

IV BIRDS OF BADJALING NATURE RESERVE, SOUTH BADJALING NATURE RESERVE, YOTING TOWN RESERVE AND YOTING WATER RESERVE

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Introduction

Birds were recorded on Badjaling Nature Reserve (BNR), South Badjaling Native Reserve (SBR), Yoting Town Reserve (YR) and Yoting Water Reserve (YWR) as part of an integrated survey of the birds of the Western Australian wheatbelt involving 25 reserves (Kitchener 1976). For location and details of the reserves included in this paper see Chapman (this report). All data were obtained by me, except that G. Harold also recorded birds from 4-11 May 1975. Dates of the bird survey are 11-18 November 1974, 4-11 May 1975 and 5-8 September 1977.

In the annotated list I summarise the status of each species at the time of my survey and list the vegetation formation type in which it was recorded. I also list for each reserve the vegetation location numbers where recordings were made (these loc. numbers are directly referable to Muir, this report, which should be consulted for habitat details). Breeding data and number of birds in each flock are given where relevant.

Status of each species is listed as scarce, uncommon, moderately common, or common, in the manner of Dell & Johnstone (1977). I have taken into consideration my experience with each species elsewhere in the South-West in evaluating its status. Nomenclature and taxonomic sequence follows Storr & Johnstone (1979).

Annotated List

Hoary-headed Grebe (*Podiceps poliocephalus*)

Uncommon; salt complex. One on pool in BNR loc. 7.2 in September and 1 in flooded samphires at north end of BNR in November.

Pacific Heron (*Ardea pacifica*)

Uncommon; salt complex. One at small saltlake 1 km north of BNR in November.

White-faced Heron (*Ardea novaehollandiae*)

Uncommon; salt complex. One on edge of small saltlake 1 km north of BNR in May and 1 in samphires in BNR loc. 7.2 in November.

Black Swan (*Cygnus atratus*)

Uncommon; salt complex. Two on small saltlakes ca 5 km north of BNR in November.

Mountain Duck (*Tadorna tadornoides*)

Uncommon; salt complex. Pairs in BNR loc. 7.1, 7.2 and 7.3 in May; 1 on BNR loc. 7.3 and 2 on saltlake 1 km north of BNR in November. Adult with 6 large chicks on saltlake 1 km north of BNR on 5 September.

Grey Teal (*Anas gibberifrons*)

Moderately common; groups of 3-39 birds. Salt complex. Three groups on saltlakes and flooded samphires at north end of BNR in May, 2 groups in BNR loc. 7.2 and group on saltlake 1 km north of BNR in September, 2 groups on pools in salt complex at north end of BNR in November.

Black-shouldered Kite (*Elanus caeruleus*)

Common in May, not recorded in September or November; single birds or 2 together. Heath, paddocks and road verges. Recorded in YR loc. 4.1 and SBR loc. 4.1. In May nearly every telephone pole between Quairading and Yoting had a Black-shouldered Kite. They were approximately 3 times as frequent as Australian Kestrels. Kitchener & Chapman (this report) report *Mus musculus* as being extremely abundant in May; it is likely that Black-shouldered Kites were feeding on them.

Wedge-tailed Eagle (*Aquila audax*)

Uncommon; single birds over SBR in May, September and November when rabbits were numerous.

Little Eagle (*Aquila morphnoides*)

Uncommon; single birds over YR, SBR and BNR in September and BNR in November. One caught a rabbit in SBR loc. 4.1 in September.

Spotted Harrier (*Circus assimilis*)

Uncommon; 1 in YWR loc. 1.4 in September. One was later seen coursing 2 m above wheatfield.

Brown Falcon (*Falco berigora*)

Uncommon; single birds. Heath and road verges. One over SBR loc. 4.1 in May, 1 in road verge north of YR in May, and 1 in road verge north of BNR in November.

Australian Kestrel (*Falco cenchroides*)

Moderately common in May, otherwise uncommon; single birds or 2 together. Overhead woodland, shrubland, heath, paddocks and road verges. Recorded at YR in May; SBR in May; BNR in May and September; and road verges and paddocks in May, September and November.

