

# BIRDS OF THE NORTH-EAST OF SOUTH AUSTRALIA

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This paper is an attempt:—

1. To record observations made over several years, principally by the author and F. G. Skipper, A. Tiver and C. M. Bishop, in the North-East Meteorological District of South Australia, an area that is not frequently visited by ornithologists.
2. To define the status and distribution of species more precisely than is possible in a publication covering the birds of the entire State.
3. To interest other observers in this area and encourage them to report their observations.

The writer, Joe Mack, of Waikerie, has lived along the River Murray for 22 years and has regularly visited the North-East since 1956 and particularly during the past ten years. His wife, Stella, has been of assistance in many ways.

Garnham Skipper has lived at Manunda, via Yunta, for 27 years and is also an S.A.O.A. member. His wife is also a keen amateur ornithologist.

Athol Tiver has resided at Spring Dam, via Yunta, for six years and spent his earlier years at Terowie and Tuilkilkey, to the east of Terowie.

Murray Bishop, of Winkie, has lived along the River Murray all his life and has visited Southern Mutooroo regularly for the past five years or so, and like the author, is a C.S.I.R.O. bird-bander.

The area surveyed in this paper is that portion of South Australia defined as North-East by the Bureau of Meteorology and is enclosed by the heavy black line on the map p. . This includes parts of the Lower North and North-East areas as used in the S.A.O.A. Annual Bird Reports. Most observations have been made south of the Oodlawirra to Broken Hill road; the area in the north-east shown shaded in the map has not been visited by the author or his colleagues. Not all place names mentioned in the paper are included in the map but most station properties where a recording has been made

are shown. Two not shown are Tiverton and Grampus, both near Spring Dam and Paramitee. Some records from beyond, but close to the border of the region have also been included.

A full survey of earlier papers or observations on this area has not been made, but J. N. McGilp's excellent paper 'Birds of Lake Frome District, South Australia' (*Emu*, vol. 22 (1923) pp. 237-244 and 274-287) is recommended for further reading.

It is emphasized that this paper represents recordings of observations by amateurs and does not purport to contain other details of species and distribution considered to be well-known or published elsewhere. The author and his colleagues readily admit weaknesses in their ability to identify some birds, particularly certain birds of prey, but it is considered that all records published below are accurate unless queried by the author. We would appreciate any comments, criticism or further records.

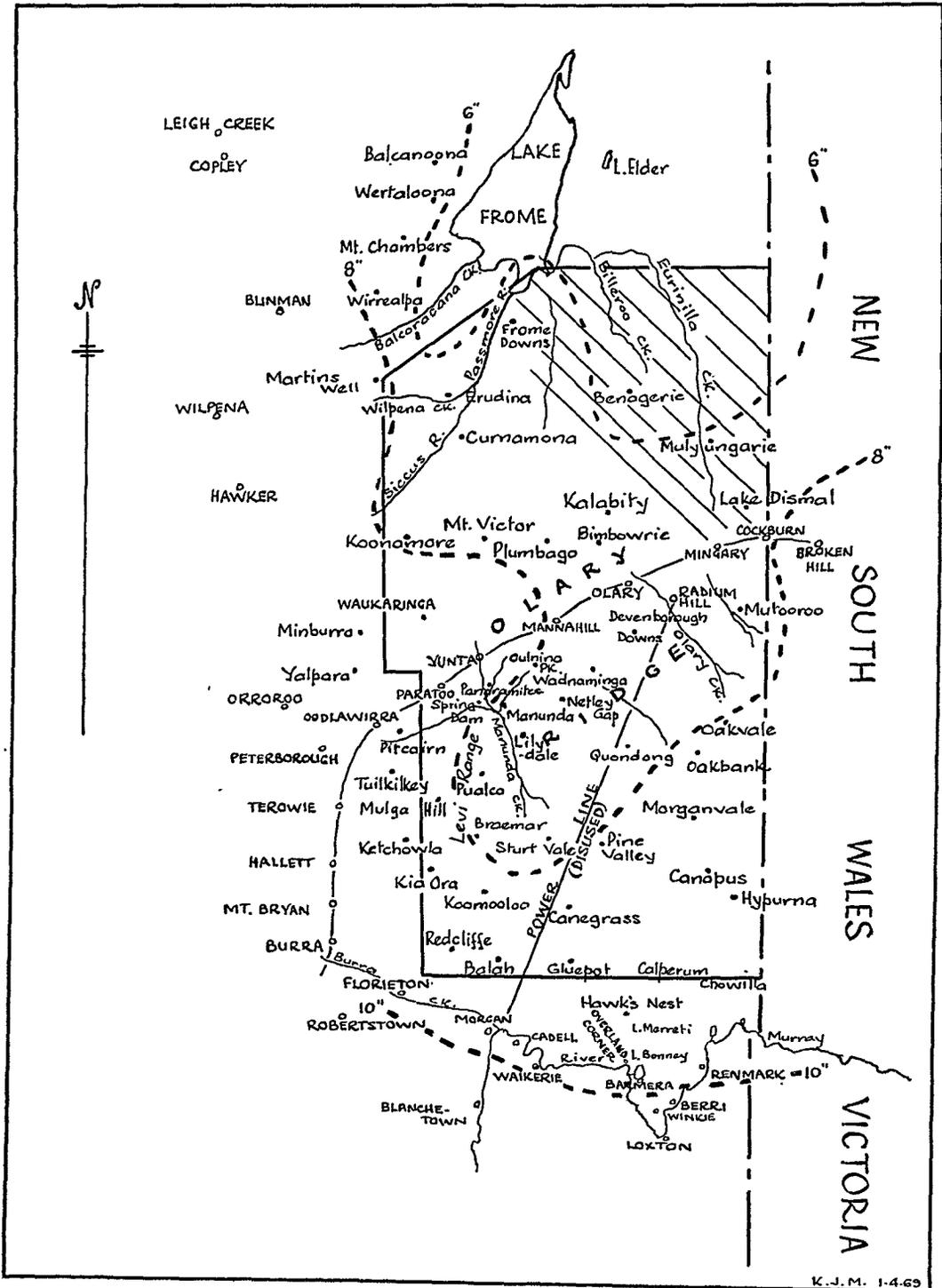
Special sightings or observations by each observer are signified by the first letter of the respective surname (e.g. T for Tiver).

