

IV BIRDS OF BUNTINE AND NUGADONG RESERVES

JOHN DELL

INTRODUCTION

Birds were recorded on Nugadong Nature Reserve (**NR**), East Nugadong Nature Reserve (**ENR**), Nugadong Forest Reserve (**NFR**) and Buntine Nature and Buntine Water Reserves (**BUR**) as part of an integrated survey of the birds of the Western Australian wheatbelt involving 25 Reserves (Kitchener 1976). The results from 10 of these reserves have already been published (previously published reports are listed in Dell (1979a). Data were obtained by me except where otherwise indicated. Dates of the bird survey are 9-22 June 1975 (G. Harold) 27 April-4 May 1976, and 15-21 November 1976 for **NR**, **ENR**, and **NFR**; and 27 August-6 September 1972 (R.E. Johnstone), 17-25 May 1973 and 12-16 July 1977 for **BUR**. A brief visit was made to **NR** on 16 July 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 loc. 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 for 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 wheatbelt in evaluating its status. Nomenclature follows Storr (1979).

ANNOTATED LIST

Emu (*Dromaius novaehollandiae*)

Scarce; woodland, mallee, shrubland, heath, and farm paddocks. One to 3 birds or footprints and faeces.

ENR: November—wheat paddocks near loc. 3.13.

BUR: May—loc. 3.52, 4.19 (adult with 2 young), paddock; July—loc. 2.1, 4.16; August—loc. 1.5, firebreak.

Pacific Heron (*Ardea pacifica*)

Uncommon, part of winter irruption in 1975 (Dell 1979c); roadside pools and paddocks. Flock of 26 flying southeast over **NR** on 15 June. Seven sightings of 1-4 birds in paddocks and along roads. One sleeping in mallee in road-verge at night.

Mountain Duck (*Tadorna tadornoides*)

Uncommon; woodland and paddocks, especially near dams. Mainly 2-4 birds, occasionally groups of up to 30 birds.

NR: June—loc. 1.3 (ca 30 birds), wheat paddocks.

BUR: May—loc. 1.5, 1.9, paddocks; July—loc. 1.5 (11 birds), paddocks; August—loc. 1.5, 1.6. Nest with 10 eggs, 6.5 m up Salmon Gum (*Eucalyptus salmonophloia*) in hollow 25 cm wide in loc. 1.5 on 30 August.

Wood Duck (*Chenonetta jubata*)

Uncommon; woodland, farm dams. Mainly groups of 10-15 birds. Groups of up to 18 birds on saltlakes northeast of **ENR**.

NR: June—farm dam near loc. 1.1

ENR: June—farm dam near loc. 3.18

BUR: September—loc. 1.5, 1.8. Nest with 10 eggs 5 m up dead gum tree in loc. 1.8 on 2 September.

Black-shouldered Kite (*Elanus caeruleus*)

Scarce; overhead and paddocks. June 1 over **NFR**, 1 and 2 in paddocks near **ENR**.

Whistling Kite (*Haliastur sphenurus*)

Uncommon; mostly overhead, occasionally in woodland. Mostly single, occasionally 2 or 3.

NR: April—loc. 1.3, 2.4; June—paddock; November—loc. 1.3.

NFR: June—loc. 1.2.

BUR: May—paddock; August—loc. 1.5 (3 birds); September—loc. 1.5

Brown Goshawk (*Accipiter fasciatus*)

Scarce; 1 in Gimlet (*Eucalyptus salubris*) in paddock east of **ENR** in June.

Collared Sparrowhawk (*Accipiter cirrocephalus*)

Scarce; 1 (presumably male) in loc. 1.3 on **NR** in November.

Wedge-tailed Eagle (*Aquila audax*)

Uncommon; woodland, mallee and overhead. Mostly single, occasionally 2 together.

NR: April—loc. 1.3; June—loc. 1.3. Nest in Gimlet tree in loc. 2.2 in May; nests in York Gums (*Eucalyptus loxophleba*) in loc. 1.2 and 1.4 in June.

ENR: April—loc. 2.9, paddock.

NFR: June—loc. 5.2. Nest in Gimlet tree in loc. 1.5 in May.

BUR: May—loc. 1.5; July—loc. 2.2, 4.2, paddock. Nest in Gimlet tree in small woodland near loc. 2.25; August—loc. 1.5, 1.8, 5.2. Bird on nest in Gimlet tree in loc. 1.5 on 27 August; nest with 2 eggs in Salmon Gum in loc. 1.8 on 27 August.

BUR: May—loc. 4.22.

Little Eagle (*Aquila morphnoides*)

Scarce; overhead. One seen twice at **NR** in June; 2 in May and 1 in July at **BUR**.

Brown Falcon (*Falco berigora*)

Uncommon; woodland, shrubland, heath and paddocks. Mostly single, occasionally 2 together.

NR: April—loc. 1.5; June—loc. 1.3, paddocks.

ENR: May—loc. 3.2, paddock; November—loc. 4.1

BUR: May—loc. 4.22.

Little Falcon (*Falco longipennis*)

Uncommon; woodland, heath and paddock. Single birds.

BUR: May—loc. 1.9; August—loc. 1.5, 1.6, 4.19 and paddock. Catching insects in the air over loc. 4.19 on 27 August.

Peregrine Falcon (*Falco peregrinus*)

Scarce; woodland, heath and overhead. Single birds.

BUR: May—loc. 4.17; July—loc. 1.5, 2.8.

Nankeen Kestrel (*Falco cenchroides*)

Generally uncommon; moderately common in June 1975 when *Mus musculus* was fairly abundant (Kitchener & Chapman, this report). Woodland, shrubland, and paddocks. Usually single; pairs in August and September. Total of 4 in vicinity of Nugadong reserves in June.

ENR: June—loc. 4.1, November—loc. 3.20.

BUR: August—loc. 1.5, (1 alighted on Raven nest); September—loc. 1.9 and near railway siding.

Mallee Fowl (*Leipoa ocellata*)

Uncommon; woodland, mallee, shrubland, heath, and paddocks. Single birds or 2 together. Birds going into stubble paddocks at 1630 and 1710 hrs in April.

NR: April—loc. 1.2, 1.5, 4.1; June—recently worked nest in loc. 2.2; November—loc. 3.3.

ENR: May—loc. 4.9.