Painted Button-quail (*Turnix varia*)

Uncommon; groups of 1-3 birds. Woodland, shrubland and heath. SBR: November — loc. 4.1. BNR: May — loc. 3.3; September — loc. 1.1.

Baillon's Crake (*Porzana pusilla*)

Scarce; 1 in BNR loc. 7.3 in May.

Banded Plover (*Vanellus tricolor*)

Uncommon; groups of 2-3 birds in paddocks in May.

Red-capped Plover (*Charadrius ruficapillus*)

Moderately common; birds throughout flooded salt complex in BNR in May, September and November, and around margins of saltlakes north of BNR in May.

Greenshank (*Tringa nebularia*)

Scarce; 1 in shallow water among samphires in BNR loc. 7.2 in May.

Marsh Sandpiper (*Tringa stagnatilis*)

Scarce; 1 in shallow water among samphires in BNR loc. 7.2 in September.

Black-winged Stilt (*Himantopus himantopus*)

Moderately common in September and November, not recorded in May. Groups of 2-15 birds on salt complex. In BNR loc. 7.2, 7.3 and saltlakes north of BNR in September and November. Eleven empty nests built of pieces of samphire on top of flattened samphire clumps in November. One young just flying and another not yet flying on 12 November.

Banded Stilt (*Cladorhynchus leucocephala*)

Moderately common in September, not recorded in May or November. Salt complex. Eight in flooded samphires in BNR loc. 7.2, several pairs on saltlakes 5 km north of BNR and ca 190 with fully developed bands on salt-lake 1 km north of BNR.

Red-necked Avocet (*Recurvirostra novaehollandiae*)

Moderately common in September and November, not recorded in May. Salt complex. Groups of up to 72 birds in BNR loc. 7.2 and 7.3 and saltlakes north of BNR.

Laughing Dove (*Streptopelia senegalensis*)

Uncommon; pairs. Woodland and heath. YR: September — loc. W3. BNR: September — loc. 4.1.

Common Bronzewing (*Phaps chalcoptera*)

Uncommon; 1-3 birds together in BNR loc. 3.4 in May and BNR loc. 1.8 in November.

Crested Pigeon (*Ocyphaps lophotes*)

Moderately common; single birds or 2 together. Woodland, shrubland, heath and road verges. YR: May — loc. 8.2 and 8.3. SBR: September — loc. 1.3. Nest with 2 newly hatched young 2.5 m from ground in *Xylomelum angustifolium* on 6 September. BNR: May — loc. 1.7 and 1.8; September — loc. 1.4, 1.8, 3.1 and 4.2; November — loc. 1.8. Recorded in road verges between all reserves in May, September and November.

Purple-crowned Lorikeet (*Glossopsitta porphyrocephala*)

Uncommon; flocks of up to 16 birds feeding among flowering York Gums (*Eucalyptus loxophleba*) in YWR loc. 1.4 in September.

Ring-necked Parrot (*Platycercus zonarius*)

Common; mainly 2 together or groups of up to 10 birds. Woodland, shrubland, salt complex, road verges and paddocks. YWR: May, September, November — loc. 1.1, 1.2, 1.4 and 1.6. YR: May — loc. 1.1, 1.2, 1.3, 8.2 and 8.3; September — loc. 1.3, W2 and 7.1; November — loc. 1.1, 1.2 and 1.3. SBR: May — loc. 1.2. BNR: May — loc. 1.1 and 1.7; September — loc. 1.7, 1.8, 3.2 and 3.4; November — loc. 1.1, 1.7 and 1.8. Adults feeding flying young in loc. 1.7 on 12 November. In road verges and paddocks between all reserves in May, September and November.

Mulga Parrot (*Platycercus varius*)

Uncommon; mainly in groups of 3-6 birds. Woodland, heath and road verges. YR: September — loc. W3. SBR: November — loc. 1.2. BNR: September — loc. 4.1. In road verges near BNR in May and November and near YWR in May.

