

## IV BIRDS OF BILLYACATting HILL NATURE RESERVE

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### INTRODUCTION

Birds were recorded on Billyacatting Hill Nature Reserve as a part of an integrated survey of the birds of the Western Australian wheatbelt involving 24 reserves (Kitchener 1976). For location and details of this reserve see Chapman (this report). Data were obtained by me during 30 October-7 November 1972, 25-26 May 1973, 30 March-6 April 1974, 21 November 1974 and 2-5 September 1977. G. Harold also obtained data on birds during 30 October-7 November 1972.

In the annotated list I summarize 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 the vegetation location numbers where recordings were made (these location numbers are directly referable to Muir, this report, which should be consulted for habitat details). Birds recorded only in areas adjacent to reserve are included also. 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

#### Emu (*Dromaius novaehollandiae*)

Scarce; 3 moved from paddock into west side of reserve in November 1972. Faeces in loc. 3.13 in September.

#### Black-throated Grebe (*Podiceps novaehollandiae*)

Scarce; 1 on large dam 0.5 km west of reserve in November 1972.

#### White-faced Heron (*Ardea novaehollandiae*)

Scarce; 1 on small dam 0.5 km west of reserve in November 1972.

#### Mountain Duck (*Tadorna tadornoides*)

Uncommon; 1 with 6 chicks on dam near Kununoppin on 3 September, 2 on large dam 0.5 km west of reserve in November 1972.

**Wood Duck (*Chenonetta jubata*)**

Uncommon; 2 adults with 12 large young in paddock near dam 1 km south of reserve on 31 October, 31 on large dam 0.5 km west of reserve in November 1972.

**Black-shouldered Kite (*Elanus caeruleus*)**

Scarce; 1 over paddock near Kununoppin in March.

**Square-tailed Kite (*Lophoictinia isura*)**

Scarce; 1 coursing low over lithic complex in September.

**Whistling Kite (*Haliastur sphenurus*)**

Uncommon; single birds over lithic complex in April and November 1972.

**Brown Goshawk (*Accipiter fasciatus*)**

Uncommon; single birds or pairs. Woodland, mallee and shrubland. One in loc. 1.8 in September, 2 building nest in Salmon Gum (*Eucalyptus salmonophloia*) in loc. 2.9 on 2 September, 2 at nest 25 m from ground in Salmon Gum in loc. 1.6 on 4 September, 1 in loc. 1.7 and 1 chasing rabbit in loc. 3.7 in November 1972, 1 at nest 13 m from ground in Salmon Gum in loc. 1.1 on 21 November 1974.

**Little Eagle (*Aquila morphnoides*)**

Uncommon; single birds or pairs. Woodland and overhead. One sitting on nest 13 m from ground in Salmon Gum in W1 on 31 October. Recorded over loc. 1.8 in September, over loc. 1.7, 1.8, 3.4 and 4.3 in November 1972 and over loc. 1.1 in November 1974.

**Wedge-tailed Eagle (*Aquila audax*)**

Uncommon; single birds, 3 together in March and April. Recorded in March, April, October and November (1972 and 1974). Most birds were soaring over lithic complex, occasionally they perched on bare granite.

**Spotted Harrier (*Circus assimilis*)**

Scarce; 1 coursing over wheat paddock near south edge of reserve in September.

**Peregrine Falcon (*Falco peregrinus*)**

Scarce; 1 in loc. 1.6 in September.

**Little Falcon (*Falco longipennis*)**

Scarce; pair feeding young in nest 24 m from ground in Salmon Gum in loc. 1.6 on 2 September. Bird being eaten was an Australian Sittella (*Neositta chrysoptera*).

**Brown Falcon (*Falco berigora*)**

Uncommon; single birds, occasionally 2 together. Woodland and over shrubland, heath, lithic complex and paddocks. One feeding small chick in nest 15 m from ground in Salmon Gum in loc. 1.4 on 4 November 1972. Recorded over loc. 1.5 and 3.13 in March, loc. 3.13 in April, loc. 3.13 in September, loc. 1.5 and 5.1 in October, and loc. 1.4, 1.8, W1, 3.13 and 4.3 in November 1972.

