 2 summer records. A fairly consistent low recording rate over the last 4 years. Two records, both of 2 birds, came from sites to the North of Canberra near Bellmount Forest GrO5 and Mundoonen NR GrI3 (both DaC1). No breeding recorded.

NEOSITTIDAE: sittella

Varied Sittella Daphoenositta chrysoptera Common, Breeding Resident General: Overall similar to last year, with 49 records (including 7 WOO) in all months, mainly from lower altitudes and including many in, or adjacent to, settled areas. Most records were of 1-9 birds, but also 2 reports from Feb of flocks of 16 and 12 birds from Burra Creek GrM21 (both Anil). One breeding record: dy/30 November Nanima TSR50 (BoJ 1).

GBS: 17 records from 5 sites in Cook (2 very close sites), Fadden, Watson and Aranda, with most records between 4wk Dec and 4wk May. Most flocks were of 4-8 birds; largest was 13, including dy/4wk Dec-1wk Jan at a site in Cook (BrM2).

PACHYCEPHALIDAE: whistlers and allies

Crested Shrike-tit *Falcunculus frontatus*Uncommon, Breeding Resident **General:** Recorded 19 times (including 5 WOO), 5 less than the average of the last four years. No records in Jun or Jul. One breeding record: dy/23 Nov nr Gunning GrN3 (ZwM1).

Olive Whistler Pachycephala olivacea Uncommon, Breeding Resident General: 7 records: 2 in the Brindabellas in Aug and Oct (before the fires) (both GiM3); and 5 in Tallaganda, 1 in Mar (SmA1), 4 in May (CrM1). Continues the low level of recording of this species from the wet forests.

Golden Whistler *Pachycephala pectoralis* Common, Breeding Resident **General:** 147 records in all months; 36 (24%) were Woodland Survey records. Of the 147 records only 4 were in the summer months. Not a single breeding record.

GBS: Similar level of recording to last year, with 405 records from 42 sites, with an abundance of A=0.2021 (cf 70% and A=0.1851 last year). This is similar to five out of the last six years. Very few records (3 single birds from 3 sites) in the summer months.

Rufous Whistler *Pachycephala rufiventris*Common, Breeding Migrant **General:** Recorded 289 times in the 9 months from Aug to Apr incl. with 39% of the records coming from the Woodland Survey. No records at all May-Jul. First record: 18 Aug JWNP (SmA1); last, 28 Apr 'Springfield' GrY4 (DeD2). Only one breeding record: br/28 Dec Campbell Park GrM13 (WaJ2).

GBS: Recording of this species has increased from last year with 64 records of 1-3 birds from 20 sites (34% of sites) with an abundance of A=0.0345, cf 29% and A=0.0199 last year, but still below the abundance of A=0.05-0.06 of the previous 4 years. Again no records in winter. A single breeding event recorded: dy/5wk Jan and 1 wk Feb Watson (WaK1).

Grey Shrike-thrush *Colluricincla harmonica* Common, Breeding Resident The bushfires may have affected this species as it was recorded more frequently in the Garden Bird Survey during Jan/Feb than is usually the case.

General: Recorded 295 times throughout the year, with 47 records (16%) during the Woodland Survey. Not one single breeding record.

GBS: 114 records from 17 sites, a similar percentage of sites (29%) as in last four years. However abundance of A=0.0488 is higher than the A=0.03-0.04 of the previous 4 years. All records except 2 were of single birds and were scattered through the year without the drop off in numbers usually seen in the summer months.

DICRURIDAE: monarchs, flycatchers, fantails

Black-faced Monarch Monarcha melanopsis

Rare, Visitor

General: A single record: 1/2 Feb Lowden Forest Park GrW19 (BoJ1).

Leaden Flycatcher Myiagra rubecula

Common, Breeding Migrant

General: Recorded 72 times in the period Sep-Mar, (including 23 WOO (32%)). First record: 29 Sep Campbell Park (SmA1); last, 29 Mar Symonston (DaG2). Two breeding records: on/20 Dec Campbell Park GrM13; and dy/4 Jan Brooks Hill GrR14 (both McJ4).

GBS: Recorded 96 times from 20 sites (35%) in the period 1wk Oct to 1wk Mar but also including a single late record in 1wk Apr. The abundance of A=0.0488 is up on that of the last few years which has been around the 0,02-0.03 level. A single breeding record: dy/2 wk Jan Aranda (HaL1).

Satin Flycatcher Myiagra cyanoleuca

Common, Breeding Migrant

General: 10 records, including I WOO record. First record: 22 Sep NLQ (Born; last, 29 Mar Lowden Forest Park (BoJ1). One breeding record: di/11 Nov Orroral Valley GrG21 (1111).

GBS: 8 records in total; 5 of 1-2 birds from 5 sites in the period I wk Oct to 1wk Feb; also 3 very unusual late records from a site in Hughes: 2/1wk Mar, 2/3wk Mar and 3/1wk May.

Restless Flycatcher Myiagra inquieta

Uncommon, Breeding Resident

General: Recorded 38 times in most months although fewer in summer - no records in Dec and only one each in Jan, Feb and Mar. No breeding recorded.

GBS: 3 records of single birds from 2 sites: 1wk Jul and 3wk Jun, Dunlop (BaJ1); 5wk Oct Curtin (AJR1).

Magpie-lark Grallina cyanoleuca

Common, Breeding Resident

General: Recorded 329 times throughout the year including 19 breeding records. First breeding: nb/13 Sep The Pinnacle CNP GrI13 (A1B1); last, dy/19 Feb ANU GrK13 (PeH2). **GBS:** Recorded through the year at all but 2 sites (one of which is a rural site). Abundance of A=2.2968 is the second lowest over the last 6 years (the lowest was A=2.26) and compares with the average of A=2.5 for those 6 years. Breeding recorded from 21 (36%) sites, up from the 25% last year and similar to the previous two years. First breeding record: nb/1wk Sep; and last, dy/4wk Feb. Four examples of double broods.

Rufous Fantail Rhipidura rufifrons

Uncommon, Breeding Migrant

General: 9 records of 1-3 birds. First record: 20 Oct Campbell Park (McI1); last, 29 Mar Lowden Forest Park (BoJ1). No breeding recorded.

GBS: Seven records of single birds from 5 sites. One of the records was 4wk Nov whilst the remaining 6 were in the autumn period, 3wk Feb to 1wk Apr.

Grey Fantail Rhipidura fuliginosa

Common, Breeding Resident/Migrant

General: 519 records, including 165 (32%) from WOO. Again a decrease in winter months with only 25 sightings (5% of the total) in Jul, May and Jun. 8 breeding records: first, nb/9 Oct nr Gundaroo GrN7 (JoM2); last, dy/30 Jan nr Bungendore GrS12 (DeD2).

GBS: Recorded from 49 (84%) sites. Abundance (A=0.4442) equaled that of 1999-2000 and was up compared with the range A=0.34-0.36 of recent years. Again a noticeable decrease in winter months with the majority of records in the period 4wk Nov to 5wk Apr. Only 2 breeding records: nb/4 wk Sep ANU (PeH2); on/3wk Dec Curtin (AJRI).

Willie Wagtail Rhipidura leucophrys

Common, Breeding Resident

General: Recorded 254 times in all months, but fewer in winter months. Eight breeding records: first, on/1 Oct ANU GrK13 (PeH2); last, cf/12 Jan Lake Ginninderra GrJ12 (AIB1). **GBS:** Recorded from 35 (60%) sites. The abundance of A=0.1398 is up on last year (A=0.1206) but still below the 0.2 of 2000-01 and continues the downward trend of the previous years of around 0.25. Two breeding events recorded: dy/1 wk Dec Holt (DaC1); and dy/l wk and 2wk Jan Watson (WaK1).

Spangled Drongo Dicrurus bracteatus

Rare, Migrant

General: One unconfirmed report.

CAMPEPHAGIDAE: cuckoo-shrikes, cicadabird, trifler

Black-faced Cuckoo-shrike *Coracina novaehollandiae* Common, Breeding Res/Migrant **General:** 218 records (down from 382 in the previous year) covering all months except June. The number of records built up rapidly in the last week of August and declined rapidly after the first week of April. WOO observations were also down, from 99 in 2001-02 to 47 this year, with MUL leading the way with ll records. Most records were of 1-4 birds, max 8/7 Nov Campbell Park GrM13 (Mull). Nine breeding records: the earliest, co/18 Oct Gundaroo Rd GrR12 (HaK1); the latest, br/28 Dec Campbell Park GrM13 (Wan).

GBS: Records from 53 sites (91%), similar to the 21-year average. Reported in 51 weeks with a build up from 1wk Sep and the autumnal decrease from I wk Mar. The measure of abundance has decreased to A=0.2619 and is now 54% below the average for all years of the GBS. Breeding was reported from 5 sites: nb/1wk Nov Curtin (AJR1); from on to dy/3wk Nov-3wk Jan Yarralumla (CCR1); and dy/variously 4wk Jan-3wk Feb in Kambah (WiB1), Macquarie (LaS1) and Ainslie (HoS1).

White-bellied Cuckoo-shrike Coracina papuensis

Rare, Visitor

This year continues the pattern of recent times of low numbers of records of this species.

General: 1 record of a dark phase bird from Garran GrK15 (SmA1) on 6 Jul.

GBS: 3 records, all of dark morph birds: 1 on 9 Aug in Kambah (PeH2) and 1 on 12 and 29 Jun in Page (AlB1).

Cicadabird Coracina tenuirostris

Uncommon, Migrant

Again continues the pattern of recent times of low numbers of records of this species.

General: 2 records: 1/7 Dec Honeysuckle Creek campground, Namadgi NP GrH20 (TaN1), and 1/23 Dec Lyrebird Trail Tidbinbilla NP GrF18 (GiM3). No post-fire records.

White-winged Triller Lalage sueurii Uncommon, Breeding Migrant

General: 37 records of 1-5 birds, with a maximum of 8/8 Nov Campbell Park GrM13 (MuT1). The first record was 29 Sep Campbell Park (SmA1); the last, 14 Jan Nanima TSR GrK7 (FyM1). 18 records (49%) came from GrM13, mainly Campbell Park as the location, so this year's 37 records compare poorly with the 42, 66, 36 and 70 records (excluding GBS) of the last four years. Four records were sourced through WOO: I each from MUL, HAL, GOO and LAM. Only one record of breeding activity, br/28 Dec Campbell Park GrM13 (WaJ2).

GBS: Only reported from one site in Curtin GrJ 14 (AJR1) with records for the 9 consecutive weeks 1wk Oct to 4wk Nov. No GBS evidence of breeding activity.

ORIOLIDAE: oriole

Olive-backed Oriole Oriolus sagittatus Common, Breeding Migrant

It is possible that some birds are over-wintering. The last observation for the previous year was on 3 May 2002 at Swinging Bridge camp GrA9 (ScK1) and the first record for this year was 16 July 2002 Lake Ginninderra GrJ12 (HoJ1). The last record for the current year was a GBS record of a single bird from Kambah (WiB I) in the first week of June 2003.

General: 73 records this year, a decline of 31% on the 106 from last year. The last non-GBS record for this year was on 6 April, 2km N of Kambah Pool GrI16 (KrS1). Most records were of 1-2 birds with the exception of 4/13 Dec Campbell Park GrM13 (McD1). The number of records from WOO also declined, by 49% from 37 to 17. No breeding records.

GBS: In contrast, the value for abundance rose to A=0.0712 after last year's rise to 0.0686. The 2002-03 value is 33% above the 21-year average. Reported from 45% of sites with the great majority of reports being of a single bird. The first GBS records were 1/1wk Sep Curtin GrJ14 (AJR1) and Kambah GrJ16 (VeP1). Breeding: dy/4 wk-5wk Jan Curtin GrJ15 (AJR1).

ARTAMIDAE: woodswallows, butcherbirds, magpie, currawongs

Masked Woodswallow Artamus personatus Rare, Visitor

A major influx of this species this year. Since 1992-93 there have been 5 years with no records and in the other years there were typically 1 or 2 records only, with a max of 4 records in 1995.

General: 15 records, the first since Oct 2000. First: 5/19 Sep, W of Bungendore GrR12 (DeD2) and last, the only WOO record, 1/15 Dec GOO GrM I 1 (TaN1). Most records which cited abundance were of 1-5 birds in areas on or adjacent to the Monaro Highway or TSRs. Larger flocks were 34/31 Oct Tarago GrY4 (DeD2) and 15/17 Nov S of Michelago GrL25 (McD1). No evidence of breeding recorded.

GBS: 5 records from 2 sites, including 3 consecutive weeks 50/4wk Sep, 40/1wk Oct and 40/2wk Oct for a site in Hackett GrL 18 (LeB 1) of presumably overflying birds; also records of 5/3wk Oct and 20/1wk Nov Curtin GrJ14 (AJR1).