NFR: May—recently worked nest in loc. 3.1; June—recently worked nest in loc. 3.1; November—inactive nest in loc. 3.1.

BUR: August—old nest in loc. 1.5; September—1 crossing road.

Black-tailed Native Hen (*Gallinula ventralis*)

Scarce; winter irruption in 1975 (Dell 1979c). One near dam near southwest corner of **ENR** in June.

Banded Plover (*Vanellus tricolor*)

Uncommon; woodland and paddocks. Usually in flocks of 2-5 birds in paddocks during daytime, calling overhead at night. In loc. 1.1 on **NR** in June. Recorded in paddocks near **NR** and **ENR** in April, May, June and November, and near **BUR** in July and August.

Domestic Pigeon (*Columba livia*)

Scarce; ca 10 at Buntine railway siding in May.

Laughing Dove (*Streptopelia senegalensis*)

Scarce; ca 3 at Buntine railway siding in May and July, 1 in paddock east of **BUR** in July (nearest homestead 2-3 km away).

Common Bronzewing (*Phaps chalcoptera*)

Moderately common (**NR**, **ENR**, **NFR**); common (**BUR**). Woodland, mallee, shrubland, and heath. Mostly single or pairs, sometimes groups of up to 10 gather to feed on split wheat along roads.

NR: April—loc. 1.2, 1.3, 2.2, 4.1; May—loc. 3.8.

ENR: June—margins of paddocks; November—bird incubating 1 egg 2 m up York Gum in loc. 2.10

NFR: June—loc. 3.9; November—loc. 5.2

BUR: May—birds gathering to drink at pools on granite in loc. 5.2 during evening; July—loc. 1.6, 2.3, 2.12, 2.30, 3.15, 3.18, 4.6. Bird incubating 2 eggs in

York Gum spout in loc. 2.3 on 12 July; August—loc. 1.5, 1.8, 2.3, 3.32.
Bird incubating 2 eggs in Salmon Gum on 27 August.

Crested Pigeon (*Ocyphaps lophotes*)

Common; woodland, mallee, shrubland, heath and paddocks. Usually 1-3 birds, occasionally groups of up to 9. Mainly edges of reserves or along roads and firebreaks.

NR: April—loc. 4.1; June—loc. 2.6; November—loc. 3.3.

ENR: April—loc. 3.18; May—loc. 3.20; June—loc. 3.2, paddocks; November—loc. 3.3, 3.21, 4.6, paddocks.

BUR: May—loc. 3.41, 3.42, 3.53, 4.19, paddocks; July—loc. 3.23, 3.25, 3.33, 3.49, 4.5, 4.7; August—loc. 1.5, 3.6, 3.32, 3.40, 5.2, paddocks. Bird incubating 1 egg in nest in mallee (*Eucalyptus drummondii*) in loc. 3.25 on 12 July, old nest in *Hakea coriacea* in road-verge east of Reserve in July.

Ring-necked Parrot (*Platycercus zonarius*)

Moderately common; mainly woodland, feeding in paddocks, also feeding in mallee, shrubland, and heath. Usually in groups of up to 10 birds, rarely singly. Most birds were in woodland on **NR**, **NFR**, and **BUR**; scarce on **ENR** which has no woodland.

NR: April—loc. 1.2, 1.3, 4.1; May—loc. 4.2; June—loc. 1.1; July—loc. 1.3; November—loc. 1.5.

ENR: April—loc. 2.9, 2.10; May—loc. 3.3; June loc. 4.6; November—loc. 2.10, 4.13, 4.16.

NFR: May—loc. 1.4; June—loc. 1.2; November—loc. 1.5, 2.6.

BUR: May—loc. 1.5, 1.8, 1.9, 3.52; July—loc. 1.3, 1.4, 1.5, 1.7, 1.8, 2.2, 2.25, 3.29, 3.39, 3.49, 5.1; August—loc. 1.5, 1.7, 1.8, 1.9, 2.3, 2.27, 5.2. Most birds in loc. 1.7, 1.8, 1.9 were nesting in August.

Mulga Parrot (*Platycercus varius*)

Uncommon; woodland, mallee, and shrubland. In groups of 2-8 birds.

NR: April—loc. 1.3, 1.5; November—loc. 2.6.

ENR: April—loc. 2.7, 2.9; June—firebreaks; November—loc. 3.13, 3.18.

NFR: May—loc. 1.4; June—loc. 1.4.

BUR: July—loc. 3.9; August—loc. 1.9.

Elegant Parrot (*Neophema elegans*)

Scarce; 1 among *Borya nitida* on granite in **BUR** loc. 5.4 in May.

Carnaby's Cockatoo (*Calyptorhynchus latirostris*)

Scarce; 2 flying through **NR** loc. 1.3 in June.

Red-tailed Black Cockatoo (*Calyptorhynchus magnificus*)

Uncommon; woodland, paddocks, and overhead. One to 3 birds per group in August/November; groups of up to 20 birds in May/June.

NR: November—loc. 1.3.

ENR: June—paddocks.

BUR: May—loc. 1.5, 1.9; August—overhead; September—loc. 1.5.

Galah (*Cacatua roseicapilla*)

Common; woodland. Feeds mainly in paddocks and on split wheat along roads and railway. Pairs, or groups of up to 70 birds especially when feeding.

NR: April—loc. 1.3; May—loc. 1.5; June—loc. 1.1, 1.3; November—loc. 1.3.

ENR: June—paddocks.

NFR: May—loc. 1.1, 1.4, 1.5; November—loc. 1.5.

BUR: May—loc. 1.5, 1.8, 1.9; July—loc. 1.7; August—loc. 1.5, 1.6, 1.7, 1.8, 1.9; September—loc. 1.2, 1.5, 1.9. In August most birds in woodland on **BUR** were nesting. Some were carrying green leaves into hollows, others had clearly discernable brood patches. On 2 September there were 15 active nests in loc. 1.5. Nest with 2 eggs in dead Salmon Gum in loc. 1.9 on 2 September. Nest with 2 eggs in Salmon Gum in loc. 1.5 on 27 August. Bird sitting outside nest spout while another was inside in loc. 1.9 on 14 July. In July most of the population was away from **BUR**, flocks of *ca* 50, *ca* 70, 2, 4, 7, 4, 7, 4, 30, 25, 8, 2, 2, 6, and *ca* 25 were in paddocks.