**Australian Kestrel (*Falco cenchroides*)**

Uncommon; single birds over paddocks and edges of reserve in September, October and in November 1972. Pair over Waddouring Hill in November 1972.

**Mallee Fowl (*Leipoa ocellata*)**

Uncommon; mainly single birds, occasionally 2 together in wheat stubble. Woodland, mallee, shrubland, lithic complex and paddocks. Recorded in *Calycopeplus helmsii* thickets in lithic complex in April and November 1972 and 1974, in loc. 1.2 and 3.7 in May, in loc. 2.7 in October, and in loc. 1.1 in November 1974. Old nests under *C. helmsii* shrubs in lithic complex.

**Painted Button-quail (*Turnix varia*)**

Uncommon; single birds or 2 together. Characteristic feeding scrapes seen more frequently. Mallee, shrubland and heath. Recorded in April, May, September and November 1972. Feeding scrapes noted in 2.4 and 4.3. Female with yolky ovarian follicles collected in loc. 2.4 on 5 November 1972. Male sitting on nest with 4 eggs under *Casuarina campestris* thicket near loc. 3.13 on 3 September.

**Banded Plover (*Vanellus tricolor*)**

Moderately common; groups of up to 3 birds. Recorded in paddocks near reserve in March, April, September, October and in November 1972. Adults with 3 young just able to fly on 4 November.

**Greenshank (*Tringa nebularia*)**

Scarce; one at large dam 0.5 km west of reserve in November.

**Laughing Dove (*Streptopelia senegalensis*)**

Scarce; several in Kununoppin in March and April.

**Domestic Pigeon (*Columbia livia*)**

Scarce; group of ca 10 birds in woodland road verge west of reserve in October and in November 1974. On 21 November a pair was apparently nesting in a hollow Salmon Gum.

**Common Bronzewing (*Phaps chalcoptera*)**

Moderately common; singly or up to 4 together. Woodland, mallee, shrubland, heath, lithic complex and paddocks. Recorded on all visits. Most were seen coming out of the reserve into wheat paddocks or stubble at dusk. Recorded in loc. 1.1, 1.2, 1.7, 1.8, 2.2, 2.4, 2.5, 2.8, 3.2, 3.7, 3.12 and in several places in lithic complex.

**Crested Pigeon (*Ocyphaps lophotes*)**

Uncommon; singly or up to 4 together. Woodland, mallee, shrubland, heath and edges of paddocks. Mostly on edges of reserve, rarely penetrating far into it. Recorded in loc. 2.1 in March, in loc. 1.8, 3.10 and 4.3 in September, and loc. 2.5, 3.2 and 4.1 in November 1972.

**Ring-necked Parrot (*Platycercus zonarius*)**

Common; pairs or groups of up to 10 birds. Woodland, mallee and paddocks, occasionally passing through shrubland, heath and lithic complex. Recorded in all woodland and mallee locations on each visit. Most abundant in Salmon Gum, Gimlet (*Eucalyptus salubris*) and Wandoo (*E. wandoo*) woodlands, less frequent in mallee and York Gum (*E. loxophleba*) woodland. Many pairs investigating nesting hollows in loc. 1.1, 1.2, 1.4, 1.5, 1.6, 1.8 and woodland in loc. 2.8 in April. Pair with 2 young only just able to fly in loc. 1.1 on 5 November 1972.

**Western Rosella (*Platycercus icterotis*)**

Scarce; 2 in loc. 1.1 in May.

**Mulga Parrot (*Platycercus varius*)**

Moderately common; in groups of 2-18 birds. Woodland, mallee, shrubland and paddocks. Recorded on all visits, mainly in the same areas. Greatest concentration was in loc. 1.1, 1.2, 2.1 and 3.1. Also recorded in loc. 1.4, 1.7, 1.8, 2.4, 2.5, 2.8, 2.9 and 3.7. Young birds only just able to fly in loc. 1.4 on 4 November 1972. Feeding on introduced grasses in loc. 1.2 and on seed-heads of *Ptilotus gaudichaudii* in loc. 2.1 in November. Feeding on grain of standing wheat in October.