Cockatiel (*Nymphicus hollandicus*)

Scarce; 3 in woodland in YR loc. 1.2 in November.

Galah (*Cacatua roseicapilla*)

Uncommon; mainly in pairs, groups of up to 15 birds especially when feeding on spilt wheat. Woodland, road verges and along railway. YWR: May — loc. 1.1 and 1.4; September — loc. 1.1, 1.2 and 1.4. YR: May — loc. 8.2; September — loc. 1.3 and W2. BNR: November — loc. 1.7 and 1.8. In road verges in May and November. Pair came out of nesting hollow in Salmon Gum (*Eucalyptus salmonophloia*) in road verge between YR and YWR on 8 May.

Corella (*Cacatua tenuirostris*)

Scarce; 2 in woodland in YWR loc. 1.6 in September.

Pallid Cuckoo (*Cuculus pallidus*)

Uncommon; single birds. Woodland, shrubland and salt complex. YR: November — loc. 3.2 (juvenile). SBR: September — loc. 1.2 and 1.3 (several clearly in transit on 8 September). BNR: September — loc. 3.5 and 7.3; November — loc. 1.7 and 1.8. Young being fed by Brown-headed Honeyeater on 11 November.

Black-eared Cuckoo (*Chrysococcyx osculans*)

Scarce; young bird being fed by female Red-capped Robin in woodland in YWR loc. 1.4 on 12 November.

Horsfield's Bronze Cuckoo (*Chrysococcyx basalis*)

Uncommon; single birds in woodland, shrubland and salt complex. In BNR loc. 3.3 and 7.2 in September and 1.4 in November.

Barn Owl (*Tyto alba*)

Uncommon. Woodland. Recorded in YWR loc. 1.1 and 1.2 in May and November.

Boobook Owl (*Ninox novaeseelandiae*)

Uncommon; calling at night in woodland and salt complex. In YWR loc. 1.2 in November and BNR loc. 7.2 in May.

Tawny Frogmouth (*Podargus strigoides*)

Uncommon; single birds at night in woodland in YWR loc. 1.2 and BNR loc. 1.2 in November.

Australian Owlet-nightjar (*Aegotheles cristatus*)

Uncommon; calling at night. Woodland. YWR: May and November — loc. 1.2. BNR: May and November — loc. 1.1 (in patch of *Eucalyptus gracilis* trees).

Spotted Nightjar (*Eurostopodus guttatus*)

Scarce; 1 flying over BNR loc. 7.1 at dusk.

Rainbow Bee-eater (*Merops ornatus*)

Uncommon; pairs recorded in November in woodland, shrubland and heath. In BNR loc. 1.2, 1.7, 3.1, 4.1 and 7.1. Nesting burrows in loc. 3.1, 4.1 and 7.1 on 12 November.

White-backed Swallow (*Cheramoeca leucosterna*)

Uncommon; mainly pairs. Overhead in vicinity of vertical cuttings in sand. Recorded in May, September and November. Cuttings with burrows in YR loc. H1, SBR loc. 1.4 and BNR loc. 1.4.

Welcome Swallow (*Hirundo neoxena*)

Common; salt complex (in vicinity of bridges), farm houses and railway sidings and feeding over adjacent areas. Recorded in May, September and November. Recorded in YR, SBR and BNR. Breeding in May and September. Nest with 2 eggs in abandoned house in YR loc. 8.3 on 8 May. Twenty-four nests (many old nests not included in count) were examined under bridges over the salt complex north of BNR on 7 September. The following clutches were noted: 1 egg (2), 2 eggs (5), 3 eggs (10) and 7 fresh empty nests. The eggs in the single clutches and 2 of the 2 egg clutches were cold, possibly indicating that incubating had not commenced, hence the clutches may be incomplete.

Tree Martin (*Hirundo nigricans*)

Moderately common; in groups of 2-20 birds over YWR, SBR and BNR in May, YR and BNR in September and YWR and BNR in November. Total number of birds seen was 79 in May, 21 in September and 10 in November.