ENR has no woodland and accordingly no nest sites. **NR** has limited areas of suitable York Gums, whereas **NFR** has a fairly large breeding population in Salmon Gum/Gimlet woodland. Areas of woodland *ca* 20 km north of **ENR** supports a large breeding population.

Corella (*Cacatua tenuirostris*)

Scarce; woodland. Between 2-7 birds in **BUR** loc. 1.9 in May, loc. 1.3 in July, and loc. 1.5, 1.9 in August/September. Pair at nest hollow in loc. 1.5 in September.

Pallid Cuckoo (*Cuculus pallidus*)

Uncommon; single birds recorded May to September. Woodland, shrubland and lithic complex.

NR: June—loc. 1.3.

NFR: April—loc. 1.5; June—loc. 1.5.

BUR: August—loc. 1.5, 5.2; September—loc. 1.5.

Black-eared Cuckoo (*Chrysococcyx osculans*)

Moderately common in July at **BUR**. Calling in loc. 2.9, 2.12, 3.7, 4.11 and 5.4.

Horsefield Bronze Cuckoo (*Chrysococcyx basalis*)

Uncommon; June only. Woodland and heath. Single, occasionally 2 together.

NR: loc. 1.3, 4.2.

ENR: loc. 4.1.

Shining Bronze Cuckoo (*Chrysococcyx lucidus*)

Scarce; woodland. Three calling in **BUR** loc. 1.5 in September.

Barn Owl (*Tyto alba*)

Scarce. One in mallee tree in road-verge east of **NR** in June.

Boobook Owl (*Ninox novaeseelandiae*)

Uncommon, woodland and mallee. Calling at night in **NR** loc. 1.3 and in mallee east of **NR** in June.

Tawny Frogmouth (*Podargus strigoides*)

Uncommon; woodland and mallee. Single birds seen at night.

NR: April—loc. 1.3; November—loc. 2.6.

BUR: September—loc. 1.5.

Australian Owlet-nightjar (*Aegotheles cristatus*)

Uncommon; woodland and mallee. Calling at night.

NR: April—loc. 1.3; June—loc. 1.3; November—loc. 1.3

ENR: May—loc. 2.10.

BUR: May—loc. 1.5; July—loc. 1.5; August—loc. 1.5.

Spotted Nightjar (*Eurostopodus guttatus*)

Scarce, 1 hawking through woodland **BUR** loc. 1.6 in July.

Sacred Kingfisher (*Halcyon sancta*)

Scarce, 1 in **BUR** loc. 1.8 in September.

Rainbow Bee-eater (*Merops ornatus*)

Uncommon (November only); woodland and mallee. Pairs.

NR: loc. 1.3

ENR: loc. 2.6, 2.10, and overhead at 4.6.

White-backed Swallow (*Cheramoeca leucosterna*)

Uncommon; vicinity of excavations in sand or gravel. In groups of up to 5 birds.

NR: April—overhead at loc. 3.11, 4.2.

ENR June—overhead at loc. 3.2, 3.19 (sand pits with burrows in loc. 3.2 and 3.19); November—overhead loc. 3.19.

BUR: May—over centre of Reserve; August—over 4.19, 3.28, and rubbish tip (burrows in banks of gravel and sand-pit excavations at 4.19 and rubbish tip).

Welcome Swallow (*Hirundo neoxena*)

Uncommon; overhead. Groups, of 1-10 birds at **NR** and **ENR** in April, May, and June; at **NFR** in June; and **BUR** in May, July, August, and September.

Tree Martin (*Hirundo nigricans*)

Moderately common; mainly in woodland, also overhead most vegetation formations. In groups of up to 10 birds.

NR: April—over loc. 1.3, 3.7; May—over loc. 1.5; June—over loc. 1.3; November—over loc. 1.3.

ENR: April—over loc. 2.7, 3.7, 4.1, 4.15; May—over loc. 2.2, 2.9, 3.19; November—over loc. 1.3, 3.19, 4.8.

BUR: May—over loc. 4.22; July—over loc. 1.3; November—over loc. 1.5, 5.2.

Richard's Pipit (*Anthus novaeseelandiae*)

Common; paddocks and disturbed margins of **NR**, **ENR**, **NFR**, and **BUR**. Mostly in twos. Recorded on all visits.

Ground Cuckoo-shrike (*Coracina maxima*)

Scarce; 4 flying north over **BUR** loc. 1.5 in May.

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

Uncommon; in all vegetation formations (most appeared to be in transit). Most sightings were of single birds, 9 flying north-northwest over **ENR** loc. 3.17 on 1 May. Total of 1 at **NR** and 9 at **ENR** in May; 1 at **ENR** and 1 at **NFR** in June; 2 at **NR**, 4 at **ENR**, and 1 at **NFR** in November; and 1 at **BUR** in May, 1 in July, 11 in August and 3 in September.

Brown Flycatcher (*Microeca leucophaea*)

Scarce; 1 in woodland loc. 1.3 on **NR** in June.

Red-capped Robin (*Petroica goodenovii*)

Uncommon at **BUR**; common elsewhere. Woodland, mallee, shrubland, and heath. Single birds or pairs.

NR: April—loc. 1.2, 1.3, 1.5, 2.6, 3.9, 3.10, 3.11, 4.1, and 4.2; May—loc. 1.3, 1.5, 2.3, 3.13, and 4.2; June—loc. 1.2, 1.3, 1.4; July—loc. 1.3; November—loc. 1.3.

ENR: April—loc. 2.9, 3.3, 3.10, 3.13, 3.17, 3.20, 3.21, 4.6, 4.8, 4.13; and 4.15; May—loc. 2.4, 2.5, 2.10, 3.1, 3.2, 3.3, 3.7, 3.8, 3.10, 3.13, 3.17, 4.1, 4.6, and 4.8; June—loc. 2.10, 3.5, 3.10, and 3.17; November—loc. 2.10, 3.3, 3.9, 3.10, and 3.19.

NFR: May—loc. 5.2; June—loc. 1.5 and 1.8; November—loc. 1.4, 2.6, and 3.1.

BUR: May—loc. 2.12; July—loc. 1.5, 2.2, 2.9, 2.12, 2.25, 3.29, 3.46, 3.47, and 4.12.