**Elegant Parrot (*Neophema elegans*)**

Uncommon; single birds or 2 together. Paddocks and overhead. Recorded in April, May and October.

**Cockatiel (*Nymphicus hollandicus*)**

Scarce; 1 in loc. 1.8 in November 1972.

**Red-tailed Black Cockatoo (*Calyptrorhynchus magnificus*)**

Uncommon, 4 groups of 4-10 birds in loc. 1.8 and near Kununoppin in March.

**Galah (*Cacatua roseicapilla*)**

Common; mainly pairs or small groups. When feeding in paddocks they aggregate into groups of up to 50 birds and at Kununoppin groups of up to 150 feed on spilt wheat along the railway. Woodland, and mallee with patches of woodland. Recorded on all visits in all woodlands and loc. 2.4, 2.5, 2.8, 2.9 and 2.11. At nest hollows in loc. 1.1 in May, loc. 1.2 in September and loc. 1.7 and 1.8 in November 1972.

**Pallid Cuckoo (*Cuculus pallidus*)**

Uncommon; single birds. Woodland, mallee, shrubland, lithic complex and road verges. Recorded in April in loc. 1.8, September in loc. 1.7, 2.4 and 3.16, October in road verges and in November 1972 in loc. 5.1.

**Black-eared Cuckoo (*Chrysococcyx osculans*)**

Scarce; single birds. Mallee and heath. In loc. 2.10 in October and loc. 4.3 in November 1972.

**Horsfield's Bronze Cuckoo (*Chrysococcyx basalis*)**

Uncommon; single birds. Shrubland and lithic complex. In loc. 3.9 in September, loc. 3.1 in November 1972 and at Waddourring Hill in November 1972.

**Barn Owl (*Tyto alba*)**

Old roost site in dead Salmon Gum in loc. 2.4.

**Boobook Owl (*Ninox novaeseelandiae*)**

Scarce; single birds calling in loc. 1.8 and W1 in November 1972.

**Tawny Frogmouth (*Podargus strigoides*)**

Uncommon; single birds. Mallee. In loc. 2.1 in April, in loc. 2.4 in September, in loc. 2.7 in October, and in loc. 2.4 in November 1972.

**Australian Owlet-nightjar (*Aegotheles cristatus*)**

Moderately common; calling at night. Woodland and mallee. Recorded on all visits. In loc. 1.7, 1.8, W1, 2.4 and 2.9.

**Spotted Nightjar (*Eurostopodus guttatus*)**

Scarce; 1 in loc. 1.1 at dusk in March.

**Red-rumped Kingfisher (*Halcyon pyrrhopygia*)**

Scarce; single birds. Woodland and mallee. In loc. 1.1 in September and loc. 2.4 in October.

**Sacred Kingfisher (*Halcyon sancta*)**

Scarce; single bird in woodland. In loc. 1.1 in November 1974.

**Rainbow Bee-eater (*Merops ornatus*)**

Moderately common in spring; mainly pairs. Woodland, mallee and overhead. In loc. 1.1, 1.2 and 2.5 in October/November 1972 and loc. 1.1 and 2.4 in November 1974. Fairly frequent overhead in November 1972. Nest burrow in loc. 1.2 on 1 November 1972 was robbed by a Mulga Snake (*Pseudechis australis*). Freshly excavated nest burrow on edge of gravel pit in loc. 2.5 on 31 October.

**Welcome Swallow (*Hirundo neoxena*)**

Uncommon; groups of up to 6 birds in Kununoppin in October and March.

**Tree Martin (*Hirundo nigricans*)**

Moderately common; groups of up to 10 birds. Woodland, mallee and overhead. Three sightings in April, 2 in May, 1 in September, 3 in October, 5 in November 1972 and 2 in November 1974. Earliest sighting was 1 April and latest 21 November.

**Fairy Martin (*Hirundo ariel*)**

Twenty-two very old nests under granite ledge in November 1972.

**Richard's Pipit (*Anthus novaeseelandiae*)**

Common; singly or in groups of up to 6 birds in paddocks and grassy margins of reserve. Recorded on all visits.

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

Moderately common; mainly singly, occasionally in groups of up to 6 birds flying south in September and November. Woodland, mallee and overhead.