White-browed Woodswallow Artamus superciliosus Uncommon, Breeding Migrant

An irruption year for this species, reflected by a significantly greater number of records than at any time since 1992-93. The highest recent number of records in a year was 22, again in 1995. **General:** 55 records, the first 29 Sep Campbell Park GrM13 (SmA1), the last 14 Jan Hall TSR GrJ10 (FyM1) but there were later GBS records. Of the 44 records which cited abundance 33 (75%) were flocks of 1-10 birds. Eight records were of flocks of 20+ birds with the largest being 30/2 Jan at Campbell Park GrM13 (LeM1). WOO surveys provided 16

records. Seven breeding records from 4 locations: nb/27 Nov Lake Ginninderra GrJ12 (AlB1); nb/30 Nov Nanima TSR 50 GrK7 (BoJ1); Hall TSR GrJ10 on/4 Dec (McD1) and dy/14 Jan (FyM1); Campbell Park GrM13 cf/13 Dec (McD1), br/28 Dec (WaJ2) and on/2 Jan (LeM1). GBS: 12 records from 6 sites; first, 100/4 wk Sep Hackett GrL13 (LeB1), last 15/1wk Feb Weston GrJ15 (BoJ1 Another record also showed 100 birds; 4wk Sep Curtin GrJ 14 (MoM3). No evidence of breeding from the GBS.

Dusky **Woodswallow** Artamus cyanopterus Common, Breeding Migrant Recorded in all months, raising the possibility that some birds might be over-wintering? In contrast to the two preceding species there was a further slight decline on recent years to the level recorded in 1999.

General: 117 records including 19 from WOO, including 10 from LAM. The first record was 7 Jul JWNP GrL14 (FyM1) with number of reports increasing in Sep, then dropping off after Mar. Last, 7 May Garran GrK15 (SmA1). Most records of 1-15 birds with larger flocks in Mar and early Apr including 40/19 Mar Lake Ginninderra GrJ12 (GrT1) and 40/5 Apr Gigerline GrJ19 (McJ4). Six breeding records: earliest, co/3 Nov Glendale Depot GrI23 (LiJ1); latest, dy/13 Feb Addison Rd GrM13 (PeH2).

GBS: Records from 15 sites (9 last year) with abundance A=0.1448, the highest recorded and nearly double the long term average. The distribution of records differs from the General observations with very few records before 5wk Jan and regular reports until 1wk May, with two records in Jun - 22/1wk Jun, 30/4wk Jun, both from a site in Curtin (AJR1). The broad pattern of gradually increasing numbers per record is similar to the General records. One breeding record: dy/1wk Feb Curtin GrJ14 (AJR 1).

Grey Butcherbird Cracticus torquatus Uncommon, Breeding Resident

General: 131 records, mostly of 1-2 birds, covering all months. 36 (27%) of these records are from a location in Burra Creek Gr M21 (Anil) and a further 30 from WOO, particularly MUL with 12 records. Two records of breeding activity: nb/11 Aug TSR 60 Mountain Creek Rd GrF10 (FyM1); on/29 Oct Glendale Depot GrI23 (LiJ1).

GBS: 47 records from 12 sites were more than double the long term average measure for F, and abundance A=0.0211 is 6 times the average. The number of sites was similar to last year but the number of records was 68% higher. Few records before 5wk Jan. One bird reported regularly from 2wk Feb to 4wk May at a site in Cook (DiBI) but other records more scattered. No records of breeding activity.

Pied Butcherbird Cracticus nigrogularis Rare, Visitor

General: One record from the same area NE of Yass as last year: 2/31 Aug GrH1 (FyM 1).

Australian Magpie Gymnorhina tibicen Common, Breeding Resident

General: 785 records for this species, a dramatic reduction from the 1635 records for 200001. 250 records (again a decrease on the previous year) from WOO. 41 breeding records, from nb/21 Aug ANU, GrKI3 (PeH2) to dy/24 May Bonython GrJ17 (PeH2).

GBS: Reported from all sites and in all weeks. Abundance A=3.6964 was 9% above last year and 36% above the long term average. Breeding activity reported from 57% of sites with first nb/3 wk Jul at two sites and last dy/1wk Mar.

Pied Currawong Strepera graculina Common, Breeding Resident

General: 414 records for this species, a drop of 27% on the previous year, itself a decline of 30% on the previous year. 101 WOO records. Most records were of 1-10 birds, with the highest number being 26/15 Aug ANU GrK13 (PeH2). 12 breeding records of which 5 were sourced from ANU GrK13 as part of a regular survey from BaMBi to JCSMR (PeH2). Earliest report was nb/21 Aug ANU GrK 13 and the last, dy/19 Dec Lambrigg GrI18 (TaN1) except for a very late record of nb/29 Mar Red Hill GrK14 (PeH2) - a second or third breeding attempt? **GBS:** Reported from all sites and in all weeks. The measure of abundance A=3.6341 has decreased slightly from last year and is now 10% below the long term average. Evidence of breeding activity was reported from just over half of the sites: the first, nb//3wk Aug from sites in Kambah GrJ16 (WiB I) and ANU GrK13 (PeH2); the last, dy/1 wk Feb Cook GrJ13 (TaN1).

Grey Currawong Strepera versicolor Common, Breeding Resident

General: 107 records from all months including 24 WOO, where the species was more frequently recorded in spring and autumn. Most reports of 1-2 birds, with three records of 4-5 birds from Tallanganda SF GrV19 in Mar and May (all CrM1). No records of breeding activity.

GBS: Reported from half of the sites and in all but one week of the year. However, the only site to show regular presence (40 weeks) was in Curtin (AJR1). The overall distribution through the year was bimodal, showing a pattern very similar to the WOO results described above. The measure of abundance (A) was 0.1061, some 30% above the long term average. One breeding record: nb/3 wk Sep Curtin GrJ14 (AJR1).

CORVIDAE: ravens

Australian Raven Corvus coronoides Common, Breeding Resident

General: 457 records, or 53% of the number of 2000-01 records. WOO contributed 102 records for this species. Four breeding records: ny/14 Sep Lambrigg GrI18 (TaN 1); ny/7 Oct Gooroo GrM11 (TaN1); on/12 Dec Bruce Ridge Gr K13 (McD1); and dyl5 Dec Tuggeranong GrK19 (VeP1).

GBS: Reported from every site and in every week. The measure of abundance (A) was 1.4488, 9% higher than last year and 50% above the long term average. 9 sites provided evidence of breeding activity: the earliest, nb/3 wk July Reid GrL13 (CaJ2); and the latest, dy/4 wk Jan O'Connor GrK13 (Bal 1).

Little Raven Corvus mellori Uncommon, Breeding **Resident** General: 29 records (including 3 WOO), a drop from 68 records in the previous year to levels last recorded in 1999. Records from all months, and mainly from areas to the east of the Murrumbidgee valley. The largest flock reported was 50/27 Dec Burra Creek GrM21 (AnI 1). Three of the records from the western part of the region were post-bushfire observations. No evidence of breeding recorded.

GBS: 15 records, mainly 4wk Dec to 3wk Feb, from 9 sites. The largest flock was 70/4wk Dec Hackett GrL13 (LeB1).

CORCORACIDAE: chough

White-winged Chough *Corcorax melanorhamphos*Common, Breeding Resident **General:** 149 records (a slight decrease from last year) covering all months, and including 33
WOO records, primarily from MUL (13). 10 breeding records, of which 6 were from the
BaMBi to JCSMR surveys by PeH2. The first record was nb/15 Sep Blue Range Hut GrE13
(LaS1), and the last, dy/28 Dec Mt Taylor GrJ 15 (KrS 1).

GBS: Records from 23 sites and covering 48 weeks (all months). The average flock size was close to 7 birds with the largest being 19/4wk Jul Aranda GrJ 13 (RoS1). The measure of abundance (A) remains close to, but slightly above the long term average. Three reports of breeding activity: dy/4wk Nov, and 2wk Dec Curtin (AJR1); and dy/3wk Oct ANU (PeH2).

PTILONORHYNCHIDAE: bowerbird

Satin Bowerbird Ptilonorhynchus violaceus

Common, Breeding Resident

Reports for this species seem to have been significantly affected by loss of key sites following the January bushfires. It is difficult to be certain about the impact of the fires, however, as many of the observations, including suggestions of breeding activity, reported in a recent article in Holland (2003) are not supported by entries in the COG database which provides the source material for this Report.

General: 23 records, a further decrease from the 42 records last year. Reports received for all months except Jan. Only 2 reports of more than 3 birds: 5/14 Aug Narrabundah Hill pine forest GrI15 (HoJ 1); and 9/15 Sept Blue Range Hut GrE13 (LaS1). Half the records (11) came from the urban area with 6 from various locations in Kambah. On the northside there were two records of single birds, 10 Mar Melba GrI1 1 (CrL1), and 29 Jun Lyneham GrK12 (Hall), No records from WOO. One breeding record: on/11 Nov Chapman GrI15 (HoJ 1).

GBS: 116 records from 19 sites, including single records from 3 sites in Aranda. A regular reporting site in Chapman is no longer active following the bushfires and the most regular reports (32 wks) now come from a site in southern Duffy GrI15 (WiM1). Most records are of 1-2 birds, although larger flocks (max 12/5wk Apr) were reported from the Duffy site and a site in Kambah reported 3-7 birds regularly between 1wk July and 4wk Aug (VeP1). One indication of potential breeding: di/1 wk Feb Ainslie GrL13 (HoS1).

ALAUDIDAE: larks

Singing Bushlark Mirafra javanica No records. Last recorded Dec 1998. Rare Visitor

Skylark Alauda arvensis

Common, Breeding Resident

General: Recorded 10 times, the earliest being 7 Jul JWNP (FyM1) but again no records after

November. No breeding.

GBS: Recorded 18 times at a site in Curtin (AJR1) which regularly records this species. All records between 1wk Jul and 2wk Nov except one in 5wk Jan.

MOTACILLIDAE: Pipit

Richards Pipit Anthus novaeseelandiae

Common, Breeding Resident

General: Recorded 51 times including 3 breeding records: di/9 Oct nr Gundaroo GrN7 (JoM2); cf/17 Nov nr Michelago GrL25 (McD1); and ne/25 Nov nr Michelago GrM25 (HoJ 1). Very few winter records, with 2 in Jul and 1 each in May and Jun.

GBS: Recorded 14 times at one site in Curtin. Only 1 record (3wk Mar) outside the period wk Jul to 2wk Nov.

PASSERIDAE: sparrow, grass-finches

House Sparrow Passer domesticus

Common, Breeding Resident

General: 66 records (well down from 184 last year) from 27 grid cells, the largest flock recorded being of just 16 birds (though larger flocks at Fyshwick sewage works may have been recorded as presence only). The only breeding record: co/27 Nov ANU GrK13 (PeH2).

GBS: Tenth most abundant bird in the GBS, down from sixth in 2001-2002. Abundance (A=3.2968) is down from 2001-2002 (A=3.9679), continuing a decline from 1999-2000 (A=6.0488). Recorded from 51 (88%) sites. Breeding (including ih, co, nb, on, cf, ny, dy) recorded from 9 sites from 5wk Jul to 2wk Feb.

Zebra Finch Taeniopygia guttata

Rare, Breeding Visitor/Escapee

General: One record: 1/16 Jan University of Canberra GrK12 (ScAl).

Double-barred Finch *Taeniopygia bichenovii*

Uncommon, Breeding Resident

General: 43 records (cf 48 last year) from 18 grid cells. No breeding recorded.

GBS: Abundance (A=0.0539) is slightly up from 2001-2002 (A=0.0374) but is still relatively low compared to previous years. Recorded from 9 (16%) sites throughout the year.

Red-browed Finch *Neochmia temporalis*

Common, Breeding Resident

General: 117 records from 38 grid cells. Includes 2 breeding records: di/9 Oct 'Lambton' GrN7 (JoM2) and cf/27 Nov Lake Ginninderra Peninsula GrJ12 (AlB1).

GBS: Abundance (A=0.3339) up from 2001-2002 (A=0.1380) but still below historic levels eg 1999-2000 (A=0.4909). Recorded from 17 (29%) sites throughout the year.

Diamond Firetail Stagonopleura guttata

Uncommon, Breeding Resident

General: 42 records (down from 52 last year) from 24 grid cells. Largest counts were of 10 birds in Jul (DaG2, McD1), though most records (38) were of 1-4 birds. No breeding recorded.

FRINGILLIDAE: finches

European Greenfinch Carduelis carduelis

Rare, Breeding Resident

General: 11 non-breeding records; 8 of them from Jerrabomberra Wetlands (GrL14), 2 from Scrivener Dam (GrJ14) and 1 from Point Hut Crossing (G617). The latter record was of 40 birds on 6 Apr (McD1), all other records were of 1-6 birds.