Pairs fighting at **ENR** in May, young being fed at **ENR** in November, nest reported by farmer near **BUR** in September. The large number of sightings at **NR** and **ENR** in April/May and their apparent absence from **BUR** in August/September may indicate seasonal movements.

Hooded robin (*Petroica cucullata*)

Scarce; 1 in loc. 4.17 on **BUR** in May.

Yellow Robin (*Eopsaltria australis*)

Uncommon; woodland, shrubland, and lithic complex. Single birds or pairs.

ENR: May—loc. 3.1.

NFR: May—loc. 5.2.

BUR: July—loc. 3.6; August—loc. 1.5, 3.32, and Buntine rubbish tip; September—loc. 1.5. In August a male was feeding a female.

Golden Whistler (*Pachycephala pectoralis*)

Uncommon; woodland, mallee, shrubland, heath, and lithic complex. Single birds or pairs.

NR: April—loc. 2.6; May—loc. 2.4; June—loc. 3.9.

ENR: April—loc. 2.5, 2.9; May—loc. 3.7, 3.8, and 3.17; November—loc. 3.19 and 3.20.

NFR: November—loc. 5.4.

BUR: May—loc. 3.42; July—loc. 1.8, 3.5, 3.6, 4.5, and 4.12.

Rufous Whistler (*Pachycephala rufiventris*)

Uncommon; woodland, mallee, shrubland, and lithic complex. Single birds or pairs.

NR: April—loc. 1.2, 1.3, and 2.6; November—loc. 1.3.

ENR: April—loc. 2.10; June—loc. 2.10; November—loc. 2.10 and 3.19.

NFR: November—loc. 1.4.

BUR: August—loc. 1.5, 3.52, and 5.1; September—loc. 1.5.

Grey Shrike-thrush (*Colluricincla harmonica*)

Common; woodland, shrubland, mallee and heath. Single birds or pairs.

NR: April—loc. 2.4; May—loc. 1.3 and 2.4; June—loc. 1.2, 1.3, and 1.4; November—loc. 1.3 and 1.5.

ENR: April—loc. 3.3 and 3.21; May—loc. 2.10, 3.3, 3.8, 3.12, 3.15, and 3.19; June—loc. 3.12, November—loc. 2.10, 3.3, 3.12, and 3.19.

NFR: November—loc. 1.4 and 3.1.

BUR: May—loc. 1.8, 1.9, 3.39, and 3.42; July—1.5, 2.5, 2.12, 2.15, 2.30, 3.5, 3.6, 3.8, 3.9, 3.25, 3.29, 3.37, 3.42, 3.47, 4.9, and 4.12; August—loc. 1.5, 3.32 and 5.2; September—loc. 1.5 and 3.32.

Crested Bellbird (*Oreoica gutturalis*)

Common; woodland, mallee, shrubland, heath, and lithic complex. Most records were of calling birds.

- NR:** April—loc. 3.3; May—loc. 3.10, 3.12, and 4.2; June—loc. 3.3; November—loc. 3.5.
- ENR:** April—loc. 3.21; May—loc. 3.6, 3.8, 3.17, and 4.6; June—loc. 4.1 and 4.6; November—loc. 3.19 and 4.16.
- NFR:** May—loc. 5.2 and 5.3.
- BUR:** May—loc. 2.28, 3.39 and 4.17; July—loc. 1.5, 2.2, 2.3, 2.17, 3.9, 3.23, 3.42, 4.2, 4.9, and 4.12; August—loc. 3.32, 3.33, 3.39, 3.42, 4.19, 5.1, and 5.2; September—loc. 3.39 and 4.12.

Grey Fantail (*Rhipidura fuliginosa*)

Seasonally common; woodland, mallee, shrubland, heath and lithic complex. Fifty-five sightings were of single birds and 21 sightings were 2 together. Recorded from April to September.

- NR:** April—loc. 1.2, 1.3, 1.4, 1.5, and 2.6; May—loc. 1.3 and 1.5; June—loc. 1.3 and 1.4; July—loc. 1.3.
- ENR:** April—loc. 2.10, 3.3, 4.15, and 4.16; May—loc. 2.4, 2.7, 2.10, 3.1, 3.3, and 4.6; June—loc. 2.5, 2.7, 2.10, and 3.1.
- NFR:** May—loc. 1.1 and 5.2.
- BUR:** May—loc. 1.5 and 1.8; July—loc. 1.3, 1.8, 2.2, 2.3, 2.6, 2.16, 3.1, 3.8, 3.9, 3.39, 3.47, 3.51, 4.5, 4.11, 5.1, and 5.2; August—loc. 1.5, 1.6, 3.32, and 5.2; September—loc. 3.32.

Willie Wagtail (*Rhipidura leucophrys*)

Uncommon at **BUR**, common elsewhere. Woodland, mallee, shrubland, heath, lithic complex, and edges of paddocks. Single birds or pairs.

- NR:** April—loc. 1.3, 2.6, 3.11, and 4.1; May—loc. 1.3 and 4.2; June—loc. 1.2, 1.3, and road-verges.
- ENR:** April—loc. 2.10, 3.3, 3.13, 3.15, 3.19, 4.1, 4.3, 4.6, and 4.16; May—loc. 3.1, 3.3, 4.6, and 4.8; June—loc. 2.9, 2.10, 3.10, 4.1, 4.3, and road-verges; November—loc. 3.19, 4.9, 4.11, and road-verges.
- NFR:** April—loc. 5.2
- BUR:** May—loc. 4.17 and 4.19; July—loc. 2.17, 3.10, 3.32, 4.16, 4.17, Buntine siding and Buntine rubbish tip; August—loc. 1.5, 3.32, and 5.2.

Southern Scrub-robin (*Drymodes brunneopygius*)

Moderately common; shrubland and heath. Most records were of calling birds.

NR: April—loc. 3.11 and 4.1; May—loc. 3.11, 3.12, and 3.13; November—loc. 3.12.

ENR: May—loc. 3.1, 3.3, 3.8, 3.19, and 4.8.

BUR: May—loc. 3.39 and 4.19; July—loc. 3.6, 3.18, and 3.39. Also recorded at Wubin townsite reserve in September.