Total of 2 in April, 21 in September, 6 in November 1972 and 7 in November 1974. Recorded in loc. 1.1, 1.4, 1.5, 1.8, 2.5, 2.7 and 2.12.

**White-winged Triller (*Lalage sueurii*)**

Moderately common in October/November 1972, uncommon in September. Singly or groups of up to 6 birds. Woodland, mallee, heath, lithic complex and road verges. In loc. 1.1, 1.8, 2.4, 2.9, 2.10 and 5.1. Twenty-four birds in October/November and 3 in September.

**Brown Flycatcher (*Microeca leucophaea*)**

Scarce; 2 on edge of loc. 1.8 in April.

**Red-capped Robin (*Petroica goodenovii*)**

Common; single birds or pairs. Woodland, mallee, shrubland, heath and lithic complex. Recorded on all visits. In loc. 1.2, 1.4, 1.5, 1.7, 1.8, W1, 2.1, 2.4, 2.8, 2.10, 3.5, 3.14, 4.3 and 5.1. Young birds near empty nest 1 m from ground in *Acacia tetragonophylla* in loc. 3.14 on 4 September. Empty nest in Sandalwood (*Santalum spicatum*) in loc. 2.10 on 2 September. Male chasing a Pallid Cuckoo (*Cuculus pallidus*) on 31 October, 2 males engaged in territorial fighting display on 4 April.

**Yellow Robin (*Eopsaltria australis*)**

Scarce, single birds. In mallee on edge of loc. 2.4 in November 1972 and under *Calycopeplus helmsii* in ecotone between loc. 1.1 and 4.3 in November 1974.

**Golden Whistler (*Pachycephala pectoralis*)**

Uncommon; single birds or pairs. Mallee, shrubland, heath and lithic complex. One sighting in March, 1 in April, 1 in September, 3 in October and 5 in November. In loc. 2.4, 3.7, 4.3, 5.1 and 5.2. Favours dense thickets particularly in areas of high runoff from granite.

**Rufous Whistler (*Pachycephala rufiventris*)**

Moderately common; single birds or pairs. Woodland, mallee and lithic complex, occasionally in shrubland. Recorded on all visits. In loc. 1.1, 1.2, 1.3, 1.4, 1.5, 1.7, W1, 2.1, 2.3, 2.4, 2.5, 2.8, 2.9, 2.10, 3.13, 3.14 and 5.1.

**Grey Shrike-thrush (*Colluricincla harmonica*)**

Common; single birds or pairs. Woodland, mallee, shrubland, heath and lithic complex. Recorded on all visits. In loc. 1.1, 1.3, 1.5, 1.6, 1.7, 1.8, 2.1, 2.4, 2.5, 2.7, 2.9, 3.1, 3.5, 3.13, 3.14, 4.3, 5.1 and numerous throughout lithic complex. Also recorded at Waddourring Hill.

**Crested Bellbird (*Oreoica gutturalis*)**

Moderately common; single birds or pairs. Mallee, shrubland, heath and lithic complex. Recorded on all visits. In loc. 2.9, 3.1, 3.4, 3.13, 3.14, 4.3 and throughout lithic complex. Nest with 2 eggs in *Casuarina campestris* 1 m from ground in loc. 3.14 on 2 September. Nest with 2 eggs in *Melaleuca* 1.2 m from ground at Waddouring Hill on 2 November 1972.

**Grey Fantail (*Rhipidura fuliginosa*)**

Moderately common in September and May, not recorded on other visits. Single birds or 2 together. Mallee, shrubland and lithic complex. In loc. 1.1, 1.2, 1.4, 2.1, 2.4 and 3.2 in May and loc. 1.6, 1.8, 2.4, 2.7, 2.9, 3.2, 3.3, 3.7, 3.14 and 5.2 in September.

**Willie Wagtail (*Rhipidura leucophrys*)**

Moderately common; single birds, occasionally 2 together. Woodland, mallee, shrubland, heath and lithic complex. In loc. 1.8 and 2.1 in March; in loc. 1.7, 1.8 and 3.2 in April; in loc. 3.2 in May; in loc. 4.3 and 5.2 in September; in loc. W1 and 2.10 in October; in loc. 1.7, W1, 4.3 and 5.1 in November 1972; and in loc. 2.4 in November 1974.