European Goldfinch Carduelis chloris

Common, Breeding Resident

General: 84 records from 36 grid cells. Largest counts: 30/31 Jul Yankee Hat carpark GrH25 (DeD2), 25/6 Apr Tharwa Sandwash GrJ19 (BoJ1); two counts of 15 birds, 1 of 10, all other records were of 1-6 birds. No breeding recorded.

GBS: Abundance (A=0.0695) well down from previous years (A=0.1746, 0.1795 and 0.1055 for 2001-02, 2000-01 and 1999-2000 respectively). Recorded from 8 (14%) sites.

DICAEIDAE: mistletoebird

Mistletoebird Dicaeum hirundinaceum

Common, Breeding Migrant

General: 110 records (cf 106 last year), of 1-8 birds, from 45 grid cells. 34 of these

records (31%) were made during WOO surveys. No breeding recorded.

GBS: Abundance (A=0.0387) similar to 2001-2002 (A=0.0390) but down from 1999-

2000 (A=0.0537). Recorded from 13 (22%) sites. No breeding recorded.

HIRUNDINIDAE: swallow, martins

Welcome Swallow Hirundo neoxena

Common, Breeding Resident

General: Recorded 239 times in all months. Just 9 (4%) of these records were from the Woodland Survey (compared with 40% of Tree Martin records). Only 3 breeding records: ny/9 Oct nr Gundaroo GrN7 (JoM2); ne/27 Oct Acacia Inlet GrK13; and on/23 Nov Tharwa Rd GrJ 19 (both McD1). A decrease in winter records with only 5 in Jun.

GBS: Recorded from 26 (45%) sites with an abundance of A=0.2131 which compares with the 0.20-0.24 of the previous 3 years. Only 7 records in the months of Jun and Jul.

Tree Martin *Hirundo nigricans*

Common, Breeding Migrant

General: Recorded 52 times of which 21 (40%) were Woodland Survey records. First record 22 Aug Cooleman Ridge GrI15 (HoJ1); last, 21 Apr Lake Ginninderra (A1B1). No records in Jul, May or Jun and only 2 in last week of Aug. Two breeding records: dy/3 Nov GrJ 18 Castle Hill (McD1); and br/12 Nov Currango GrA24 (Joan Adams).

GBS: 11 records from 6 sites during the period 4wk Aug to 1wk Mar.

Fairy Martin Hirundo ariel

Uncommon, Breeding Migrant

General: Recorded 20 times between Sep and Feb. First, 14 Sep, last 2 Feb, both JWNP (SmA1). Only 1 breeding record: on/18 Nov nr Michelago GrL21 (HoJ1).

SYLVIIDAE: old world warblers

Clamorous Reed-Warbler Acrocephalus stentoreus Common, Breeding Migrant General: 68 records, the first 24 Aug Kellys Swamp GrL14 (SmA1) and the last 16 Mar O'Connor GrK13 (PeH2). Three breeding records: cf/24 Nov Black Mtn Peninsula GrK14; dy/6 Jan, Warrina Inlet GrJ14 (both McD1); and dy/2 Mar Lake Tuggeranong GrJ16 (PeH2). GBS: 4 records of single birds in Jan-Feb from Page, Curtin, Hackett and Ngunnawal.

Little Grassbird *Megalurus gramineus*

Uncommon, Breeding Resident General: 20 records of which 16, spread through the year, came from JWNP-Fyshwick sewage ponds complex GrL14; 2 from ANU GrK14 (PeH2) and 2 from Acacia Peninsula LBG GrKI3. All records, where abundance was given, were of single birds, except 2/12Oct eastern end of LBG GrL14 (LaS1). No evidence of breeding activity reported.

Rufous Songlark Cincloramphus mathewsi

Common, Breeding Migrant

General: 16 records, only half the number for the previous year. Largest number reported was 8/22 Oct N of Tidbinbilla tracking station Gr H16 (LaD1). Other records of 1-4 birds. All records between 15 Sep Lake Ginninderra (McI1) and 19 Dec Lambrigg (TaN1).

GBS: 1 record: 1/4wk Feb Yarralumla GrK14 (CCR1).

Brown Songlark Cincloramphus cruralis

Rare, Breeding Migrant

General: 1 record of a single bird, east end of Lake Burley Griffin 12 Oct (LaS1).

Golden-headed Cisticola Cisticola exilis

Uncommon, Breeding Resident

General: 25 records throughout the year, most commonly from the JWNP-Fyshwick sewage ponds complex GrL 14. Most records 1-4 birds, max 6 birds recorded at Fyshwick sewage ponds GrL14 on 7 July (FyM1).

ZOSTEROPIDAE: silvereye

Silvereye Zosterops lateralis

Common, Breeding Resident/Migrant

General: 148 records (well down from 287 last year) from 49 grid cells; 30 (20%) of the records were from WOO surveys. Largest counts were of just 20 birds. No breeding recorded. GBS: Third most abundant bird in the GBS. Abundance (A=5.1735) down from 2001-2002 (A=6.3723). Reported from 56 (97%) sites, breeding recorded from 7 sites.

MUSCICAPIDAE: thrushes

Bassian Thrush Zoothera lunulata

Uncommon, Breeding Resident

General: 9 non-breeding records; 4 from the Brindabella and adjacent ranges before the January fires, 3 from Tallaganda SF in Mar and May, and 2 from ANBG in May and Jun. GBS: A single bird recorded at a site in Melba (DaT1) during 5wk Apr may have been a refugee from the fires still seeking suitable habitat. The first record of this species for the GBS.

Common Blackbird Turdus merula

Common, Breeding Resident

General: 114 records (well down on 233 last year) from 31 grid cells, the dozen records from beyond the greater Canberra area being from the ranges to the west, Naas, Michelago, Murrumbateman, Gundaroo, and Gunning. No breeding recorded.

GBS: Abundance (A=1.5945) down on 2001-2002 (A=1.8165). Recorded from 57 (98%) of sites, breeding recorded from 8 sites.

STURNIDAE: starling, myna

Common Starling Sturnus vulgaris

Common, Breeding Resident

General: 297 records (down from 465 last year) from 64 grid cells. Includes 15 breeding records (ih, cf, ny, dy) between 14 Sep and 29 Mar. Largest flock: 200/18 Aug Fyshwick sewage ponds Gr L14 (PeH2).

GBS: Canberra's fifth most common GBS bird again this year. Abundance (A=4.2497) slightly down from 2001-2002 (A=4.2696) continuing a long-term decline since 1995-96 (A=9.8804). Recorded from 49 (84%) sites. Breeding recorded from 7 sites.

Common Myna Acridotheres tristis

Common, Breeding Resident

General: 120 records (well down from 236 last year) from 23 grid cells. Includes 1 breeding record: ih/22 Sep RED GrK15 (PeH2).

GBS: Fourth most abundant GBS bird again this year. Abundance (A=4.2749) down from 2001-2002 (A=4.5562). Recorded from 57 (98%) sites. Breeding recorded from 15 sites.

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Table 1. Number of records per species for each survey type

ABA: Australian Bird Atlas, BA: Birds Australia, GA: Greening Australia, HMS: Honeyeater Migration Survey, INC: Incidental, THR: Threatened Bird Survey, WBS: Water Bird Survey, WOO: Woodland Survey.

Species	Total	ABA	BA	GA	HMS	INC	THR	WBS	WOO	%ABA/BA	%WOO
Australian Magpie	785	385	100	10	13	2	11	2	262	61.8%	33.4%
Crimson Rosella	695	384	61	7	15	I	9	-	218	64.0%	31.4%
Superb Fairy-wren	544	324	83	8	9	3	11	-	106	74.8%	19.5%
Grey Fantail	519	257	62	12	13	6	4	-	165	61.5%	31.8%
Galah	473	227	69	2	8	1	8	1	157	62.6%	33.2%
Australian Raven	457	252	76	-	13	2	6	1	107	71.8%	23.4%
Sulphur-crest Cockatoo	455	241	61	4	10	1	5	-	133	66.4%	29.2%
Striated Pardalote	443	227	39	6	3	3	12	-	153	60.0%	34.5%
Pied Currawong	414	239	51	4	10	-	5	-	105	70.0%	25.4%
Wh-throatedTreecreeper	402	243	39	-	14	1	5	-	100	70.1%	24.9%
Eastern Rosella	390	200	38	3	8	-	9	-	132	61.0%	33.8%
Red Wattlebird	382	246	57	2	9	3	6	_	59	79.3%	15.4%
Weebill	361	144	34	3	6	-	1	-	173	49.3%	47.9%
Magpie-lark	329	189	72	4	6	4	4	-	50	79.3%	15.2%
Yel-rumped Thornbill	312	173	52	7	8	3	5	_	64	72.1%	20.5%
Laughing Kookaburra	306	175	57	4	6	2	4	_	58	75.8%	19.0%
Common Starling	297	146	70	1	1	1	7	_	71	72.7%	23.9%
Grey Shrike-thrush	295	193	31	4	12	2	6	_	47	75.9%	15.9%
Rufous Whistler	289	133	30	5	2	1	5	-	113	56.4%	39.1%
Spotted Pardalote	287	169	38		9	-	3	-	68	72.1%	23.7%
Buff-rumped Thornbill	280	141	24	3	4	2	2	-	104	58.9%	37.1%
Yel-faced Honeyeater	279	155	28	3	18	3	7	-	65	65.6%	23.3%
Brown Thornbill	276	197	39	8	12	1	3	-	16	85.5%	5.8%
Noisy Miner	259	128	30	2	3	4	8	-	84	61.0%	32.4%
Willie Wagtail	254	157	38	5	5	1	10	-	38	76.8%	15.0%
Striated Thornbill	250	163	18	2	3	1	2	-	61	72.4%	24.4%
Welcome Swallow	239	153	53	3	9	5	5	2	9	86.2%	3.8%
Australian Wood Duck	233	154	32	1	7	4	2	-	33	79.8%	14.2%
Blk-face Cuckoo-shrike	220	112	46	1	1	3	8	-	49	71.8%	22.3%
Scarlet Robin	214	123	14	1	11	8	I	-	56	64.0%	26.2%
Pacific Black Duck	193	130	44	-	8	2	1	1	7	90.2%	3.6%
White-eared Honeyeater	187	124	11	-	11	1	2		38	72.2%	20.3%
Crested Pigeon	179	102	41	2	1	2	3	-	28	79.9%	15.6%
Wh-plumed Honeyeater	176	99	20	2	4	-	10	-	41	67.6%	23.3%
Wh-browed Scrubwren	164	109	33	-	9	2	3	-	8	86.6%	4.9%
Noisy Friarbird	162	76	17	-	2	1	3	-	63	57.4%	38.9%
Wh-throated Gerygone	156	66	20	-	-	2	1	-	67	55.1%	42.9%
White-winged Chough	149	84	24	1	2	2	1	-	35	72.5%	23.5%
Silvereye	148	82	31	3	3	-	-	-	29	76.4%	19.6%
Golden Whistler	147	86	17	2	5	I	-	-	36	70.1%	24.5%
Eurasian Coot	140	96	42	-	2	-	-	-	-	98.6%	-
Eastern Spinebill	138	91	18	-	9	1	-	-	19	79.0%	13.8%
Grey Butcherbird	131	70	12	-	6	3	4		36	62.6%	27.5%