White-browed Babbler (*Pomatostomus superciliosus*)

Moderately common; woodland, mallee, shrubland, and heath. Most sightings were of groups of 3-5 birds.

NR: April—loc. 1.3, 3.11, and 4.1; May—loc. 1.5 and S2; June—loc. 3.3; November—loc. 1.3, 3.11, and 3.8. Old nests in loc. 1.3, 1.5, 3.8, 3.10, 3.11, 4.1, and 4.2.

ENR: May—loc. 2.4; June—loc. 3.1; November—loc. 3.3 and 3.19. Old nests in loc. 2.4, 2.10, 3.1, 3.3, 3.5, 3.7, 3.13, 3.17, 3.18, 3.19, and 4.12. Nest with 2 eggs in loc. 3.19 on 18 November.

NFR: June—loc. 3.10; November—loc. 1.5.

BUR: May—loc. 3.35, 3.40, and 3.52; July—loc. 3.18 and 4.7; September—loc. 3.45. Old nests in loc. 2.18, 2.20, 2.21, 3.1, 3.5, 3.18, 3.19, 3.23, 3.28, 3.40, 3.46, 3.52, 4.7, 4.12, and 4.23.

Nests were in the following plants: *Acacia stereophylla* (3); *Banksia benthamiana* (2); *Casuarina acutivalvis* ♀ (20); *C. acutivalvis* ♂ (7); *C. campestris* ♀ (2); *C. corniculata* ♀ (4); *C. corniculata* ♂ (1); *Eucalyptus drummondii* (1); *Grevillea excelsior* (2); *Hakea coriacea* (14); *H. falcata* (1); *H. scoparia* (10); *H. subsulcata* (3); *Melaleuca eleutherostachya* (1); *M. nematophylla* (2); *Persoonia saundersiana* (2); *Santalum acuminatum* (2).

Western Warbler (*Gerygone fusca*)

Uncommon; woodland and mallee. Single birds.

NR: April—loc. 1.3; June—loc. 1.3.

ENR: June—loc. 2.10.

NFR: June—loc. 1.5.

BUR: July—loc. 1.3; August—loc. 1.5 and 2.17.

Weebill (*Smicrornis brevirostris*)

Uncommon at **BUR**; common elsewhere; woodland and mallee. Most sightings were of 3-6 birds, occasionally up to 8.

- NR:** April—loc. 1.1, 1.3, and 1.4; June—loc. 1.3; July—loc. 1.3; November—loc. 1.2, 1.3, and 1.5.
- ENR:** April—loc. 2.10; May—loc. 2.7 and 2.8; June—loc. 2.2; November—loc. 2.10 and 3.3.
- NFR:** May—loc. 1.5; November—loc. 1.2 and 1.4.
- BUR:** May—loc. 1.5 and 1.9; August—loc. 1.5, 1.8, 2.18, and 2.27.

The absence of Weebills from **BUR** in July 1977 was surprising. Perhaps it was related to the drought prevailing at the time. Weebills were present in York Gums (*Eucalyptus loxophleba*) on **NR** in July.

Brown Thornbill (*Acanthiza pusilla*)

Common; woodland, mallee, shrubland, and heath. Mostly pairs, occasionally single birds.

- NR:** April—loc. 1.3, 1.5, 2.2, 2.4, 2.6, 3.7, 3.9, 3.11, and 4.1; May—loc. 1.5, 3.12, and 4.2; June—loc. 1.3 and 4.2; November—loc. 3.11, 3.12, and 4.2.
- ENR:** April—loc. 2.9 and 4.16; May—loc. 2.4, 3.1, 3.2, 3.3, 3.5, 3.6, 3.7, 3.8, 3.15, 3.17, 3.19, 4.5, 4.8, and 4.10; June—loc. 3.1, 3.10, 4.11, 4.12, and H1; November—loc. 3.8, 3.12, 3.19, 4.6, and 4.12.
- NFR:** June—loc. 3.10; November—loc. 3.1.
- BUR:** May—loc. 1.8, 3.40, 3.42, 3.49, and 3.52; July—loc. 1.1, 1.8, 2.17, 2.25, 3.23, 3.39, 3.42, and 4.16; August—loc. 1.5, 1.8, 3.49, 3.51, 3.52, 4.19, and 5.2; September—loc. 1.5 and 2.18.

Yellow-rumped Thornbill (*Acanthiza chrysorrhoa*)

Moderately common; woodland, mallee, shrubland, heath and lithic complex. Mostly in groups of 3-6 birds.

- NR:** April—loc. 1.3; May—loc. 1.4; June—loc. 1.3; July—loc. 1.3; November—loc. 1.3.
- ENR:** April—loc. 2.4, 2.5, 2.10, and 3.13; May—loc. 2.7 and 2.10; June—loc. 2.10 and 4.3; November—loc. 2.10, 3.3, and 3.17.
- NFR:** May—loc. 1.8; June—loc. 1.5; November—loc. 1.4 and 3.1. Old nest in *Acacia acuaria* in loc. 1.8 and in *Santalum acuminatum* in loc. 1.5.
- BUR:** July—loc. 2.2, 3.29, 3.33, and 3.42; August—loc. 2.17 and 5.2; September—loc. 3.42.

Chestnut-rumped Thornbill (*Acanthiza uropygialis*)

Moderately common; woodland, mallee, shrubland, and heath. Mostly in groups of 2-5 birds.

NR: April—loc. 1.2, 1.3, 1.4, 1.5, 2.4, 3.10, and 4.1. May—loc. 1.3, 1.5, and 4.2; June—loc. 1.1, 1.3, and 1.4; November—loc. 1.3 and 1.5.

ENR: April—loc. 2.9, 2.10, and 3.18; May—loc. 3.15; June—loc. 2.10.

NFR: May—loc. 1.5; June—loc. 1.5; November—loc. 1.4 and 5.2.

BUR: May—loc. 1.5 and 3.35; July—loc. 1.3, 1.6, 1.8, 2.2, 2.9, 2.12, 3.5, 3.6, and 3.51; August—loc. 1.5, 1.9, 2.16, 3.6, and 5.2.

Redthroat (*Pyrrholaemus brunneus*)

Moderately common; woodland, mallee, shrubland, heath, and lithic complex. Single birds or pairs.

NR: May—loc. 2.4 and 3.10; June—loc. 1.3.