**Chestnut Quail-thrush (*Cinclosoma castanotum*)**

Uncommon; single birds or 2 together. Mallee, shrubland, heath and lithic complex. In loc. 3.2 in April; in loc. 4.1 in May; in loc. 2.1, 5.1 and 5.2 in September.

**Southern Scrub-robin (*Drymodes brunneopygius*)**

Moderately common; mainly 2 together. Throughout lithic complex in patches of shrubland and heath; also in shrubland in loc. 3.1.

**White-browed Babbler (*Pomatostomus superciliosus*)**

Moderately common; groups of 2-5 birds. Shrubland, heath and lithic complex, occasionally in woodland especially near edges of shrubland. In loc. 3.1 and 4.3 in March; in loc. 3.13, 4.3 and lithic complex in April; in loc. 3.1 in May; in loc. 1.1, 1.3, 3.14, 3.16 and lithic complex in September; in loc. 5.1 in October; in loc. 1.4, 3.1, 4.3, 5.1 and other lithic complex in November 1972; and in loc. 4.3 and 5.1 in November 1974. Old nests in loc. 1.3, 3.2, 3.5, 3.14, 3.16 and 4.3. Old nests were in *Acacia tetragonaphylla* (8), *Calycopeplus helmsii* (5), *Casuarina campestris* ♀ (1), *Hakea recurva* (1), and *Melaleuca uncinata* (2).

**Western Flyeater (*Gerygone fusca*)**

Uncommon; 1 in loc. 3.1 in April and 1 in mallee road verge 0.5 km north of reserve in May.



**Weebill (*Smicrornis brevirostris*)**

Common; groups of 2-6 birds. Woodland, mallee and shrubland with eucalypts. In all woodland and mallee associations each time they were visited. Adults feeding young on 2 April and 4 April. Recorded in loc. 1.1, 1.2, 1.4, 1.5, 1.6, 1.7, 1.8, 2.1, 2.3, 2.4, 2.5, 2.6, 2.7, 2.8, 2.9, 2.10, 3.11, 3.13 and 3.16.

**Broad-tailed Thornbill (*Acanthiza apicalis*)**

Moderately common; single birds or 2 together. Woodland, mallee, shrubland, heath and lithic complex. In loc. 3.16 and 4.3 in March; in loc. 1.7 and 3.7 in April; in loc. 2.4 and 3.2 in May; in loc. 2.9, 3.1, 3.2, 3.5, 3.7, 4.1, 4.3 and lithic complex in September; in loc. 2.10 in October; in loc. 2.1, 3.1, 4.3 and lithic complex in November 1972; and in loc. 3.1 and 3.14 in November 1974.

**Chestnut-rumped Thornbill (*Acanthiza uropygialis*)**

Common; groups of 2-6 birds. Woodland, mallee, shrubland and lithic complex. Recorded in loc. 1.1, 1.2, 1.5, 1.6, 1.7, 1.8, 2.6, 2.7, 3.1, 3.3, 3.5, 3.13, 3.14, 3.16, 4.3 and several times in lithic complex. Adults feeding young at Waddouring Hill on 2 November 1972.

**Yellow-rumped Thornbill (*Acanthiza chrysorrhoa*)**

Common; groups of 2-5 birds. Woodland, mallee, shrubland and lithic complex. Recorded in loc. 1.1, 1.2, 1.6, 1.7, 1.8, W1, 2.1, 2.2, 2.4, 2.5, 2.9, 3.1, 3.2, 3.3, 3.5, 3.7, 3.14, 3.16, and 5.1. Nest with 3 large young in *Acacia colletioides* 1.5 m from ground in W1 on 2 September; nest with 4 eggs in *Billardiera* growing on York Gum 2 m from ground in loc. 3.3 on 2 September, 2 adults at nest built into base of raptore nest in Salmon Gum 18 m from ground in loc. 1.6 on 4 September, 4 adults at nest in mallee in loc. 2.1 on 31 March, group with young in loc. 1.1 on 21 November 1973.