Species	Total	ABA	BA	GA	HMS	INC	THR	WBS	WOO	%ABA'BA	%W00
Red-rumped Parrot	128	70	18	-	3	3	5	-	29	68.8%	22.7%
Dusky Moorhen	127	82	42	-	2	1	-		-	97.6%	-
Purple Swamphen	123	77	45	-	-	1	-	-	-	99.2%	-
Common Myna	120	44	38	-	-	-	-	-	38	68.3%	31.7%
Grey Teal	117	67	42	-	-	1	-	3	4	93.2%	3.4%
Dusky Woodswallow	117	62	20	-	4	3	9	-	19	70.1%	16.2%
Red-browed Finch	117	77	25	-	6	2	1	-	6	87.2%	5.1%
Speckled Warbler	114	58	20	-	1	1	1	-	33	68.4%	28.9%
Common Blackbird	114	59	42	-	5	-	1	-	7	88.6%	6.1%
Mistletoebird	110	57	15	-	I	-	3	-	34	65.5%	30.9%
Masked Lapwing	108	57	45	-	1	I	-	3	I	94.4%	0.9%
Grey Currawong	107	67	9	-	1	5	I	-	24	71.0%	22.4%
Brown-head Honeyeater	100	73	12	-	-	2	I	-	12	85.0%	12.0%
Yel-tail Black-Cockatoo	97	53	14	-	6	19	-	-	5	69.1%	5.2%
Australasian Grebe	94	51	31	1	-	3	1	-	7	87.2%	7.4%
White-faced Heron	88	54	19	1	10	1	-	-	3	83.0%	3.4%
Gang-gang Cockatoo	88	54	16	1	1	4	1	-	11	79.5%	12.5%
Pallid Cuckoo	84	34	18	1	-	-	5	-	26	61.9%	31.0%
Wh-naped Honeyeater	84	55	6	-	12	-	4	-	7	72.6%	8.3%
European Goldfinch	84	51	17	1	2	2	7	-	4	81.0%	4.8%
Common Bronzewing	79	45	21	-	-	1	-	-	12	83.5%	15.2%
Little Pied Cormorant	77	48	20	-	5	2	1	-	1	88.3%	1.3%
Hardhead	74	41	32	-	-	1	-	-	-	98.6%	-
Olive-backed Oriole	73	39	13	-	2	1	1	-	17	71.2%	23.3%
Western Gerygone	72	20	14	-	-	-	2	-	36	47.2%	50.0%
Eastern Yellow Robin	72	47	9	-	4	1	2	-	9	77.8%	12.5%
Leaden Flycatcher	72	40	7	1	-	1	-	-	23	65.3%	31.9%
Clam Reed-Warbler	68	39	28	-	-	1	-	-	-	98.5%	-
Black Swan	67	42	20	-	-	3	-	2	-	92.5%	-
Australian Pelican	66	36	22	-	7	1	-	-	-	87.9%	-
Australian King-Parrot	66	36	13	-	4	-	-	-	13	74.2%	19.7%
House Sparrow	66	31	27	-	-	-	2	-	6	87.9%	9.1%
Australasian Shoveler	65	31	32	-	-	1	-	1	-	96.9%	-
Wedge-tailed Eagle	64	43	5	1	9	2	1	-	3	75.0%	4.7%
Flame Robin	59	40	7	-	1	5	3	-	3	79.7%	5.1%
Hoary-headed Grebe	58	28	30	-	-	-	-	-	-	100.0%	-
Brown Treecreeper	58	26	5	-	1	-	6	-	20	53.4%	34.5%
Silver Gul1	56	29	24	-	-	-	-	3	-	94.6%	-
Wh-brow Woodswallow	55	23	1 I	-	-	3	2	-	16	61.8%	29.1%
Pink-eared Duck	53	24	29	-	-	-	-	-	-	100.0%	-
Sacred Kingfisher	52	28	14	-	-	1	2	-	7	80.8%	13.5%
Tree Martin	52	19	6	-	1	3	2	-	21	48.1%	40.4%
Richard's Pipit	51	32	7	-	1	2	3	2	4	76.5%	7.8%
Nankeen Kestrel	49	27	9	-	2	2	1	-	8	73.5%	16.3%
Varied Sittella	49	29	12	-	-	-	I	-	7	83.7%	14.3%
Straw-necked Ibis	48	20	23	-	-	3	-	2	-	89.6%	-
Australian White Ibis	46	24	20	_		_	_	_	2	95.7%	4.3%

Species	Total	ABA	BA	GA I	HMS	INC	THR	WBS	WOO	%ABA/BA	%WOO
Rock Dove	45	27	17	-	-	1	-	-	-	97.8%	-
Double-barred Finch	43	28	8	2	1	1	1	-	2	83.7%	4.7%
Diamond Firetail	42	22	4	1	2	5	6	-	2	61.9%	4.8%
Dollarbird	41	15	14	-	-	2	-	-	10	70.7%	24.4%
Fuscous Honeyeater	41	28	5	-	2	3	3	-	-	80.5%	-
Brown Falcon	40	18	12	-	1	5	1	-	3	75.0%	7.5%
Restless Flycatcher	38	26	1	-	3	1	7	-	-	71.1%	-
Black-shouldered Kite	37	8	5	-	-	24	-	-	-	35.1%	-
Red-kneed Dotterel	37	18	16	-	-	3	-	-	-	91.9%	-
White-winged Triller	37	20	11	-	-	-	2	-	4	83.8%	10.8%
Whistling Kite	36	9	20	_	1	6	-	-	-	80.6%	-
Jacky Winter	36	18	8	-	-	3	2	-	5	72.2%	13.9%
Black-fronted Dotterel	34	19	10	-	2	3	-	-	-	85.3%	-
Great Cormorant	33	23	7	-	3	-	-	-	-	90.9%	-
Hooded Robin	33	14	1	-	1	8	1	-	8	45.5%	24.2%
Chestnut Teal	32	12	18	-	-	1	-	I	-	93.8%	-
Fan-tailed Cuckoo	31	18	5	-	-	2	2	-	4	74.2%	12.9%
Horsfield's Br-Cuckoo	31	20	2	_	-	1	2	-	6	71.0%	19.4%
Latham's Snipe	30	13	14	-	-	3	-	-	-	90.0%	-
Darter	29	16	8	-	-	5	-	-	-	82.8%	-
Little Raven	29	12	7	_	-	6	-	1	3	65.5%	10.3%
Superb Lyrebird	28	22	4	-	1	-	1	-	-	92.9%	-
Painted Honeyeater	28	14	4	-	-	6	1	-	3	64.3%	10.7%
Brown Goshawk	27	12	6	-	1	4	-	-	4	66.7%	14.8%
Little Eagle	27	11	10	-	-	1	1	-	4	77.8%	14.8%
Little Black Cormorant	26	20	5	-	1	-	-	-	-	96.2%	-
Glossy Black-Cockatoo	25	21	-	-	-	3	1	-	-	84.0%	-
Golden-headed Cisticola	25	14	8	-	-	3	-	-	-	88.0%	-
Southern Whiteface	24	11	6	-	-	2	2	-	3	70.8%	12.5%
Freckled Duck	23	9	9	-	-	4	-	1	-	78.3%	-
Satin Bowerbird	23	8	5	-	1	9	-	-	-	56.5%	-
Yellow Thornbill	21	14	2	3	-	1		-	1	76.2%	4.8%
Blue-billed Duck	20	7	13	-		-	-	-	-	100.0%	-
Yel low-bi 1 led Spoonbill	20	9	7	-	-	1	-	2	I	80.0%	5.0%
Australian Hobby	20	4	6	-	3	5	-	-	2	50.0%	10.0%
Pectoral Sandpiper	20	6	6	-	-	7	-	-	1	60.0%	5.0%
Fairy Martin	20	8	9	-	-	-	3	-	-	85.0%	-
Little Grassbird	20	9	11	-	-	-	-	-	-	100.0%	-
Whiskered Tern	19	2	11	-	-	6	-	-	-	68.4%	-
Crested Shrike-tit	19	9	4	-	-	-	1	-	5	68.4%	26.3%
Great Egret	18	5	12	-	-	1	-	-	-	94.4%	-
Collared Sparrowhawk	18	5	3	-	-	5	1	-	4	44.4%	22.2%
Australian Shelduck	17	13	2	-	-	1	-	1	-	88.2%	-
Wh-throated Needletail	17	3	3	-	-	11	-	-	-	35.3%	-
New Holland H'eater	17	10	7	-	-	-	-	-	-	100.0%	-
Glossy Ibis	16	7	7	-	-	2	-	-	-	87.5%	-
Red-capped Robin	16	6	3	_	_	2	_	_	5	56.3%	31.3%

Rufous Songlark 16 9 Peregrine Falcon 15 4 Sharp-tailed Sandpiper 15 6 Aust Owlet-nightjar 15 10 Rose Robin 15 6 Masked Woodswallow 15 6 Royal Spoonbill 14 8 Superb Parrot 13 5 Little Corella 12 2 Rainbow Bee-eater 12 3	3 6 6 2 1 4 6 3 1 4 6 - - - - - - - - - - - - - - - - - -		1 1	7 2 2 2 3 3 6 3	2 - - I - 1	- 1 - - - - -	1 6 1 8 2 8 1 4 1 6 - 1 1 6 2 2 2 5 - 8 - 6 - 7	75.0% 56.7% 50.0% 50.0% 66.7% 66.7% 600.0% 51.5% 25.0% 58.3% 51.8% 53.6% 70.0%	12.5% 6.7% 6.7% 13.3% 6.7% 6.7% 16.7%
Sharp-tailed Sandpiper 15 6 Aust Owlet-nightjar 15 10 Rose Robin 15 6 Masked Woodswallow 15 6 Royal Spoonbill 14 8 Superb Parrot 13 5 Little Corella 12 2	6 2 1 4 6 3 1 4 6 - 2 2 2 2		- - - - - 1	1 1 7 3 - 7 2 2 2 2 3 3 6	- I - 1 - -	1 - - - - - - -	1 8 2 8 1 4 4 1 6 6 - 1 1 6 6 2 2 2 5 5 - 8 8 - 6 6 - 7	80.0% 80.0% 16.7% 16.7% 100.0% 15.5% 125.0% 158.3% 188.3% 188.8% 188.8% 188.6% 198.00%	6.7% 13.3% 6.7% 6.7% - 7.7% 16.7% - -
Aust Owlet-nightjar 15 10 Rose Robin 15 6 Masked Woodswallow 15 6 Royal Spoonbill 14 8 Superb Parrot 13 5 Little Corella 12 2	2 1 4 6 3 1 4 6 - 2 - 1 2 2	-	- - - - 1	1 7 3 - 7 2 2 2 3 3 6	- I - 1 - -	- - - - - -	2 8 1 4 4 1 6 6 - 1 1 6 6 2 2 2 5 5 - 8 8 - 6 6 - 7	80.0% 16.7% 16.7% 100.0% 151.5% 125.0% 158.3% 158.3% 158.8% 158.6% 170.0%	13.3% 6.7% 6.7% - 7.7% 16.7% - -
Rose Robin156Masked Woodswallow156Royal Spoonbill148Superb Parrot135Little Corella122	1 4 6 3 1 4 6 - 2 2 2 2	-	1	7 3 7 2 2 2 3 3 6	- I - 1 - -	- - - - - -	1 4 4 1 6 6 - 1 1 6 6 2 2 2 5 - 8 8 - 6 6 - 7	16.7% 16.7% 100.0% 151.5% 125.0% 158.3% 158.3% 158.8% 158.8% 158.6% 170.0%	6.7% 6.7% - 7.7% 16.7% - -
Masked Woodswallow 15 6 Royal Spoonbill 14 8 Superb Parrot 13 5 Little Corella 12 2	4 6 3 1 4 6 - 2 - 1 2 2	-	- - - 1	3 7 2 2 2 2 3 3 6	I - 1	- - - - - -	1 6 - 1 1 6 2 2 2 5 - 8 - 8 - 6	56.7% 100.0% 51.5% 25.0% 58.3% 81.8% 63.6% 70.0%	6.7% - 7.7% 16.7% 16.7% -
Royal Spoonbill 14 8 Superb Parrot 13 5 Little Corella 12 2	6 3 1 4 6 - 2 - 1 2 2		- - 1 -	7 2 2 2 3 3 6	1	- - - -	- 1 1 6 2 2 2 5 - 8 - 8 - 6	00.0% 51.5% 25.0% 58.3% 81.8% 63.6% 70.0%	7.7% 16.7% 16.7%
Superb Parrot 13 5 Little Corella 12 2	3 1 4 6 - 2 - 1 2 2		- 1 - -	7 2 2 2 3 3 6	1 - - - -	- - - -	1 6 2 2 2 5 - 8 - 8 - 6	51.5% 25.0% 58.3% 31.8% 53.6% 70.0%	16.7% 16.7% -
Little Corella 12 2	1 4 6 - 2 - 1 2 2		- 1 - -	2 2 2 3 3 6	1 - - - -	- - - -	2 2 2 5 - 8 - 8 - 6	25.0% 58.3% 81.8% 81.8% 53.6% 70.0%	16.7% 16.7% -
	4 6 - 2 - 1 2 2		- 1 - -	2 2 2 3 3 6	1 - - - -	- - - -	2 5 - 8 - 8 - 6 - 7	58.3% 31.8% 31.8% 53.6%	16.7%
Rainbow Bee-eater 12 3	6 - 2 - 1 2 2	- - - -	- 1 - -	2 2 3 3 6	- - - -	- - -	- 8 - 8 - 6 - 7	31.8% 31.8% 53.6% 70.0%	- -
** *** ******* **	2 - 1 2 2	- - -	1	2 3 3 6	- - -	-	- 8 - 6 - 7	31.8% 53.6% 70.0%	- -
Black-tailed Native-hen 11 3	2 - 1 2 2	- - -	1	3 3 6	- - -	-	- 6 - 7	53.6% 70.0%	-
Crescent Honeyeater 11 9	1 2 2	- - -	- - -	3 6	-		- 7	70.0%	-
European Greenfinch 11 5	1 2 2	- - -	-	6	-				-
Brown Quail 10 7	2 2 -	-	-			-	- 4	10.00/	
Long-toed Stint 10 3	2	-		3				10.0%	-
Wonga Pigeon 10 5	-		-		-	-	- 7	70.0%	-
Satin Flycatcher 10 7		-		-	-	-	19	00.0%	10.0%
Skylark 10 5	1		-	-	1	4	- 5	50.0%	-
Spotted Turtle-Dove 10 1		-	-	8	-	-	- 2	20.0%	-
Aust Spotted Crake 9 4	4	-	-	1	-	-	- 8	88.9%	-
Spotted Quail-thrush 9 7	2	-	-	-	-	-	- 1	00.0%	-
Rufous Fantail 9 8	-	-	-	1	-	-	- 8	88.9%	-
Bassian Thrush 9 5	1	-	-	3	-	-	- 6	66.7%	-
Musk Duck							- 1	00.0%	-
Mallard 8 5	3	-	-	-	-	-	- 1	00.0%	-
Cattle Egret 8 3	4	-	-	1	-	-	- 8	37.5%	-
Shining Bronze-Cuckoo 8 2	4	-	-	-	-	-	2 7	75.0%	25.0%
Red-brow Treecreeper 8 5	3	-	-	-	-	-	- 1	00.0%	-
Nankeen Night Heron 7 3	3	-	-	i	-	-	- 8	35.7%	-
Southern Boobook 7 3	1		-	1	-	-	2 5	57.1%	28.6%
Olive Whistler 7 3	1	-	-	3	-	-	- 5	57.1%	-
Pied Cormorant 6 3	-	1	-	2	-	-	- 5	50.0%	-
Spotted Harrier 6 -	1	-	-	5	-	-	- 1	6.7%	-
White-bellied Sea-Eagle 6 1	1	-	2	1	-	-	1 3	33.3%	16.7%
Eastern Whipbird 6 4	2	-	-	-	-	-	- 1	00.0%	-
Great Crested Grebe 5 3	-	_	-	2	-	-	- 6	60.0%	_
White-necked Heron 5 3	1	_	1	_	_	_	- 8	80.0%	_
Grey Goshawk 5 -	1	_	_	4	_	_	- 2	20.0%	_
Black Falcon 5 -	_	_		5	_	_	_	_	_
Baillon's Crake 5 2	1	_	_	2	_	_	- 6	50.0%	_
Marsh Sandpiper 5 2	3	_	_	_	_	_		00.0%	_
Black-winged Stilt 5 3	_	_	_	_	_	2		50.0%	_
Spotless Crake 4 1	1	_	_	2	_	_		50.0%	_
Brush Cuckoo 4	-			_				_	75.0%
Tawny Frogmouth 4 1	1	_	_	2	_	_	- 5	50.0%	-
Pilotbird 4 1	1	_	_	2	_	_		50.0%	_
Yel-tufted Honeyeater 4 3	_	-	-	1	-	-		75.0%	_