ENR: April—loc. 2.4, 3.3, 3.19 and 4.4; May—loc. 2.5, 3.1, 3.6, 3.8, 3.12, 3.17, 3.19, and 4.5; June—loc. 3.1, 3.2, 3.10, 4.11 and H1; November—loc. 2.10, 3.3, 4.6, and 4.8.

NFR: May—loc. 5.2; November—loc. 5.2.

BUR: May—loc. 3.35, 3.39, 3.40, 3.42, and 3.52; July—loc. 1.3, 1.5, 2.12, 3.5, 3.6, 3.9, 3.19, 3.23, 3.36, 3.39, 3.41, 3.48, 4.11, 4.12, 4.14, and 5.4.

White-browed Scrub-wren (*Sericornis frontatus*)

Scarce, 3 in patch of heath in **BUR** loc. 3.34 in August.

Shy Hylacola (*Hylacola cauta*)

Uncommon; mallee, shrubland, and heath. Single birds or pairs.

NR: November—loc. 4.2.

ENR: May—loc. 2.4, 3.21, 4.3, and H1; June—loc. 4.3.

BUR: September—loc. 3.45.

Calamanthus (*Calamanthus fuliginosus*)

Uncommon; shrubland and heath. Single birds, usually calling, occasionally seen.

NR: June—loc. 4.2.

ENR: May—loc. 4.1 (several calling on tops of small bushes, 1 caught in break-back trap)

BUR: May—loc. 3.32 (1 caught in break-back trap); August—loc. 4.12 and 4.19.

Splendid Fairy-wren (*Malurus splendens*)

Scarce; lithic complex. Three including nuptial-plumaged male among *Acacia saligna* at base of granite outcrop in NFR loc. 5.1 in May.

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

Moderately common; mallee, shrubland, heath, and lithic complex. Usually in groups of 3-4 birds. Males in June, August, and November were in nuptial plumage; in April and May they were in eclipse plumage.

NR: April—loc. 3.12, 4.1, and 4.2; November—loc. 4.2.

ENR: April—loc. 3.20 and 3.21; May—loc. 2.4, 3.7, 3.12, 3.13, and 3.19; June—loc. H1; November—loc. 4.8.

BUR: May—loc. 3.35 and 4.12; July—loc. 3.23 and 3.42; August—loc. 4.19 and 5.2; September—loc. 2.28.

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

Scarce; heath. Group of *ca* 5 birds in **ENR** loc. 4.1 in June and November.

Brown Songlark (*Cincloramphus cruralis*)

Scarce; 1 in paddock north of **NR** in November.

Rufous Songlark (*Cincloramphus mathewsi*)

Uncommon; several calling over wheat fields near **BUR** in August.

Striated Pardalote (*Pardalotus striatus*)

Seasonally common; woodland and mallee. Mostly in small groups of up to 6 birds; flocks of up to 45 birds generally flying northeast or north in May.

NR: May—loc. 1.3; June—loc. 1.3; November—loc. 1.3 and 1.5.

ENR: April—loc. 3.21 (patch of mallee).

NFR: November—loc. 1.5.

BUR: May—loc. 1.5, 1.8, 1.9 and flocks overhead; July—loc. 1.5 and 1.7; August—loc. 1.5, 1.6, 1.7, 1.8, and 1.9.

Grey-greasted Silvereye (*Zosterops lateralis*)

Scarce; 1 at Wubin town reserve in August.

Brown Honeyeater (*Lichmera indistincta*)

Moderately common at **BUR**, scarce elsewhere; woodland, mallee, shrubland and heath. Only 1 record at the Nugadong reserves; 19 sightings of 1-6 birds at **BUR**.

NR: June—loc. 2.5.

BUR: July—loc. 1.5 (feeding on flowers of *Eremophila oppositifolia*), 3.47, 4.7, 4.16, and road-verges with flowering *Hakea coriacea*; August—loc. 2.17, 3.6, 3.42, 4.19, 5.2; September—loc. 1.5, 2.28 and 3.32.

Singing Honeyeater (*Meliphaga virescens*)

Common; woodland, mallee, shrubland, heath, lithic complex, and road-verges. Single birds or pairs.

NR: April—loc. 1.3, 1.4, 3.9, and 4.1; May—loc. 1.3 and 1.5; June—loc. 1.3, 2.6, 3.3, and 4.2; July—loc. 1.3; November—loc. 1.3 and 2.4.

ENR: April—loc. 2.4, 2.10, 3.3, 3.15, 3.19, 3.21, 4.1, and 4.8; May—loc. 3.7, 3.13, 4.4, 4.7, and 4.12; June—loc. 2.9; November—loc. 2.10, 3.3, 3.19, 4.4, 4.13, and 4.15.

NFR: May—loc. 1.1 and 5.6; June—loc. 3.10, 3.12, and 5.2; November—loc. 2.4 and 5.1.

BUR: May—loc. 1.8, 1.9, 4.3, and 4.17; July—loc. 2.17, 2.21, 3.1, 3.7, 3.15, 3.18, 3.19, 3.28, 3.33, 3.39, 3.47, 3.48, 4.2, 4.7, 4.8, 4.16, 4.17, 4.18, 5.1, and 5.4; August—loc. 2.17, and 5.2; September—loc. 3.45. Many of the birds were feeding on flowers of *Hakea coriacea* in July; some were feeding on *Grevillea excelsior* and *G. apiculoba*.

White-eared Honeyeater (*Meliphaga leucotis*)

Moderately common; woodland, mallee and shrubland. Single birds or 2 together.

NR: April—loc. 1.2; May—loc. 1.3 and S2; June—loc. 1.3; November—loc. 1.3 and 1.5.

ENR: April—loc. 2.9 and 2.10; May—loc. 3.3 and 3.8; June—loc. 2.7 and 2.9.

NFR: May—loc. 1.5 and 5.2; June—loc. 1.5.

BUR: May—loc. 1.5, 1.9, and 3.35; July—loc. 1.3, 1.5, 1.7, 3.8, 3.9, and 3.37, August—loc. 2.1 and 2.16. In July some were feeding on flowers of *Hakea coriacea*.

Brown-headed Honeyeater (*Melithreptus brevirostris*)

Moderately common at **NR**, uncommon elsewhere; woodland, mallee, and shrubland. Mostly in flocks of 4-7 birds; a few flocks of 15-30 birds in April, May, and November. Probably they congregate into the larger flocks in the non-breeding season.