Richard's Pipit (*Anthus novaeseelandiae*)

Moderately common; mainly 2 together, occasionally up to 4. Woodland, heath and paddocks, most sightings were in paddocks adjacent to reserves, road verges and fences. Similar status in May, September and November. Recorded in YR loc. 4.1 and H1, SBR loc. 1.4 and BNR loc. 1.1 and 7.3.

Black-faced Cuckoo-shrike (*Coracina novaehollandiae*)

Common; single birds or 2 together. Woodland, shrubland and heath. September and May birds were probably in transit. YR: September — loc. 1.3. SBR: September — loc. 1.2; November — loc. 1.2. BNR: May — loc. 1.1 and 1.8; September — loc. 1.8, 3.3, 3.4, 3.5 and 4.2; November — loc. 1.8.

White-winged Triller (*Lalage sueurii*)

Uncommon; 1-3 birds together. Woodland, shrubland, heath and salt complex. Total of 7 in September and 9 in November. YWR: November — loc. 1.4. BNR: September — loc. 1.7, 3.3, 4.1 and 7.2; November — loc. 1.7, 1.8, 3.1 and 4.1.

Jacky Winter (*Microeca leucophaea*)

Scarce; 1 in woodland in YWR loc. 1.1 in May.

Red-capped Robin (*Petroica goodenovii*)

Uncommon; mainly pairs, occasionally single birds. Woodland and shrubland. YWR: May — loc. 1.1; September — loc. 1.2 and 3.2 (male feeding young on 5 September); November — loc. 1.1 and 1.4. YR: September — loc. 1.3; November — loc. 3.1. BNR: September — loc. 1.8.

Yellow Robin (*Eopsaltria australis*)

Scarce; 1 in patch of *Melaleuca acuminata* and *M. adnata* 2-2.5 m tall, 30-70% canopy cover under York Gum (*Eucalyptus loxophleba*) woodland adjacent to YWR loc. 1.4 in May.

Rufous Whistler (*Pachycephala rufiventris*)

Moderately common; single birds or 2 together. Woodland, occasionally shrubland. YWR: May — loc. 1.1 and 1.2; September — loc. 1.1, 1.2 and 1.4; November — loc. 1.1, 1.2 and 1.4. YR: September — loc. 1.2, 1.3 and W3; November — loc. 1.2. SBR: November — loc. 1.2. BNR: May — loc. 1.1 and 3.1 (both sightings in patch of *Eucalyptus gracilis*); September — loc. 1.1, 1.8, 3.5 and 4.2; November — loc. 1.1 and 1.8.

Grey Shrike-thrush (*Colluricincla harmonica*)

Uncommon; single birds or 2 together. Woodland, shrubland and road verges (in May). YWR: May — loc. 1.4; September — loc. 1.6. SBR: September — loc. 1.2. BNR: May — loc. 1.2; September — loc. 1.3 and 3.4; November — loc. 1.8.

Grey Fantail (*Rhipidura fuliginosa*)

Uncommon; single birds or 2 together. Only recorded in May and September (probably non-breeding winter visitor or passage migrant). Woodland, once in heath. Nine birds in May and 6 in September. YWR: May — loc. 1.2; September — loc. 1.2 and 1.6. YR: May — loc. 1.3 and 4.1; September — loc. 1.3. BNR: May — loc. 1.1, 1.3 and 1.8.

Willie Wagtail (*Rhipidura leucophrys*)

Moderately common; single birds or 2 together. Woodland, shrubland, heath, salt complex, disturbed areas (along railway) and road verges. Thirteen birds seen in May, 12 in September and 6 in November. YWR: September — loc. 1.2 and 1.4. YR: May — loc. 3.1 and 8.3. SBR: May — loc. 1.2; September — loc. 1.3 and 1.5; November — loc. 1.2. BNR: May — loc. 1.1, 1.7 and 7.3; September — loc. 4.2 and 7.2; November — loc. 1.1, 1.8 and 3.1.