Species	Total	ABA	BA	GA	HMS	INC	THR	WBS	WOO	%ABA/BA	%W00
Little Bittern	3	1	-	-	-	2	-	-	-	33.3%	-
Black Kite	3								-	-	-
Swamp Harrier	3	2	1	-	-	-	-	-	-	100.0%	-
Painted Button-quail	3	1	-	1		1	-	-	-	33.3%	-
Red-capped Plover	3								-	-	-
Maj Mitchell's Cockatoo	3								-	-	-
Rainbow Lorikeet	3	2	-	-	-	1	-	-	-	66.7%	-
Powerful Owl									-	100.0%	-
Barn Owl	3	-	1	-	-	2	-	-	-	33.3%	-
Red-backed Kingfisher	3	1	1	-	-	1	-	-	-	66.7%	-
White-fronted Chat	3	2	-	-	I	-	-	-	-	66.7%	-
Emu	2	-	1	-	-	1	-	-	-	50.0%	-
Stubble Quail	2								-	50.0%	-
Buff-banded Rail	2								-	-	-
Peaceful Dove	2									-	100.0%
Long-billed Corella	2								-	-	-
Turquoise Parrot	2								-	-	-
Common Koel	2								-	-	-
Channel-billed Cuckoo	2								-	-	-
White-throated Nightar	2	1	-	-	-	I	-	-	-	50.0%	-
Fork-tailed Swift	2								-	-	-
Little Wattlebird	2	1	-	-	-	1	-	-	-	50.0%	-
Wh-bellied C-shrike	2	-	1	-	-	1	-	-	-	50.0%	-
Cicadabird	2	1	-	-	-	1	-	-	-	50.0%	-
domestic chicken	1								-	100.0%	-
Australasian Bittern	1								-	-	-
Lewin's Rail	1								-	100.0%	-
Red-necked Stint	1								-	-	-
Gull-billed Tern	1								-	-	-
White-Headed Pigeon	1								-	-	-
Brush Bronzewing	1								-	100.0%	-
Diamond Dove	1								-	100.0%	-
Cockatiel	1								-	-	-
Musk Lorikeet	1								-	-	-
Little Lorikeet	1								-	-	-
Swift Parrot	1								-	-	-
Little Friarbird	1								-	-	-
Lewin's Honeyeater	1								-	100.0%	-
Scarlet Honeyeater	1	-	-	-		I	-	-	-	-	-
Pied Honeyeater	1								-	-	-
Black-faced Monarch	1								-	100.0%	-
Pied Butcherbird	1								-	100.0%	-
Zebra Finch	1								-	-	-
Brown Songlark	1								-	100.0%	-
totals	18602	10191	3178	141	431	462		40	3845	13369	3845
% of total records	100	54.8	17.1	0.8	2.3	2.5	1.7	0,2	20.7	71.9	20.7

This table is based on database records only for these survey types. GBS records are not included.

TABLE 2. GARDEN BIRD SURVEY STATISTICS - 2002-2003

Values for A, F, W, R and G for 1 July 2002 to 30 June 2003 (Year 22), together with percentage change when compared with the mean of all previous years (Years 1-21).

	Species	A	dA%	6 F	dF%	W dW%	R	dR%	G
	1 Galah	9.3091	43.3	100.0	0.6	52 0.0	83.83	7.5	11.10
+	2 Sulphur-crested Cockatoo	8.8156	81.2	100.0	2.9	52 0.0	85.43	28.4	10.32
	3 Silvereye	5.1735	-13.9	96.6	-0.6	52 0.0	63.54	-7.7	8.14
+	4 Common Myna	4.2749	64.5	98.3	51.0	52 0.3	76.38	77.4	5.60
-	5 Common Starling	4.2497	-61.1	84.5	-12.5	52 0.0	47.62	-33.2	8.92
	6 Australian Magpie	3.6964	36.0	100.0	0.5	52 0.0	92.55	9.1	3,99
	7 Crimson Rosella	3.6400	25.1	100.0	1.2	52 0.0	89.31	14.7	4.08
	8 Pied Currawong	3.6341	-9.8	100.0	1.3	52 0.0	86.57	9.1	4.20
	9 Yellow-faced Honeyeater	3.3520	26.0	79.3	-9.2	52 2.2	17.77	-34.3	18.86
-	10 House Sparrow	3.2968	-53.4	87.9	-8.5	52 0.0	52.84	-28.3	6.24
	11 Red Wattlebird	2.6451	32.2	100.0	2.7	52 0.0	86.32	15.3	3.06
+	12 Australian King-Parrot	2.5272	82.3	93.1	26.1	52 1.0	62.65	79.2	4.03
	13 Magpie-lark	2.2968	13.4	94.8	-3.5	52 0.0	82.57	12.2	2.78
+	14 Crested Pigeon	2.2425	276.8	98.3	146.2	52 54.2	67.75	222.8	3.31
	15 Common Blackbird	1.5945	-7.9	98.3	6.9	52 0.0	74.27	2.9	2.15
	16 Eastern Rosella	1.5499	4.6	98.3	1.8	52 0.0	58.40	1.2	2.65
+	17 Australian Raven	1.4488	50.3	100.0	7.2	52 0.0	65.22	37.8	2.22
+	18 Yellow-tailed BlCockatoo	1.3217	1534.7	79.3	886.7	41 389.2	10.48	1520.3	12.61
-	19 Yellow-rumped Thornbill	1.0665	-29.8	93.1	5.9	52 0.0	27.54	-25.8	3.87
+	20 Superb Fairy-wren	1.0274	43.5	77.6	12.0	52 0.0	32.46	38.9	3.16
+ 2	1 Gang-gang Cockatoo	1.0253	55.3	72.4	2.7	52 0.4	32.51	48.8	3.15
	22 Rock Dove	0.8829	-25.7	48.3	-5.5	52 0.0	15.41	-12.1	5.73
+	23 White-throated Needletail	0.7794	263.1	51.7	115.9	19 66.3	2.74	140.6	28.48
	24 Spotted Pardalote	0.6762	9.5	84.5	8.7	52 0.1	34.82	22.4	1.94
	25 Eastern Spinebill	0.6699	19.4	91.4	3.3	52 1.0	44.25	31.1	1.51
-	26 Noisy Friarbird	0.5398	-44.5	89.7	-4.8	35 -20.9	28.84	-26.5	1.87
	27 Weebill	0.5272	21.9	55.2	14.0	52 0.3	20.76	22.1	2.54
+	28 Australian Wood Duck	0.5179	347.0	24.1	10.0	48 33.2	5.01	72.6	10.34
	29 Striated Pardalote	0.5175	-16.7	77.6	3.2	52 0.0	24.80	-11.6	2.09
+	30 Brown Thornbill	0.4686	106.0	70.7	64.6	52 2.6	24.25	100.5	1.93
	31 Grey Fantail	0.4442	25.7	84.5	2.3	52 0.3	27.37	19.2	1.62
+	32 Striated Thornbill	0.4093	90.3	46.6	27.7	42 -9.0	7.49	26.4	5.46
	33 Straw-necked Ibis	0.4046	-2.6	37.9	81.3	43 93.8	3.83	80.9	10.56
	34 Red-browed Finch	0.3339	-1.8	27.6	5.2	51 19.8	5.64	20.2	5.92
	35 White-winged Chough	0.3234	3.2	39.7	50.2	49 13.7	4.80	16.9	6.74
	36 Laughing Kookaburra	0.3229	-12.6	70.7	-4.5	52 0.0	16.55	-20.8	1.95
+	37 Little Corella	0.3166	718.3	31.0	293.9	39 125.0	3.66	238.3	8.64
+	38 Noisy Miner	0.2935	84.2	36.2	90.6	51 2.1	7.71	67.4	3.81