**Redthroat (*Pyrholaemus brunneus*)**

Common; singly or groups of up to 4 birds, occasionally up to 9 together. Woodland, mallee, shrubland, heath and lithic complex. Recorded in loc. 1.1, 2.1, 2.5, 3.1, 3.2, 3.4, 3.7, 3.10, 3.11, 3.13, 3.14, 4.3 and several places in lithic complex. Pair feeding 2 young at Waddouring Hill on 2 November 1972.

**Blue-breasted Fairy-wren (*Malurus pulcherrimus*)**

Uncommon; groups of 2-4 birds. Woodland, mallee, shrubland, heath and lithic complex, mainly in dense thickets. Recorded in loc. 4.3 in March; in loc. 3.7 in April; in loc. 1.3 and 5.2 in September; in loc. 5.1 in October; in

loc. 2.4, 3.1, 3.7, 4.3 and 5.1 in November 1972; and in loc. 3.7 in November 1974.

**Brown Songlark (*Cincloramphus cruralis*)**

Uncommon; several displaying over paddocks in October and November 1972.

**Australian Sittella (*Daphoenositta chrysoptera*)**

Scarce; group of 4 birds in loc. 2.10 in September. Prey of Little Falcon in loc. 1.6 in September.

**Mistletoe-bird (*Dicaeum hirundinaceum*)**

Uncommon; single birds. Three sightings in April, 1 in September and 2 in November 1972. *Amyema miquelii* is fairly abundant on the reserve, growing on Salmon Gums, Wandoo (*Eucalyptus wandoo*) and Quondong (*Santalum acuminatum*). It was in fruit in April and September and had flowers in April.

**Striated Pardalote (*Pardalotus striatus*)**

Common; groups of 2-10 birds. Woodland, mallee and overhead. Flocks giving migratory calls and flying north or north-east in March, south in September, and south and west in October and November. Feeding in eucalypts in April, May, September and November. Recorded in loc. 1.1, 1.2, 1.5, 1.8, W1, 2.1, 2.4, 2.5, 2.7, 2.9, 2.10 and 3.16.

**Brown Honeyeater (*Lichmera indistincta*)**

Common in May, September and November, scarce in April. No records in March. Woodland, mallee, shrubland, heath and lithic complex. Probably commonest bird in reserve in October/November, mainly in shrublands and feeding on flowers of *Calothamnus asper* at base of granite. Common in lithic complex and feeding on flowers of *Hakea petiolaris* in May. Only 5 birds recorded in April when they were feeding on flowers of *Amyema miquelii* growing on Salmon Gums and Quondongs. Recorded in loc. 1.5 and 5.1 in April; in loc. 2.4 and throughout lithic complex in May; in loc. 1.3, 2.4, 2.5, 2.10, 3.3, 3.7, 3.9, 3.10, 3.16 and throughout lithic complex in September; in loc. 1.1, 1.3, 2.10, 4.3 and throughout lithic complex in October/November 1972; in loc. 3.9, 3.10, 3.11, 4.3 and throughout lithic complex in November 1974. Recorded at Waddouring Hill in November 1972.

**Black Honeyeater (*Certhionyx niger*)**

Scarce; pair at Waddouring Hill feeding on flowering *Calothamnus asper* on 2 November 1972.

**Singing Honeyeater (*Meliphaga virescens*)**

Moderately common; single birds or 2 together, sometimes aggregating to feed on flowers of *Calothamnus asper* and *Leptospermum erubescens*. Woodland, mallee, shrubland, heath and lithic complex. Recorded in loc. 4.3 and in lithic complex in March; in loc. 1.1, 1.5, 1.7, 1.8, 2.8, 3.1, 4.3 and lithic complex in April; in loc. 1.1, 2.4, 2.5, 3.1 and lithic complex in May; in loc. 1.3, 1.7, 2.9, 2.10, 3.3, 3.5, 3.7, 3.10, 3.13, 3.14 and lithic complex in September; in loc. 4.3 and in lithic complex in October/November 1972; and in lithic complex in November 1974.