White-browed Babbler (*Pomatostomus superciliosus*)

Common on SBR and BNR, scarce elsewhere; in groups of 2-7 birds. Woodland, shrubland, heath and road verges. YWR: May — loc. 1.2. Old nest in *Melaleuca adnata* in loc. 3.2. SBR: May — loc. 1.1 and 1.2; September — loc. 1.1, 1.2, 1.3 and 1.5; November — loc. 1.1, 1.2 and 1.3. Old nests in loc. 1.2, 1.3 and 1.5. BNR: May — loc. 1.1 and 1.2; September — loc. 1.1, 3.1, 3.2, 3.4 and 4.2; November — loc. 1.1. Old nests in loc. 1.1, 1.4, 3.2 and 3.5. Old nests were in *Acacia acuminata* (2), *Banksia prionotes* (5), *Casuarina campestris* ♀ (1), *Grevillea excelsior* (1), *G. pritzellii* (1) and *Xylomelum angustifolium* (9).

Western Flyeater (*Gerygone fusca*)

Uncommon; single birds. Woodland and salt complex (in eucalypts only). YWR: May — loc. 1.4; September — loc. 1.1 and 1.6. YR: September — loc. 1.3 and 7.1. BNR: May — loc. 1.1 (patch of *Eucalyptus gracilis*).

Weebill (*Smicrornis brevirostris*)

Common at YWR, uncommon elsewhere; pairs or groups of up to 6 birds. Woodland (eucalypts only). YWR: May — loc. 1.1, 1.2 and 1.4; September — loc. 1.1, 1.2, 1.4 and 1.6; November — loc. 1.1 and 1.2. YR: May — loc. 1.2 and 1.3; September — loc. W2 and W3. BNR: May — loc. 1.1 (patch of *E. gracilis*); September — loc. 1.1 (*E. gracilis*) and 1.8; November — loc. 1.7 and 1.8.

Yellow-rumped Thornbill (*Acanthiza chrysorrhoa*)

Uncommon; groups of up to 7 birds. Woodland and shrubland. YWR: May — loc. 1.1; September — loc. 1.1, 1.2 and 1.4. Adults feeding flying young on 5 September. YR: September — loc. 1.3 and W3. Nest with 4 eggs 1 m from ground in *Eucalyptus wandoo* in loc. 1.3, nest with 3 small chicks 2 m from ground in *E. wandoo* in W3, pair building nest 2.5 m from ground in *Actinostrobos arenarius* in W3 on 6 September. BNR: May — loc. 3.1/7.1 ecotone; September — loc. 1.1, 1.8 and W1. Adult feeding 3 young in loc. 1.1 on 7 September.

Chestnut-rumped Thornbill (*Acanthiza uropygialis*)

Uncommon; groups of 2-6 birds. Woodland and salt complex. YWR: May — loc. 1.1 and 1.2; September — loc. 1.1 YR: May — loc. 1.2 and 1.3; September — loc. W2. BNR: May — loc. 1.1; September — salt complex at north end of reserve.

Redthroat (*Pyrrholaemus brunneus*)

Uncommon; group of 2-4 birds in woodland in BNR loc. 1.1 in May and November.

White-winged Fairy-wren (*Malurus leucopterus*)

Moderately common in shrubland in salt complex at BNR. Groups of up to 5 birds in May, September and November. Recorded in loc. 7.1, 7.2, 7.3 and 3.1.

Brown Songlark (*Cincloramphus cruralis*)

Moderately common in September and November. Paddocks and disturbed heaths. Recorded in YR loc. H1 and BNR loc. 4.1 in September.

Australian Sittella (*Daphoenositta chrysoptera*)

Scarce; 2 in woodland in BNR loc. 1.8 in September.

Spotted Pardalote (*Pardalotus punctatus*)

Uncommon; groups of 2-4 birds in YWR loc. 1.2 in May. Some were flying north-east and giving migratory calls.