Species	A	dA%	F	dF%	W dW%]	R dR%	G
+ 39 Australian White Ibis	0.2909	87.0	13.8	32.2	33 122.8	2.02	137.1	14.40
+ 40 White-browed Scrubwren	02804	157.0	48.3	117.1	52 13.3	16.21	161.2	1.73
- 41 Black-faced Cuckoo-shrike	0.2619	-52.5	91.4	-2.3	51 -1.7	20.13	-42.4	1.30
+ 42 Pacific Black Duck	0.2434		10.3	23.3	50 93.0	4.29	173.3	5.67
- 43 Red-rumped Parrot	02185	-45.7	37.9	-5.0	51 0.8	6.06	-31.8	3.60
44 Welcome Swallow	0.2131	-6.8	44.8	20.4	49 -0.8	7.62	9.9	2.80
+ 45 Golden Whistler	0.2021	39.6	72.4	21.2	38 -12.8	17.31	42.0	1.17
+ 46 Wh-browed Woodswallow	0.1836	726.4	10.3	527.7	8 546.2	0.51	766.3	36.33
+ 47 Buff-rumped Thornbill	0.1499	42.0	27.6	80.1	40 5.5	4.29	53.0	3.49
+ 48 Dusky Woodswallow	0.1448	181.7	25.9	98.5	21 50.0	2.06	165.1	7.02
+ 49 Satin Bowerbird	0.1444	35.4	34.5	177.5	52 77.6	7.12	107.8	2.03
- 50 White-naped Honeyeater	0.1398	-80.1	34.5	-36.3	22 -31.6	2.86	-62.1	4.88
- 51 Willie Wagtail	0.1398	-52.4	60.3	-27.2	52 0.0	10.91	-51.7	1.28
+ 52 Little Raven	0.1086	50.6	15.5	84.7	12 37.7	0.63	49.2	17.20
+ 53 Grey Currawong	0.1061	29.9	50.0	47.7	51 3.9	9.68	41.2	1.10
54 White-eared Honeyeater	0.0876	-17.0	41.4	-23.1	51 28.4	6.91	-14.4	127
55 Olive-backed Oriole	0.0712	28.1	44.8	7.2	32 -5.9	6.32	23.4	1.13
56 Fuscous Honeyeater	0.0699	-56.0	34.5	-7.0	29 8.2	3.20	-37.5	2.18
- 57 European Goldfinch	0.0695	-78.0	13.8	-70.1	41 -17.1	23	2-74.9	3.00
+ 58 Masked Woodswallow	0.0653	7462.6	3.4	658.8	5 1066.7	0.21	988.8	31.00
- 59 Masked Lapwing	0.0598	-36.1	34.5	-7.8	43 -8.3	3.66	-29.7	1.63
60 Dollarbird	0.0589	-1.4	44.8	34.0	19 -16.2	3.62	-1.0	1.63
- 61 Double-barred Finch	0.0539	-60.1	15.5	-26.8	35 -5.9	1.94	-41.0	2.78
62 Silver Gull	0.0531	-92.0	6.9	-22.6	23 25.1	1.09	20.4	4.85
63 White-throated Treecreeper	0.0531	-1.9	20.7	18.9	49 6.6	5.18	9.4	1.02
- 64 Grey Shrike-thrush	0.0488	-36.7	29.3	-26.8	49 4.4	4.80	-30.5	1.02
+ 65 Leaden Flycatcher	0.0488	58.7	34.5	65.1	23 -1.6	4.04	82.7	1.21
- 66 White-plumed Honeyeater	0.0451	-71.8	34.5	-23.6	31 -33.7	2.57	-65.7	1.75
+ 67 Collared Sparrowhawk	0.0446	157.9	41.4	100.0	45 64.1	4.17	154.4	1.07
+ 68 Tawny Frogmouth	0.0442	252.8	10.3	150.0	37 1573	2.36	255.1	1.88
69 Varied Sittella	0.0417	-4.5	8.6	-15.8	14 -18.6	0.72	-11.7	5.82
+ 70 Mistletoebird	0.0387	59.6	22.4	65.2	36 37.2	3.66	70.9	1.06
- 71 Rufous Whistler	0.0345	-68.0	34.5	-40.3	31 -33.0	2.69	-69.9	1.28
72 Southern Boobook	0.0333	-17.9	37.9	13.6	34 -11.1	3.16	-16.2	1.05
+ 73 Rainbow Lorikeet	0.0312	151.4	12.1	83.7	25 79.2	1.52	134.0	2.06
74 Common Bronzewing	0.0295	-5.0	12.1	32.6	34 17.6	1.60	1.0	1.84
75 White-faced Heron	0.0257	-15.2	22.4	52.4	35 20.3	2.11	13.4	1.22
+ 76 Rose Robin	0.0253	92.4	31.0	133.5	21 22.5	2.32	91.3	1.09
77 Australian Hobby	0.0248	-33.6	39.7	13.3	28 -25.1	2.27	-27.6	1.09
+ 78 Wedge-tailed Eagle	0.0227	167.5	25.9	114.5	30 160.3	1.73	196.6	1.32

 $\begin{array}{l} A \ (abundance) = mean \ number \ of \ birds/site/week \\ F \ (distribution) = \% \ of \ sites \ with \ record(s) \\ W \ (weeks) = number \ of \ weeks \ with \ record(s) \end{array}$

 $\label{eq:Radiation} R \mbox{ (recording rate)} = \% \mbox{ of observer weeks with record(s)} \\ G \mbox{ (group size)} = \mbox{mean number of individuals/observation}$

Species		A dA%	6 І	dF%	w dW%	R	dR%	G
+ 79 Grey Butcherbird	0.0211	579.1	20.7	233.0	21312.1	1.98	552.6	1.06
80 Tree Martin	0.0198	-30.0	12.1	61.5	137.5	0.67	18.1	2.94
+ 81 Spotted Turtle-Dove	0.0181	307.1	12.1	407.9	22266.7	1.39	303.5	1.30
- 82 Brown-headed Honeyeater	0.0177	-37.7	8.6	15.0	9-35.3	0.46	-33.5	3.82
+ 83 Common Koel	0.0164	451.6	19.0	210.1	13259.2	1.52	442.5	1.08
- 84 New Holland Honeyeater	0.0156	-66.2	13.8	17.8	19-33.8	1.05	-43.0	1.48
85 Skylark	0.0156	-54.8	1.7	-15.0	185.6	0.76	-10.9	2.06
86 Yellow Thornbill	0.0152	-9.9	6.9	-13.6	16-20.4	0.76	-16.3	2.00
+ 87 Grey Teal	0.0147	586.3	3.4	338.7	13457.1	0.55	431.3	2.69
88 Brown Goshawk	0.0147	17.2	25.9	16.4	2411.3	1.47	25.7	1.00
89 Flame Robin	0.0131	-6.1	1.7	-78.0	9-27.0	0.38	-41.4	3.44
+ 90 Peregrine Falcon	0.0101	109.8	17.2	93.3	1770.0	0.93	109.3	1.09
- 91 Scarlet Robin	0.0101	-79.0	13.8	-56.6	15-45.5	0.93	-71.8	1.09
- 92 Richard's Pipit	0.0101	-43.4	1.7	-54.4	14-17.4	0.59	-29.3	1.71
+ 93 Purple Swamphen	0.0097	256.7	1.7	439.9	14525.5	0.59	615.5	1.64
- 94 White-throated Gerygone	0.0093	-54.1	12.1	-36.8	17-18.9	0.88	-52.2	1.05
95 Australian Pelican	0.0088	-54.6	12.1	16.4	1214.5	0.51	-3.5	1.75
- 96 Black-shouldered Kite	0.0088	-50.8	8.6	-29.4	18-30.0	0.84	-42.1	1.05
97 Sacred Kingfisher	0.0088	-20.8	17.2	-11.6	8-48.3	0.80	-23.5	1.11
+ 98 Dusky Moorhen	0.0072	3183.5	1.7	521.4	102900.0	0.42	3247.4	1.70
- 99 Pallid Cuckoo	0.0072	-79.5	10.3	-66.1	11-46.9	0.67	-78.8	1.06
+ 100 Cockatiel	0.0055	322.0	12.1	375.3	10268.4	0.42	293.3	1.30
101 Satin Flycatcher	0.0055	50.0	10.3	56.2	830.2	0.34	8.5	1.63
+ 102 Little Pied Cormorant	0.0051	247.1	3.4	64.8	12334.5	0.51	315.4	1.00
103 Little Eagle	0.0051	-6.0	12.1	39.3	10-11.0	0.46	-7.1	1.09
104 Western Gerygone	0.0051	-2.4	5.2	-18.8	1110.0	0.51	5.7	1.00
- 105 White-winged Triller	0.0051	-63.8	1.7	-79.3	9-19.6	0.38	-54.3	1.33
- 106 Nankeen Kestrel	0.0046	-82.0	6.9	-68.8	9-71.2	0.46	-79.4	1.00
+ 107 Superb Parrot	0.0042	157.8	3.4	115.6	4133.3	0.17	155.1	2.50
+ 108 Australian Owlet-nightjar	0.0042	62.3	1.7	3.2	973.4	0.38	65.5	1.11
- 109 Brown Falcon	0.0038	-50.6	5.2	-47.1	8-44.6	0.38	-43.2	1.00
- 110 Rainbow Bee-eater	0.0034	-76.3	5.2	-28.9	2-59.2	0.13	-49.7	2.67
+ 111 Little Wattlebird **	0.0029	2272.3	1.7	520.0	72000.0	0.29	2272.3	1.00
112 Rufous Fantail	0.0029	-13.7	8.6	-2.6	5-19.8	0.29	-9.0	1.00
- 113 Speckled Warbler	0.0025	-79.4	3.4	-37.3	4-73.8	0.21	-67.8	1.20
- 114 Crescent Honeyeater	0.0025	-91.0	3.4	-73.8	4-82.1	0.25	-87.4	1.00
+ 115 Jacky Winter	0.0025	119.8	3.4	158.7	5101.9	0.21	116.6	1.20
116 Mallard	0.0021	431.4	1.7	194.4	131.3	0.04	13.6	5.00
- 117 Fan-tailed Cuckoo	0.0021	-82.0	5.2	-66.5	5-72.7	0.21	-81.1	1.00
- 118 Great Cormorant	0.0017	-61.3	5.2	30.4	3-43.2	0.13	-43.7	1.33
119 Little Lorikeet	0.0017	87.8	1.7	14.3	116.7	0.04	8.9	4.00
- 120 Horsfield's Bronze-Cuckoo	0.0017	-82.3	6.9	-41.0	4-71.1	0.17	-81.5	1.00
121 Clamorous Reed-Warbler	0.0017	-18.6	6.9	342.3	3-3.1	0.17	17.4	1.00

Species	A	dA%		F dF%	W dW%]	R dR%	G
+ 122 Hardhead	0.0013	3104.4	1.7	2108.6	36200.0	0.13	6308.8	1.00
123 Little Black Cormorant	0.0013	-63.0	1.7	7.8	1-69.6	0.04	-71.0	3.00
+ 124 Black Falcon *	0.0013	648.4	3.4	570.5	3600.0	0.13	648.4	1.00
125 Budgerigar	0.0013	1.9	3.4	-5.2	2-34.4	0.08	-28.3	1.50
+ 126 Rose-ringed Parakeet **	0.0013	535.1	1.7	380.0	3425.0	0.13	535.1	1.00
- 127 Shining Bronze-Cuckoo	0.0013	-85.0	5.2	-55.2	3-78.6	0.13	-84.8	1.00
128 Eastern Yellow Robin	0.0013	-76.8	3.4	33.9	2-81.7	0.08	-82.5	1.50
129 Restless Flycatcher	0.0013	-73.5	3.4	-51.3	3-69.4	0.13	-72.1	1.00
+ 130 Wh-bellied Cuckoo-shrike	0.0013	176.8	3.4	185.7	3162.5	0.13	176.8	1.00
131 Australasian Grebe	0.0008	-17.1	3.4	1007.3	2147.1	0.08	84.0	1.00
+ 132 Great Egret	0.0008	200.3	1.7	123.3	2250.0	0.08	274.2	1.00
133 Cattle Egret	0.0008	-72.0	1.7	70.5	231.3	0.08	39.4	1.00
134 Eurasian Coot	0.0008	-95.1	1.7	274.2	2-10.6	0.08	-4.8	1.00
135 Fork-tailed Swift **	0.0008	-73.1	1.7	45.8	2200.0	0.08	144.6	1.00
+ 136 Brown Songlark	0.0008	220.9	1.7	264.7	161.5	0.04	79.5	2.00
137 Glossy Ibis	0.0004	n/a	1.7	n/a	1 n/a	0.04	n/a	1.00
+ 138 Royal Spoonbill	0.0004	109.3	1.7	306.0	1250.0	0.04	259.9	1.00
+ 139 Black Kite **	0.0004	366.6	1.7	365.9	1320.0	0.04	366.6	1.00
140 Whistling Kite	0.0004	-26.2	1.7	24.9	1-19.2	0.04	-18.1	1.00
+ 141 Grey Goshawk	0.0004	96.4	1.7	163.7	175.0	0.04	96.4	1.00
142 Australian Spotted Crake	0.0004	n/a	1.7	n/a	1 n/a	0.04	n/a	1.00
143 Latham's Snipe	0.0004	n/a	1.7	n/a	1 n/a	0.04	n/a	1.00
144 White-headed Pigeon	0.0004	2.3	1.7	560.6	I50.0	0.04	39.8	1.00
+ 145 Peaceful Dove	0.0004	131.4	1.7	199.2	1110.0	0.04	131.4	1.00
+ 146 Major Mitchell's Cockatoo	0.0004	222.3	1.7	355.9	1250.0	0.04	222.3	1.00
+ 147 Fischer's Lovebird **	0.0004	994.7	1.7	2108.6	12000.0	0.04	2089.3	1.00
+ 148 Scarlet Honeyeater	0.0004	186.6	1.7	228.1	1200.0	0.04	186.6	1.00
- 149 Rufous Songlark	0.0004	-90.8	1.7	-21.2	1-80.7	0.04	-86.2	1.00
150 Bassian Thrush	0.0004	n/a	1.7	n/a	1 n/a	0.04	n/a	1.00

A (abundance) = mean number of birds/site/week F (distribution) = % of sites with record(s) W (weeks) = number of weeks with record(s) $\begin{array}{l} R \ (recording \ rate) = \% \ of \ observer \ weeks \ with \ record(s) \\ G \ (group \ size) = mean \ number \ of \ individua's/observation \end{array}$

Legend for Table 2

An indication of the status of a species for the GBS year, relative to the average for all previous GBS years, is provided by a + or - prefix when dA% and dR% are both greater than $\pm 25\%$. This may be indicative of a general increase or decline over the period of the GBS, or may simply reflect a particularly good or poor reporting year for that species. In cases where A and R values are small, this indicator may be misleading or erroneous.

n/a in columns listing percentage change indicates that there have been no records of that species in previous years so no comparisons can be made.