**White-eared Honeyeater (*Meliphaga leucotis*)**

Common; single birds or 2 together, occasionally aggregating to feed in flowering *Hakea petiolaris*. Woodland, mallee, shrubland, heath and lithic complex. Recorded in loc. 1.7 and 1.8 in March; in loc. 1.1, 1.5, 1.7, 1.8, 2.1 and 2.8 in April; in loc. 1.1, 1.2, 2.4, 2.5 and in lithic complex in flowering *H. petiolaris* in May; in loc. 1.2, 1.5 and 2.4 in September; and in loc. 2.1, 2.4, 2.5, 3.1, 3.5, 4.3 and lithic complex in October/November 1972. Nest with 2 small downy young in *Casuarina campestris* 1.7 m from ground in loc. 3.5 on 4 November; young birds barely flying in loc. 2.4 on 3 November.

**Brown-headed Honeyeater (*Melithreptus brevirostris*)**

Moderately common; pairs in September and November and groups of 4-6 birds in March, April, May and November. Woodland, mallee, shrubland and lithic complex. Recorded in loc. 1.7 and 3.16 in March; in loc. 1.7, 1.8, 2.1 and lithic complex in April; in loc. 2.4 in May; in loc. 1.3, 1.8 and 3.3 in September; and in loc. 1.1, 2.4 and 2.8 in November 1972.

**White-fronted Honeyeater (*Phylidonyris albifrons*)**

Moderately common in September and November; groups of 2-5 birds. Heath and lithic complex. Feeding in *Calothamnus asper* throughout lithic complex in September and in November 1972. Common at Waddourring Hill in November 1972 feeding in flowering *C. asper* and *Leptospermum erubescens*.

**Yellow-throated Miner (*Manorina flavigula*)**

Uncommon; groups of 2-10 birds. Woodland, mallee, and farmland. No records in March/April. Recorded in loc. 1.8, 2.4, 2.5 and farmland in May; in loc. 1.4, 1.6, 1.8, 2.10 and farmland in September; in loc. 1.1, 1.2 and farmland in October/November 1972.

**Spiny-cheeked Honeyeater (*Acanthagenys rufogularis*)**

Scarce; single birds in loc. 1.1, 2.9, 3.14 and 4.3 in September.

**Red Wattlebird (*Anthochaera carunculata*)**

Uncommon; single birds or groups of up to 8 (in May). Woodland and mallee. Recorded in loc. 1.8 in April; in loc. 1.1 and 2.4 in May; in loc. 1.1 and 2.1 in November 1972; and in loc. 2.1 in November 1974.

**White-fronted Chat (*Epthianura albifrons*)**

Moderately common; groups of 2-7 birds. Paddocks and grassy margins of reserve. Recorded in April, May, September and November.

**Zebra Finch (*Poephila guttata*)**

Uncommon; 10 on roadside 1 km west of reserve and 10 at dam 2 km south-west of reserve in May; 4 in paddock 4 km south-west of reserve in April.

**Magpie-lark (*Grallina cyanoleuca*)**

Uncommon; single birds or groups of up to 4. Paddocks, particularly in vicinity of dams. Recorded on all visits.

**Dusky Wood-swallow (*Artamus cyanopterus*)**

Scarce; 9 flying north over loc. 1.8 on 4 April.

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

Uncommon; singly or groups of up to 6 birds in paddocks in April and in October/November 1972.

**Grey Butcherbird (*Cracticus torquatus*)**

Uncommon; single birds or pairs. Woodland and mallee. Recorded in loc. 1.8 in March, 1.7, 1.8 and 2.4 in April, 2.4 in May, 1.8 and 2.9 in September, 1.1, 1.4, 1.8, W1 and 2.4 in October/November 1972, and in 2.4 in November 1974.

**Pied Butcherbird (*Cracticus nigrogularis*)**

Uncommon; single birds or pairs. Woodland, mallee and paddocks. Recorded in loc. 1.2, 1.8 and 2.10 in March, 1.8 and 2.8 in April, 1.4 and 1.8 in September, and 2.9 in October.

**Magpie (*Cracticus tibicen*)**

Moderately common; groups of 2-5 birds. Woodland, mallee and paddocks. Recorded approximately in same places each time the reserve was visited. In loc. 1.1, 1.4, 1.8, W1 and 2.4. Most sightings were in paddocks in vicinity of trees.