Striated Pardalote (*Pardalotus striatus*)

Uncommon; groups of 2-8 birds. Woodland (eucalypts only). YWR: May — loc. 1.2; September — loc. 1.2, 1.4 and 1.6; November — loc. 1.4. YR: May — loc. 1.2; September — loc. 1.2, W2 and W3. BNR: November — loc. 1.8.

Grey-breasted Silvereve (Zosterops lateralis)

Scarce; groups of 2-5 birds. Margins of salt complex at BNR. Recorded in loc. 7.3 in May, 4.1 in November and 1 km north of reserve in September.

Brown Honeyeater (Lichmera indistincta)

Common in September and November, moderately common in May. Woodland, shrubland, heath, salt complex and road verges. YWR: September — loc. 1.1, 1.2, 1.4 and 3.2. YR: September — loc. 1.2, 1.3, W3 and 7.1 (mainly in flowering *Eucalyptus wandoo*); November — loc. 3.1. SBR: May and November — loc. 1.1, 1.2 and 1.3 (in flowering *Banksia prionotes*). BNR: May — loc. 1.1, 1.2, 1.4 (in flowering *B. prionotes*) and 4.2 (in flowering *Acacia saligna*); September — loc. 1.1, 1.3, 1.4, 1.8, 3.1, 3.2, 3.3, 3.4, 3.5, 4.1, 7.2 and 7.3; November — loc. 1.1, 1.3, 1.4 and 3.1. Feeding in flowering *B. prionotes* in road verges between BNR and YR in May; common in Quairading in November.

Singing Honeyeater (Meliphaga virescens)

Common; single birds or pairs, sometimes gathering together in flowering shrubs. Woodland, shrubland, heath and salt complex. YWR: May — loc. 1.1 and 1.4; September — loc. 1.1, 1.2 and 1.4. YR: May — loc. 3.1 and 3.2; September — loc. 1.3, W3, 3.1, 3.2 and 4.1. SBR: May — loc. 1.1, 1.2 and 1.3 (in flowering *Banksia prionotes*); September — loc. 1.2, 1.3, 1.5 and 4.1; November — loc. 1.1, 1.2 and 1.3 (in flowering *B. prionotes*). BNR: May — loc. 1.1, 1.4, 4.2, 7.2 and 7.3; September — loc. 1.1, 1.4, 1.8, 3.1, 3.3, 3.4, 3.5 and 4.1; November — loc. 1.1 and 1.4.

Brown-headed Honeyeater (Melithreptus brevirostris)

Uncommon; groups of 2-4 birds. Woodland and heath. YWR: September — loc. 1.1 and 1.2; November — loc. 1.4. YR: November — loc. 1.2. BNR: November — loc. 1.7, 1.8 and 4.1. Two feeding juvenile Pallid Cuckoo in loc. 1.7 on 11 November.

White-fronted Honeyeater (Phylidonyris albifrons)

Uncommon; several in woodland and shrubland in BNR loc. 1.1 and 3.1 in September.

Tawny-crowned Honeyeater (Phylidonyris melanops)

Scarce; 2 in heath in BNR loc. 4.1 in September.

Yellow-throated Miner (Manorina flavigula)

Moderately common; groups of 1-12 birds. Woodland, salt complex and road verges. YWR: May — loc. 1.1; September — loc. 1.4; November — loc.

1.2. In road verges near reserve in May, September and November. YR: September — loc. 7.1. SBR: May — loc. 1.1, 1.2 and 1.3 (in flowering *Banksia prionotes*). BNR: November — loc. 1.8.

Spiny-cheeked Honeyeater (*Acanthagenys rufogularis*)

Moderately common in May, uncommon in November, not recorded in September; single birds, pairs or groups gathering to feed in flowering shrubs. Woodland, shrubland and salt complex. SBR: May — loc. 1.1 and 1.2 feeding in flowering *Banksia prionotes*. BNR: May — loc. 1.2, 1.4, 1.7 and salt complex at north end of reserve; November — loc. 1.1, 1.4 and 3.1. Nest with 3 eggs 3 m from ground in *Acacia acuminata* in loc. 1.1 on 12 November.