^{*} indicates a species for which both endorsed and unendorsed records contribute to the statistics.

^{**} indicates a species for which there were only unendorsed record(s).

DATA, METHODOLOGIES, AND EXPLANATORY NOTES

Sources of

data General

records

All records other than the GBS records have been included this year as 'General' records.

Garden Bird Survey (GBS)

GBS data are derived from standard charts on which participants record observations on a weekly basis at sites throughout suburban Canberra. Observers record the maximum number of each species seen at any one time during a week within a radius of 100 metres of their home or workplace. Statistical values for measures abundance (A), distribution (F), weekly presence (W), recording rate (R), and group size (G), together with the percentage change in these values when compared with the average of the previous 21 years are shown on pp. 174177. The methods used to calculate these values are described below.

A Measure of abundance.

This is the average number of individuals of a species recorded at a site for each week over the full year. It is obtained by adding all weekly observations of the species and dividing the sum by the total number of weeks in which observations were made. For example, if the total number of weeks during which observations were made was 2156 and the total number of Eastern Spinebills recorded was 1106, the average number of that species seen each week, at each site, over the full year (A) would be 0.513.

F Measure of distribution.

This is the number of sites at which a species was recorded at least once during the year expressed as a percentage of the total number of sites. If there were 50 sites and the White- throated Needletail was recorded at least once at 9 of them, the value of F for the year is 18%.

W Measure of weekly presence

The number of weeks in the year for which a species was recorded at any site. In the case of a resident species such as the Crested Pigeon, which is present throughout the year, W=52; whereas a migrant such as the Dollarbird, was present only for 19 weeks, for example, W=19.

R Measure of the recording rate

This is the number of observer-weeks during which a species was recorded, expressed as a percentage of the total number of observer- weeks for the year. For example, if the Noisy Miner was recorded during 111 of the observer-weeks and the total number of observer-weeks for the year was 2156, for the Noisy Miner R=5.15%.

G Measure of group size

Average number of individuals of a species recorded in each observation. For example, if the calculated G value for the Silver Gull was 134.3, it is an indication that the Silver Gull was usually observed in sizeable flocks.

Woodland Survey (WOO)

Data are collected systematically following protocols which have a sound statistical basis. Nine sub-sites (plots of 50 m radius), in habitat structures of low, medium and high are set up at each site, and surveys are conducted seasonally (four times a year). Each sub-site is surveyed for 10 minutes with all birds seen or heard recorded, and other birds outside the plot in the same habitat within a 100-m radius also being recorded.

Surveys at Mulligans Flat (24 subsites) commenced in 1995, and include sites in Grassy Woodland as well as other habitats.

Surveys are done each season in September, December, March and June. Surveys at Lambrigg were discontinued after the autumn survey; the Campbell Park survey began with the winter survey. The winter

surveys for Newline Quarry and Mulligans Flat were not done until early July, so the data from those surveys are not included in this report.

Waterbird Survey (WBS)

Data on the number of waterbirds present are normally collected during monthly surveys of Lake Bathurst (including The Morass) and Lake George. The survey involves visits to three locations at Lake Bathurst and to two locations at Lake George. In 2002-03, however, Lake George was not surveyed as it was dry and Lake Bathurst was only surveyed when water levels permitted, in July, August and September.

Explanatory notes on the text

The names and sequence of birds in the Systematic List conform to *The Taxonomy* and Species of Birds of Australia and its *Territories* (Christidis & Boles 1994).

The status shown for each bird in the Systematic List takes account of results of the 1986-89 'Atlas' survey of the ACT (Taylor & COG 1992), database records, survey results and other data currently available. It is updated regularly by the COG Rarities Panel

As applicable, information for each species in the Systematic List is in the sequence: 'General' (all surveys except GBS), and 'GBS' (Garden Bird Survey). For some species, there may also be a brief general commentary preceding the data summary.

As a general rule details of specific records are set out in the following format:

number of individuals/date, place, grid (observer). For example, '4/15 Jun ANBG GrK13 (WiJI)', indicates four birds on 15 June at Australian National Botanic Gardens grid cell K13 and the observer was Jacqui Winter. (A full list of observers and their observer codes is provided on pp. 181-182. When sufficient data are available, breeding

records giving the first and last nest and/or dependent young records are often included. In these cases the breeding code, e.g. 'ne' (nest with eggs) or 'dy' (dependent young), or other abbreviation as appropriate, takes the place of the number of individuals. For breeding records of cuckoos, the host species, if recorded, is shown in brackets immediately following the breeding indicator, e.g. dy(White-plumed Honeyeater)/18 Dec.

The words `record(s)' are not used to indicate the number of birds involved. Where available and appropriate the number of individuals is included. Numbers and distribution of birds are sometimes compared with the previous year. Unless indicated otherwise, a statement in this report such as `overall numbers lower' should be taken to mean lower than in the immediately preceding year.

Because the Garden Bird Survey works on a weekly basis, GBS data have no specific dates, but are of the form '2wk May', '2wk' referring to the second week of the month. The first day of the first week rarely starts on the first day of the month, however. The dates of each GBS week are shown at the top of the GBS chart and are also listed by Taylor (1987) and Veerman (2002).

Abbreviations The following abbreviations include some used in previous editions of the Annual Bird Report.	max maximum MFS Mulligans Flat Survey Misc miscellaneous (records) MIF Majura Firing Range Mt/Mtn Mount/Mountain
General	MUL Mulligans Flat N North
ANBG Australian National Botanic Gardens ANU Australian National University BA Birds Australia CAS Castle Hill CBN Canberra Bird Notes Ck creek CMP Campbell Park CNP Canberra Nature Park CSIRO Commonwealth Scientific and Industrial Research Organisation	
The abbreviation is followed by the	Res Reserve
location, e.g. CS1RO Black Mtn	S South
esc escapee (status as confirmed by the COG Rarities Panel)	SF State Forest SP sewage ponds
E East f female GA Greening Australia GBS Garden Bird Survey GOO Gooroo Gr COG grid cell (number) GunL Gungahlin Lakes HAL Hall/Gold Creek Hs/Hstd Homestead Hwy Highway inc, incl including/inclusive juv juvenile	SYM Symonston TSR Travelling Stock Reserve TUG Tuggeranong UNIC University of Canberra, Bruce unsp unspecified W West WBS Waterbird Survey WL wetlands WOO Woodland Survey wk week Breeding codes
JWNP Jerrabomberra Wetlands Nature Park	cf carrying food
km kilometre LAM Lambrigg LBath Lake Bathurst LBathE Lake Bathurst east basin LBathW Lake Bathurst west basin LBth Lake Bathurst LBG Lake Burley Griffin LGeo Lake George LGeoN Lake George northern end LGeoS Lake George southern end LGin Lake Ginninderra LTug Lake Tuggeranong m male MAJ Mt Majura	co copulation di display dy dependent young ih inspecting hollow nb nest building ne nest with eggs ny nest with young on bird on or observed leaving nest

List of contrib	utors	HAJ1	Holland family
C 1	C 4 7 4	TT T 1	HaKl Kay Hahne
Code	Contributor name	HaL1	Lee Halasz Stewart Harris
AJR1	Allon family	HaS4 HoA1	A Howarth
AJRI A J B1	Allen family Barbara Allan	HoBI	
AIR1	Richard Allen		Bill Horrigan Jack Holland
Airí Anil	Ian Anderson	HoJ1 HoJ2	Jack Holland Jim Hone
Am AM1		HoJ3	
BaB1	Margaret Aston	HoS1	John Hodgetts
Ball	Barry Baker Ian Baird	W1	Steve Holliday Janet Irons
Bal1	Joe Barr	JoF1	Fiona Johnson
BeDI		JoH1 JoM2	
	Darryl Beaumont		Murray Johnson
BeR3 BlC1	Rosemary Bell Caroline Blackmore	Kali	Julienne Kamprad Lana Kosseck
BIR1		KoL1 KrS1	
	Rosemary Blemings		Shirley Kral David Landon
BoD1	David Bourne	LaD1	
Boil	Jennifer Bounds	LaJ5	John Layton
BoM1	Margaret Boots	LaSI	Sue Lashko
BoS2	Suzi Bond Muriel Brookfield	LaT1	Terena Lally
BrM2		LeAI	Adam Leavesley
CaJ 1	J Carnahan	LeB1	Brendan Lepschi
CaNI	Nathan Carroll	TeM1	Michael Lenz
CCR1	R&C Cannon	LiBI	Bruce Lindenmayer
CIS1	S. Cleland	LJT1	Lipscombe family
CoD2	David Cook	LiM1	Maria Lukacs
CoE1	Elizabeth Compston	LuNI	Noel Luff
CrI1	Isobel Crawford	MaC2	Macleay family
CrL1	Liz Crawford	MaP4	Peter Marsack
CiM1	Mike Crowley	MaR1	Richard Mason
CuC2	Clive Curson	McA4	A. McLachlan
DaC1	Chris Davey	McD1	David McDonald
DaG2	Geoffrey Dabb	McI1	Ian J McMahon
DaT1	Tony Daukus	McJ2	Jonette McDonnell
DeD2	Dianne Deans	McJ4	Julie McGuiness
DiB1	Bob Digan	MDNI	McDonald family
DoM1	Mike Doyle	MiP4	P Miller & A Inglis
DwB1	Barry & Kay Dwyer	MoM1	M Moncur
FoA1	Alan Ford	MoM3	Martyn Moffat
FrII	Ian Fraser	MuT1	Terry Munro
FuDI	Deborah Fuller	NeC1	Carol Newman
FyMI	Malcolm Fyfe	NeG1	Gail Neumann
GeJ 1	Jean Geue	O _t P1	Peter Ormay
GiM3	Matt Gilfedder &	PeH2	Harvey Perkins
C 72	Cathy Robinson	RaG1	Greg & Sallie Ramsay
GoP2	Phyl Goddard	RoA1	Alison Rowell
GrB1	Bill Graham	RoPI	Peter Roberts
GrT1	Tom Green	RoS1	Susan Robertson
HaC2	Chris Hastir	RuBI	Bob Rusk

ScA1	Anthony Scott	WiPl Pauline Wicksteed
ScB2	Brian Scales	WiS1 Steve Wilson
ScG1	Gutta Schoefl	WoD 1 D Wood
ScK I	Ken Schaefer	ZwM1 Marnix Zwankhuizen
ScR1	Richard Schodde	
SmA1	Alastair Smith	The following were contributors to
TaD2	David Taylor	Birds Australia, and whose data were made available to COG via an
TaN 1	Nicki Taws	exchange agreement with that organisation. Contributors to both COG
VeP1	Philip Veerman	and BA are only listed above.
WaJ2	John Walter	Joan Adams
WaK1	Kathy Walter	Harry Hines David Pool

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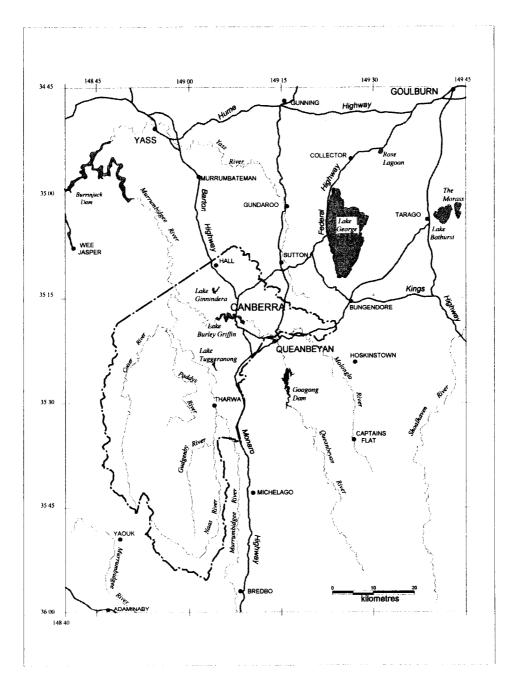
Thanks must also go to Paul Fennell, for his work in maintaining the COG database and to Tony Harding and Kay Hahne for data input.

The writing team for the Systematic List comprised Barbara Allan, Martin Butterfield, Grahame Clark, Chris Final responsibility for any errors of commission or omission rests however with the editors, Harvey Perkins and Barbara Allan.