### Grey Currawong (*Strepera versicolor*)

Uncommon; single birds or 2 together. Woodland, mallee and lithic complex. Recorded in loc. 2.1 in March, 2.4 in April, 1.2, 1.6, 1.8 and 3.14 in September, 1.1, 1.2, 1.4, 2.5 and lithic complex in October/November 1972, and in lithic complex in November 1974. Young birds just able to fly in loc. 1.4 on 4 November 1972.

### Little Crow (*Corvus bennetti*)

Moderately common; single or in groups of up to 41. Woodland, mallee and overhead. Passage migrant in April/May and October/November and probably a small local resident population. Pairs in loc. 1.1 in March, 1.8 in April, 2.5 in May, and 1.3, 1.7, 1.8 and 2.5 in October/November 1972. Nest with young in Salmon Gum 12 m from ground in loc. 2.5 on 6 November 1972; female bird collected. Seven groups of 4-35 birds flying north or northeast in April, 1 group in May, and 7 groups of 5-41 birds flying south in October/November 1972.

### Australian Raven (*Corvus coronoides*)

Common; pairs or groups of up to 8 birds. Woodland, mallee, farmland and overhead. Recorded in all woodlands and most mallee associations each time they were visited. Pair at nest in Salmon Gum in loc. 1.5 on 2 September, pair with 1 young barely flying on 2 September, young bird barely flying in loc. 1.1 on 21 November 1974.

## DISCUSSION

The biological survey of Billyacatting Hill Nature Reserve recorded 89 species of birds. Of these, 15 were recorded only in farmland, 1 only at Waddouring Hill Reserve 14 km north-west of Billyacatting Hill, and 2 were only noted by the presence of old nests and an old roosting site. The total of 71 species on the reserve is comparable to that recorded for reserves in the central wheatbelt (Dell 1978, 1980).

Billyacatting Hill Nature Reserve provides very diverse habitat for birds. Muir (this report) indicates the area and percentage of vegetation in each of the five formations present. The 162 ha of woodland are especially important as about 10% of trees are senescent (Muir this report), thus providing a large number of hollows for nesting birds. Seven species of psittacids were recorded; except for Cockatiel and Red-tailed Black Cockatoo, all probably nest on the reserve. Other birds which are known to utilize hollows for either roosting or nesting include Wood Duck, Mountain Duck, Australian Kestrel, Common Bronzewing, Barn Owl, Boobook Owl, Australian Owlet-nightjar, Sacred Kingfisher, Tree Martin, Grey Shrike-thrush, Chestnut-rumped

Thornbill, and Striated Pardalote. These were all recorded either in the reserve or nearby and are likely to utilize the reserve for nesting.

Many hawks in the wheatbelt nest in woodlands. Billyacatting Hill Nature Reserve is noteworthy in that 11 species were recorded in the reserve or nearby. Of these, Brown Goshawk, Little Eagle, Little Falcon and Brown Falcon were recorded breeding; no doubt some of the others breed there also.

The large area of lithic complex (1370 ha or 66.1%, Muir this report) provides habitat for a large number of passerine birds. This part of the reserve is heavily dissected with densely vegetated gullies and patches of shrubland and heath throughout. The varying density of this vegetation and the sharp edges between shrubland and bare rock could be important to some bird species. Small passerines found in this type of vegetation included Red-capped Robin, Yellow Robin, Golden Whistler, Rufous Whistler, Grey Shrike-thrush, Crested Bellbird, Grey Fantail, Willie Wagtail, Chestnut Quail-thrush, Southern Scrub-robin, White-browed Babbler, Broad-tailed Thornbill, Chestnut-rumped Thornbill, Yellow-rumped Thornbill, Red-throat, Blue-breasted Fairy-wren, and 5 species of honeyeater. Of these, the Yellow Robin and Chestnut Quail-thrush have declined markedly in the wheatbelt.

Of the 25 species for which nesting data were recorded, 23 were breeding in spring; two psittacids — Ring-necked Parrot and Galah — were occupying nesting hollows in autumn as well as breeding in spring. Only old nests of the Fairy Martin and White-browed Babbler were found.