Red Wattlebird (*Anthochaera carunculata*)

Scarce; 1 in BNR loc. 1.1 in November.

White-fronted Chat (*Epthianura albifrons*)

Common; groups of 2-10 birds. Heath, salt complex and paddocks. Recorded in May, September and November. Recorded in YR loc. 4.1, 4.2 and H1; SBR loc. 4.1 and BNR loc. 4.1, 7.1, 7.2 and 7.3 and salt complex north of BNR and in paddocks adjacent to all reserves.

Zebra Finch (*Poephila guttata*)

Scarce; 2 in heath in BNR loc. 4.1 in September.

Magpie-lark (*Grallina cyanoleuca*)

Uncommon; 1-3 birds. Woodland, shrubland and paddocks. Four birds recorded in May and September and 5 in November. YWR: September — loc. 1.6 and 0.5 km south of reserve. YR: May — loc. 8.2 and paddock north of reserve. BNR: May — loc. 1.7; September — loc. 1.8 and 3.1; November — loc. 1.7 and in paddock near dam north of reserve.

Dusky Wood-swallow (*Artamus cyanopterus*)

Scarce; 4 over BNR in May.

Black-faced Wood-swallow (*Artamus cinereus*)

Common; groups of 2-5 birds. Woodland, shrubland, heath, salt complex and road verges. YR: May — loc. 3.1; September — loc. H1. SBR: May — loc. 4.1; September — loc. 4.1; November — loc. 1.2 (in flowering *Banksia prionotes*). BNR: May — loc. 1.8 and 7.1; September — loc. 1.4, 3.3, 3.4, 4.1, 4.2, 7.2 and 7.3; November — loc. 1.7, 1.8, 3.1 and 7.1. Nest with 4 eggs 1.9 m from ground in *Exocarpus sparteus* in ecotone between loc. 3.1 and 7.1 on 12 November.

Grey Butcherbird (*Cracticus torquatus*)

Scarce; single birds. Woodland and shrubland. SBR: May — loc. 1.2. BNR: May — loc. 1.8 and 3.3.

Pied Butcherbird (*Cracticus nigrogularis*)

Uncommon; single birds or 2 together. Woodland and road verges. YWR: May — loc. 1.2; September — loc. 1.1 and 1.2; November — road verges adjacent to reserve. YR: May — loc. 1.2; September — loc. 7.1 and W3. Nest with bird sitting 10 m up *Eucalyptus loxophleba* in W3 on 6 September.

Magpie (*Cracticus tibicen*)

Uncommon; 1-4 birds in groups. Woodland, salt complex and paddocks. YWR: November — loc. 1.4. YR: May — disturbed areas around siding. BNR: May — loc. 1.1 and 7.3; September — loc. 1.8 and 4.2. Empty nest in mallee in verge 1 km south of BNR in November.

Australian Raven (*Corvus coronoides*)

Common; groups of 1-6 birds. Woodland, salt complex and farmland. YWR: May, September and November — loc. 1.1, 1.2 and 1.4. YR: May, September and November — loc. 1.3, 7.1 and W3. Pair feeding 2 large young in nest 22 m from ground in *Eucalyptus salmonophloia* in loc. 7.1 on 6 September. SBR: birds over reserve in May, September and November. Empty nest 10 m from ground in *Eucalyptus comitae-vallis* in loc. 2.1 in September. BNR: May, September and November — loc. 1.7, 1.8, 7.3 and over most other locs. Empty nest 5.5 m from ground in *Banksia prionotes* in loc. 3.4 in September; adult with 2 flying young at saltlake 1 km north of BNR on 5 September.