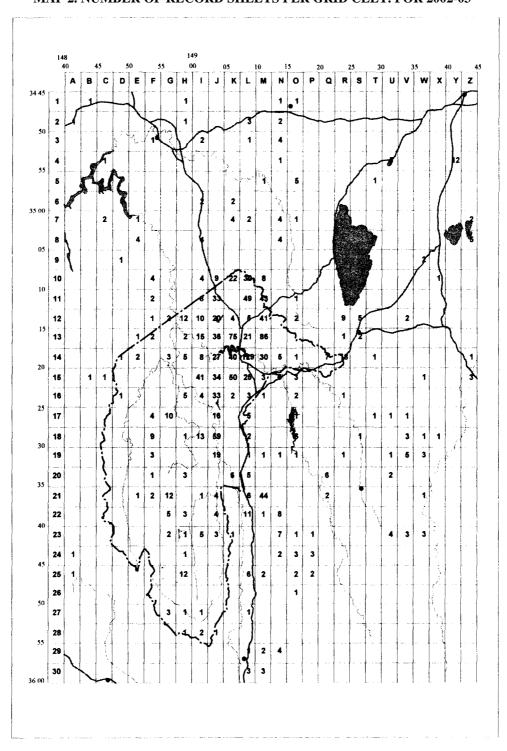
The exceptional quality of the maps in this ABR is due to Nicki Taws and the wonders of advanced technology. Rainfall and temperature data were sourced from the Bureau of Meteorology.

The Woodland Survey support from Environment ACT is particularly appreciated, as is the work of all survey organisers and participants.

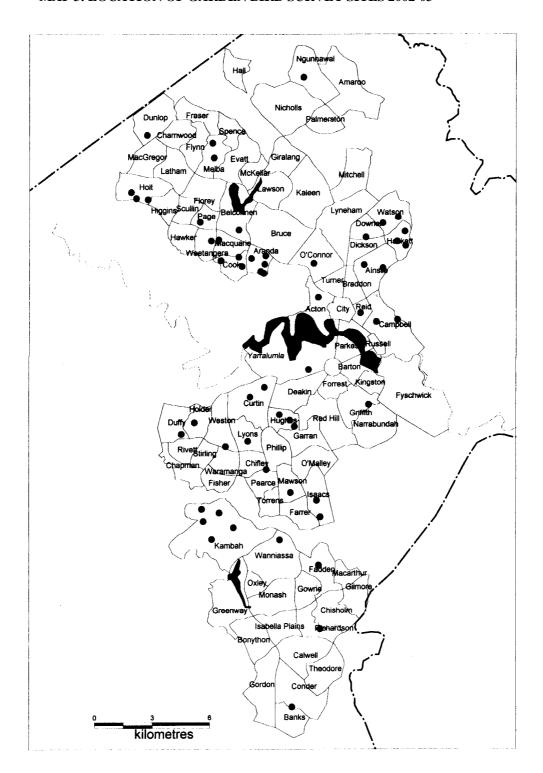
MAP 1: THE CANBERRA REGION (COG'S AREA OF INTEREST)



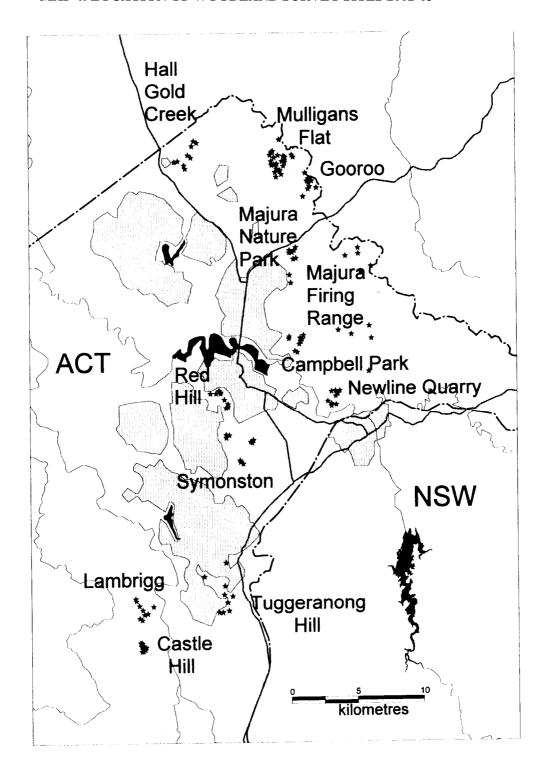
MAP 2. NUMBER OF RECORD SHEETS PER GRID CELT. FOR 2002-03



MAP 3: LOCATION OF GARDEN BIRD SURVEY SITES 2002-03



MAP 4: LOCATION OF WOODLAND SURVEY SITES 2002-03



APPENDIX 1. LIST OF 'UNUSUAL' BIRDS (JULY 1998, AS AMENDED 2002)

The list is made up of unusually occurring or 'rare' species for which there have been confirmed sightings in COG's region within the last thirty years. The list does not include species which have been classified purely as escapees, for example, Princess Parrot *Polytelis alexandrae* or Red-capped Parrot *Purpureicephalus spurius*.

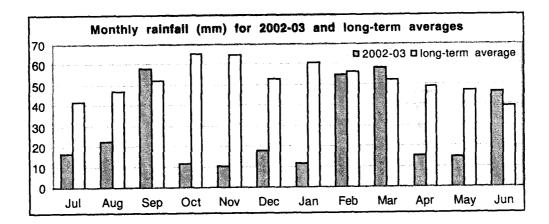
Magpie Goose Anseranas semipalmata Plumed Whistling-Duck Dendrocygna eytoni Freckled Duck Stictonetta naevosa Pied Cormorant Phalacrocorax varius Intermediate Egret Ardea intermedia Australasian Bittern Botaurus poiciloptilus Black-necked Stork Ephippiorhynchus asiaticus Osprey Pandion haliaetus Letter-winged Kite Elanus scriptus Square-tailed Kite Lophoictinia isura Black Kite Milvus migrans Spotted Harrier Circus assimilis Grey Goshawk Accipiter novaehollandiae Grey Falcon Falco hypoleucos Black Falcon Falco subniger Brolga Grus rubicunda Lewin's Rail Rallus pectoralis Spotless Crake Porzana tabuensis Black-tailed Native-hen Gallinula ventralis Little Button-quail Turnix velox Red-chested Button-quail Turnix pyrrhothorax Bar-tailed Godwit Limosa lapponica Little Curlew Numenius minutus Eastern Curlew Numenius madagascariensis Marsh Sandpiper Tringa stagnatilis Wood Sandpiper Tringa glareola Common Sandpiper Actitis hypoleucos Ruddy Turnstone Arenaria interpres Pectoral Sandpiper Calidris melanotos Painted Snipe Rostratula benghalensis Bush Stone-curlew Burhinus grallarius Grey Plover Pluvialis squartarola Banded Lapwing Vanellus tricolor Gull-billed Tern Sterna nilotica Caspian Tern Sterna caspia White-winged Black Tern Chlidonias leucopterus Diamond Dove Geopelia cuneata Bar-shouldered Dove Geopelia humeralis Long-billed Corella Cacatua tenuirostris

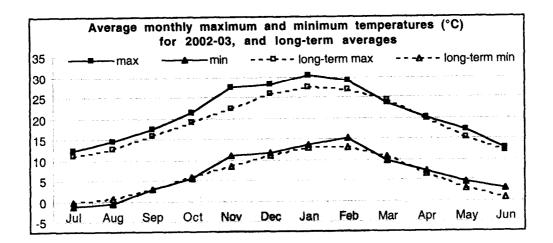
Musk Lorikeet Glossopsitta concinna Swift Parrot Lathamus discolor Blue Bonnet Northiella haematogaster Blue-winged Parrot Neophema chrysostoma Black-eared Cuckoo Chrysococcyx osculans Channel-billed Cuckoo Scythrops novaehollandiae Barking Owl Ninox connivens Sooty Owl Tyto tenebricosa Masked Owl Tyto novaehollandiae Grass Owl Tyto capensis White-throated Nightjar Eurostopodus mystacalis Fork-tailed Swift Apus pacificus Azure Kingfisher Alcedo azurea Red-backed Kingfisher Todiramphus pyrrhopygia Variegated Fairy-wren Malurus lamberti Chestnut-rumped Heathwren Hylacola pyrrhopygia Brown Gerygone Gerygone mouki Little Wattlebird Anthochaera chrysoptera Spiny-cheeked Honeyeater Acanthagenys rufogularis Little Friarbird Philemon citreogularis Lewin's Honeyeater Meliphaga lewinii Painted Honeyeater Grantiella picta Tawny-crowned Honeyeater Phylidonyris melanops Black Honeyeater Certhionyx niger Scarlet Honeyeater Myzomela sanguinolenta Crimson Chat Epthianura tricolor Pink Robin Petroica rodinogaster Grey-crowned Babbler Pomatostomus temporalis black-faced Monarch Monarcha melanopsis Spangled Drongo Dicrurus bracteatus White-bellied Cuckoo-shrike Coracina papuensis Pied Butcherbird Cracticus nigrogularis Singing Bushlark Mirafra javanica

White-backed Swallow Cheramoeca leucosternus

APPENDIX 2. 2002-03 WEATHER SUMMARY

Rainfall and temperature data for Canberra Airport were sourced from the Commonwealth Bureau of Meteorology web http://www.bom.gov.au/announcementsimedia_releases/act. Overall the year was much drier and warmer than average. Total rainfall for the year was just 339.8 mm, well below the long-term average of 630.8 mm. Only September, February, March and Jun had rainfalls close to the monthly averages, all other months being exceptionally dry. Temperatures were generally well above average. Maxima were above long term averages, by an average of 2°C, for every month except March which was 0.7°C below the average. November was exceptionally warmer than average - by 5.1 °C. Monthly minima were less divergent from the averages, with eight of the twelve months being an average of 1.4 C warmer, though July, August, October and March were on average a little less than 1 C cooler than average. The summer months were also windier than normal.





The COG office is located at Room 5, Griffin Centre, Bunda Street, Civic. Opening hours are Tuesdays from approximately 10:00 - 12:30; at other times by arrangement with the secretary, Please call the office on 6247 4996 to confirm that it is open or to leave a message,

Canberra Bird Notes is published by the Canberra Ornithologists Group Inc and is edited by Harvey Perkins and Barbara Allan. Major articles of up to 5000 words are welcome on matters of the distribution, identification or behaviour of birds occurring in the Australian Capital Territory and surrounding area. Contributions on these topics should be sent to Harvey Perkins, 42 Summerland Circuit, Kambah ACT 2902, or via email to harvey.perkins@anu.edu.au, Short notes, book reviews and other contributions should be sent to Barbara Allan, 47 Hannaford Street, Page ACT 2614 or via email to allanbm@ozemail.com.au, If you would like to discuss your proposed article in advance, please feel free to contact Harvey on 6231 8209 or Barbara on 6254 6520,

Canberra Bird Notes 28 (4) December 2003

Annual Bird Report: 1 July 2002 to 30 June 2003

CONTENTS

Introduction and overview		125
Casuariidae: emu	Menuridae: lyrebird	149
Phasianidae: quail	Climacteridae: treecreepers	
Anatidae: ducks, swan	Maluridae: fairy-wrens	
Podicipedidae: grebes	Pardalotidae: pardalotes, thornbills etc	
Anhingidae: darter	Meliphagidae: honeyeaters	
Phalacrocoracidae: cormorants	Petroicidae: robins	156 157
Ardeidae: herons, egrets, bitterns 133		158
Threskiornithidae: ibises, spoonbills 134	Pachycephalidae: whistlers etc	
Accipitridae: kites and eagles	Dicruridae: flycatchers, fantails	
Falconidae: falcons, kestrel	Campephagidae: cuckoo-shrikes etc	
Rallidae: rails, crakes, etc 138	Oriolidae: oriole	
Turnicidae: button-quail	Artamidae: woodswallows, magpie etc	
Scolopacidae: snipe, sandpipers 139 Recurvirostridae: stilts, avocet 140	Corvidae: ravens	
Charadriidae: plovers, dotterels etc 140	Ptilonorhynchidae: bowerbird	
Laridae: gulls, terns	Alaudidae: larks	
Columbidae: pigeons, doves	Motacillidae: pipit	
Cacatuidae: cockatoos	Passeridae: sparrow, grass-finches	
Psittacidae: lorikeets, parrots 144	Fringillidae: finches	
Cuculidae: cuckoos, koel	Dicaeidae: mistletoebird	166
Strigidae: hawk owls 147	Hirundinidae: swallow, martins	166
Tytonidae: masked owls 147	Sylviidae: old-world warblers	
Podargidae: frogmouth 147	Zosteropidae: silvereye	167
Caprimulgidae: nightjar148	Muscicapidae: thrushes	
Aegothelidae: owlet nightjar 148	Sturnidae: starling, myna	168
Apodidae: swifts148		
Alcedinidae: kingfisher		
Halcyonidae: kookaburra, kingfishers 148		
Meropidae: bee-eater		
Coraciidae: dollarbird		
Table 1 Species by survey type		169
Table 2 GBS statistics		174
Data, Methodologies, and Explanatory Notes		178
Maps		183
Appendix 1 - COG Unusual Bird List	02	187
Appendix 2 - Rainfall and temperature for 2002	-03	188