NR: April—loc. 1.3; June—loc. 1.3; November—loc. 1.3 and 1.5.

ENR: May—loc. 3.19; November—loc. 3.19.

NFR: November—loc. 1.4.

BUR: May—loc. 1.5 and 1.9; August—loc. 1.5.

Yellow-throated Miner (*Manorina flavigula*)

Moderately common at **ENR**, uncommon elsewhere; woodland, mallee, shrubland, and lithic complex. One or 2 together in November, up to 15 in a flock in April to August.

NR: November—loc. 1.3.

ENR: April—loc. 3.7, 3.9, and 3.21; June—loc. 2.10 and 7 flocks in road-verges; November—loc. 2.10.

BUR: May—1 at railway siding; August—loc. 1.5, 1.8, 1.9, 2.17, and 5.2. Some were feeding on flowers of *Banksia benthamiana* in August.

Spiny-cheeked Honeyeater (*Acanthagenys rufogularis*)

Scarce; mallee. One in **ENR** loc. 2.10 in November and 1 in **BUR** loc. 2.1 in July.

Red Wattlebird (*Anthochaera carunculata*)

Uncommon, seasonal; woodland, shrubland, and lithic complex. Single birds or 2 together.

NR: June—loc. 1.5

BUR: May—loc. 1.9, July—loc. 1.2, 1.5, and calling over paddock; August—loc. 1.5, 1.8, 1.9, 3.32 and 5.2. Feeding in flowering *Banksia benthamiana* in loc. 3.32 in August.

White-fronted Chat (*Epthianura albifrons*)

Moderately common; shrubland, heath, lithic complex, and farm paddocks. Mostly in groups of 3-8 birds.

NR: April—loc. 4.1; July—loc. 4.2.

ENR: April—loc. 3.13, 4.1 and 4.9; May—loc. 3.13, 3.17, 4.1, and 4.11; June—loc. 3.12 and 4.1; November—loc. 3.19, 4.11, and 4.13. Old nests in *Ecdeiocolea monostachya* in loc. 4.11.

BUR: May—loc. 1.5 (overhead); July—loc. 2.2, (overhead), 3.7, 3.15, 3.18, 3.29, 3.42, 4.1, 4.2, 4.18, and 5.1; August—several in paddocks and along roads.

Nesting after rain along road at Nugadong siding in July. On 12 July some young had just left the nest, another nest among dead grass had 3 young nearly ready to fly.

Adults were feeding young on caterpillars of *Apina callisto* moths. These caterpillars were extremely abundant on recently germinated grasses and composite weeds.

Zebra Finch (*Poephila guttata*)

Scarce; shrubland and paddocks. Groups of 2-5 birds.

ENR: April—loc. 3.19; November—paddock adjacent to loc. 3.19.

BUR: July—near siding.

Magpie-lark (*Grallina cyanoleuca*)

Uncommon; woodland, lithic complex, road-verges, and paddocks. Most sightings were of 2 birds. Total of 3 in vicinity of Nugadong reserves in April, 2 in May, 20 in June, and 5 in November. Total of 4 near **BUR** in May, 2 in July, and 6 in August.

NR: April—loc. 1.3.

BUR: May—loc. 1.5; August—loc. 5.2.

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

Moderately common; shrubland, heath, road-verges and paddocks. Usually in groups of 2-4 birds, groups of up to 15 birds in June and July.

ENR: April—loc. 3.21 and paddocks; June—road-verges and paddocks; November—loc. 3.20, 4.13, road-verges, and paddocks. Nest with 2 eggs in *Grevillea* sp. in verge opposite loc. 3.20 on 18 November.

BUR: May—road-verges and paddocks; July—loc. 3.9, 4.16, 4.17, road-verges and paddocks; August—loc. 3.6, road-verges and paddocks.

Grey Butcherbird (*Cracticus torquatus*)

Uncommon; woodland, mallee, shrubland, and lithic complex. Single birds, occasionally 2 together.

NR: April—loc. 1.3 and 1.5; May—loc. 2.4; June—loc. 1.3; November—loc. 2.6.

ENR: May—loc. 3.12; November—loc. M2 (young bird only recently flying.)

NFR: May—loc. 1.2, 1.5, and 5.2; November—loc. 1.5.

BUR: May—loc. 1.5 and 1.9; July—loc. 1.5; August—loc. 1.5.

Pied Butcherbird (*Cracticus nigrogularis*)

Uncommon; woodland, lithic complex, and road verges. Single birds or pairs.

NR: June—loc. 1.3 and road-verges; November—road-verges.

BUR: May—loc. 1.5 and 1.9; July—near railway siding; August—loc. 1.5, 1.6, 1.8, 5.2 and road-verges.

Magpie (*Cracticus tibicen*)

Uncommon; woodland, mallee, road-verges and paddocks. Usually in groups of 2-5 birds.

NR: May—loc. 5.2; June—loc. 1.3; November—loc. 1.5 and road-verges.

ENR: April—paddock near loc. 3.18; June—paddocks near Reserve.

BUR: May—loc. 1.9 and road-verges; July—at Buntine siding and rubbish tip; August—loc. 1.5, 2.3, 5.2 and paddocks. Building nest in loc. 2.3 on 27 August.

Grey Currawong (*Strepera versicolor*)

Uncommon; woodland, mallee, shrubland, heath and lithic complex. Single birds or 2 together.

NR: April—loc. 1.3; June—loc. 1.3.

NFR: November—loc. 1.5.

BUR: May—loc. 1.2 and 1.5; July—loc. 1.5, 3.3, and 4.12; August—loc. 1.5, 2.17, and 5.2.

Little Crow (*Corvus bennetti*)

Moderately common; woodland, paddocks and overhead. Usually in groups of 2-10 birds, often in transit. Groups of up to 63 birds were in transit in May, July, and November. Birds overhead and in vicinity of **NR**, **ENR**, and **NFR** in April, May, June, and November. Birds in woodlands, overhead and in paddocks near **BUR** in May, July, and August. Nest with bird sitting in Salmon Gum (*Eucalyptus salmonophloia*) in **BUR** loc. 1.3 on 15 July, pair near nest in **BUR** loc. 1.2 on 30 August.