Discussion

The survey of the 4 reserves included in this report recorded 80 species of birds; this is comparable to the number recorded on other reserves in the wheatbelt. However, of these, 2 were recorded only in salt complex outside the reserves, 1 was recorded only in farmland and 2 only recorded overhead. This leaves 75 species recorded within 1 or more reserves. This is close to the total of 73 on the Durokoppin/Kodj Kodjin Reserves (Dell 1978) and the 79 species on the Bendinger Reserves (Dell 1977).

The relative richness of the assemblage is largely due to the salt complex on BNR. This salt complex is part of a continuous drainage running in a north-east/south-west direction. Within a 33 km radius of BNR there is ca 11,700 ha of salt complex. Fourteen birds were only recorded in this salt

complex and another, Welcome Swallow, was largely confined to it. Therefore only 63 species were recorded in vegetation other than salt complex.

Some groups of birds, especially shrubland insectivores, were poorly represented. Typical shrubland or heath birds absent from all 4 reserves were Golden Whistler (*Pachycephala pectoralis*), Broad-tailed Thornbill (*Acanthiza apicalis*), Shy Hylacola (*Sericornis cautus*), Calamanthus (*Sericornis fuliginosus*), Blue-breasted Fairy-wren (*Malurus pulcherrimus*) and White-eared Honeyeater (*Meliphaga leucotis*). Shrubland is practically absent from YWR; YR and SBR are downgraded; their absence from BNR was not expected considering that the *Banksia* and *Xylomelum* woodland and shrubland seems to be suitable habitat. It is possible that BNR was burnt after it became isolated by farmland and the birds listed above may not have been able to recolonise it because of poor road verges in the vicinity.

Only 1 species of non-passerine, Ring-necked Parrot, was common to all reserves, compared with 7 species of passerines. This reflects differences in vegetation between the reserves. Muir (this report) comments on the fact that the woodland on BNR and SBR is mostly composed of *Banksia* and *Xylomelum* compared with YWR and YR where the woodland consists of eucalypts. Table 1 shows the number of non-passerines and passerines on each reserve and the number in common between any 2 reserves.

TABLE 1
Number of non-passerine and passerine birds on each reserve
and number in common between any 2 reserves.

Non-passerine — 35 species		BNR	SBR	YR	YWR	Passerine — 43 species
	BNR (27)			17	23	
SBR (8)	8			12	9	SBR (14)
YR (10)	10	5			18	YR (23)
YWR (10)	5	2	2			YWR (23)

Eight species, namely Black-winged Stilt, Crested Pigeon, Ring-necked Parrot, Rainbow Bee-eater, Brown-headed Honeyeater, Spiny-cheeked Honeyeater, Black-faced Wood-swallow and Pied Butcherbird were breeding (i.e. had eggs or young) in November. Three species, Welcome Swallow, Yellow-rumped Thornbill and Australian Raven had eggs or young in September, and Welcome Swallow had eggs in May.

Storr (1953) listed 41 species at Yoting, and another 7 at Pantapin. Of Storr's species, Black-fronted Plover (*Charadrius melanops*), Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Whistling Kite (*Haliastur sphenurus*), Regent Parrot (*Polytelis anthopeplus*), and Little Crow (*Corvus bennetti*)

were not recorded by me. Three of Storr's Pantapin species, namely Broad-tailed Thornbill (*Acanthiza apicalis*), Crested Bellbird (*Oreoica gutturalis*) and White-eared Honeyeater (*Meliphaga leucotis*) were not recorded by me on any of the 4 reserves. Storr's comment on the occurrence of mallee and sandplain scrub at Pantapin and the absence of mallee on those reserves may account for the absence of these 3 species on the 4 reserves.

Storr's brief paper is useful in that he indicated comparative abundance of species present during his stay (2 December 1952 to 16 January 1953). Most of Storr's species seem to have changed little in the last 25 years. Galah is now a breeding resident but not particularly common, Regent Parrot has disappeared entirely, and Yellow-rumped Thornbill is now apparently scarcer (destruction of road verges may account for this). Birds not present in 1953 but now resident include Crested Pigeon and Pied Butcherbird, 2 species which have either expanded their range or increased in abundance since clearing in the wheatbelt.