Australian Raven (*Corvus coronoides*)

Common; woodland, mallee, and farmland. Mostly in groups of 2-6 birds, occasionally aggregating into flocks of up to 20 birds to feed especially at Buntine rubbish tip. Recorded on all visits to **NR**, **ENR**, **NFR**, and **BUR**. In all woodlands on each reserve and in mallee in **ENR** loc. 2.10 and **BUR** loc. 2.2.

Nesting at **BUR**: adult sitting on nest 10m up Gimlet (*Eucalyptus salubris*) in loc. 2.2 on 12 July, adult sitting on nest 13 m up Gimlet in loc. 1.5 on 27 August (chicks calling in nest on 2 September), pair copulating on empty nest in loc. 1.5 on 30 August, nest with eggs in loc. 1.6 on 30 August (this nest 60m from previous nest).

DISCUSSION

The survey of Buntine and Nugadong reserves recorded 89 species of birds. This total is slightly more than that recorded on other wheatbelt reserves. However, the survey was undertaken over a 5 year period during both heavy rainfall and drought years; therefore it is likely that the actual number of species on the reserves is similar to other reserves. Of the 89 species 9 were recorded only in farmland or townships; this leaves 80 species recorded within 1 or more reserves. Thirty-three of these species were non-passerines and 47 were passerines.

Only 15.1% of non-passerines were common to all reserves, compared to 46.8% of passerines. This probably indicates that some non-passerines (particularly hawks) utilise areas very much larger than any individual reserve. Consequently their probability of being recorded on all reserves in a limited period of time is considerably less than could be expected for passerines which utilise much smaller areas.

The table below shows the percentage of non-passerine and passerine species in common between any 2 reserves. The figures reflect the same trend apparent above. The high percentage (51.5) for non-passerines on **NR/BUR** is possibly due to the fact that I camped on both these reserves 5 times and not on any other reserve.

Non-Passerines					Passerines			
	NR	ENR	NFR	BUR	NR	ENR	NFR	BUR
NR		33.3	27.2	51.5		70.2	51.0	76.6
ENR	33.3		18.1	33.3	70.2		51.0	78.7
NFR	27.2	18.1		24.2	51.0	51.0		55.3
BUR	51.5	33.3	24.2		76.6	78.7	55.3	

Birds which utilise hollows in eucalypts as nest sites were relatively scarce on **ENR** compared to the other 3 reserves because of the absence of woodland (Muir, this report). Shrubland and heath formations (or as components of lithic complex on **NFR**) are well represented on all reserves; as a consequence many small insectivorous birds which occupy shrublands and heaths were found on all 4 reserves. This group included Red-capped Robin, Golden Whistler, Grey Shrike-thrush, Crested Bellbird, White-browed Babbler, Brown Thornbill, Yellow-rumped Thornbill and Redthroat. Several other small insectivores including Yellow Robin, Southern Scrub-robin, Shy Hylacola, Calamanthus and Blue-breasted Fairy-wren were found on 3 of the 4 reserves.

Compared to other parts of the wheatbelt, birds of the northern central portion are relatively well known. Sedgwick (1953) listed 76 species of birds at Caron, 45 km northwest of Buntine. A high percentage of the birds recorded by Sedgwick at Caron were recorded by me at Buntine/Nugadong. Most of the 12 species recorded by Sedgwick but not by me are migratory, nomadic, or likely to have periodic irruptions into the wheatbelt. Included in these groups are Little Quail (*Turnix velox*), Australia Dotterel (*Peltohyas australis*), Black-winged Stilt (*Himantopus himantopus*), Australian Bustard (*Otis australis*), White-faced Heron (*Ardea novaehollandiae*), Pink Cockatoo (*Cacatua leadbeateri*), Smoker Parrot (*Polytelis anthopeplus*), Fork-tailed Swift (*Apus pacificus*), Masked Wood-swallow (*Artamus personatus*), Tawny-crowned Honeyeater (*Phylidonyris melanops*), White-fronted Honeyeater (*P. albifrons*), and Yellow-fronted Honeyeater (*Meliphaga plumula*).

Reid (1951) listed 43 species at Bunketch, ca 45 km southeast of the Nugadong reserves, including 8 species not recorded by me at Buntine/Nugadong. These were Painted Snipe (*Rostratula benghalensis*), Black Duck (*Anas superciliosus*), Spotted Harrier (*Circus assimilis*), Pink Cockatoo (*Cacatua leadbeateri*), Smoker Parrot (*Polytelis anthopeplus*), Red-rumped Kingfisher (*Halcyon pyrrhopygia*), Fairy Martin (*Hirundo ariel*) and Pied Honeyeater (*Certhionyx variegatus*). Most of these are nomadic or seasonal visitors to the wheatbelt. The Smoker Parrot has declined throughout the wheatbelt and is now rarely recorded. Reid (*ibid*) considered the White-browed Scrub-wren to be the commonest small bird at Bunketch. It has all but disappeared from the northern central wheatbelt, being now found only in relic-tual heaths and shrubland including Buntine reserve.

Dell (1979b) recorded 78 species at Marchagee Nature Reserve ca 50 km west of Buntine. The bird assemblage at Marchagee is different from that at Buntine/Nugadong because the vegetation there is quite different and there are a number of saltlakes and samphire marshes which are not present at Buntine/Nugadong.

The most recent bird list for the northern central wheatbelt is for Wongan Hills (de Rebeira & de Rebeira 1977) ca 70 km south of Nugadong. Their paper mainly covers birds of the remnant woodland, mallee and shrubland of the laterite hills, as well as the saltlakes to the west, and accordingly the bird assemblage is quite different from that at Buntine/Nugadong. Considering the amount of vegetation on the hills (ca 1750 ha) it is surprising that White-browed Scrub-wren was not recorded at Wongan Hills. It is interesting that Wongan Hills and Nugadong Forest Reserve are the only 2 localities in the wheatbelt (apart from the western and northern fringes) where the Splendid Fairy-wren is known to occur.

Evidence of breeding is presented for 9 species of non-passerines and 11 of passerines at Buntine/Nugadong. The earliest breeding was White-fronted Chat (12 July—young nearly ready to fly) and the latest was Common Bronzewing (18 November—bird incubating 1 egg).