An asterisk (\*) indicates an introduced species.

Sightings by Messrs. H. J. Eckert and G. O. Furness have also been incorporated. John Eckert, of Langhorne's Creek, visited Sturt Vale in October 1968, making many sightings, while records of the Black and Pied Honeyeaters by Mr. Furness, in September 1965 (from the *S.A. Ornithologist* Bird Report of 1965) have been quoted, from Plumbago Station. Other recordings quoted are by bushman friends of author, Messrs. H. M. Bown and T. E. O'Reilly, now of Waikerie, while information concerning the Ostrich has been mainly obtained from Mr. G. E. Moxham, of Morgan.

The comment, 'No Record,' only implies that neither the author nor his colleagues has recorded, beyond all doubt, that species, but, according to H. T. Condon's *Handlist of the Birds of South Australia* (1968), the species is one that should occur or has occur-

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THE NORTH-EAST METEOROLOGICAL DISTRICT

red in the region. The number preceding each species is that of Condon's "Handlist."

The North-East is bisected by the Olary Ridge, the centre of which is south of, and parallel to, the railway line between Yunta and Cockburn. Beyond the low ranges to the north and south, the gum creeks occasionally flow, those in the north heading towards Lake Frome, while those in the south spread into watercourses through to Cane-grass, Oakbank and Oakvale, supporting mainly mulgas, eremophilas and cassias; beyond these are the plains, with blue bush and black bush (*Kochia* sp.), saltbush (*Atriplex* sp.), black oke (*Casuarina cristata*) and sugarwood or false sandalwood (*Myoporum platycarpum*) the main plant species. In an area roughly bounded by Cadell, Cane-grass, Pine Valley, Morganvale and Chowilla, various mallees (*Eucalyptus* spp.) predominate, with porcupine grass (*Triodia irritans*), while to the west, in the region of the Levi Range, and fringing the hills east of Burra to Terowie and towards Wadnaminga, another mallee association occurs in places, containing principally *Eucalyptus porosa* and *E. transcontinentalis*. The larger creeks contain Red Gums (*E. camaldulensis*) while the swamps are fringed with Black Box (*E. largiflorens*) in the south, verging on Coolabahs (*E. coolabah*) in the Lake Frome area. The Native Pine (*Callitris* sp.) occurs sparsely through the southern mallee, with larger stands in the Mulyungarie—Billeroo—Lake Frome area. There is a smallish, but dense, area at Oulmina Park.

Of these associations, the mallee undoubtedly has the greatest variety of bird life, with those areas where there is a saltbush steppe or where bluebush and black oke predominate, containing usually a rather small population. However, these same plains and scrubs, in good seasons (as in 1955, 1956, 1962-3-4, 1968 and 1969) support spear grass (*Stipa* sp.) and other ephemerals and are invaded by nomadic species, sometimes in very large numbers, e.g. Crimson Chats, Budgerygahs and wood-swallows.

Rainfall varies from an average of almost ten to below six inches per annum, as shown by the isohyets on the map. Yunta, in the central west, has an average of 9.19 inches, while Waikerie to the south, averages 9.60 inches. Benagerie and beyond average less than 6 inches. Outstanding seasons at Yunta have been 1917 (18.58"), 1920 (16.41"),

1950 (19.17") and 1955 (15.97"), with lows of 3.26" in 1940 and 3.36" in 1967, which was the final of three years of drought that yielded in total only 16.68". Waikerie's highest readings have been 17.18" (1910), 15.19" (1917), 15.67" (1921) and 15.42" (1954), with its lowest, 3.53" in 1967. The drought years of 1965-7 yielded a total of 19.09".

The year 1956 was brilliant for herbage and wildflowers, after a good to record season the year before, while 1962-3-4 yielded much better than average growth. The rainfall figures illustrate the connection between nomadic movements and seasons, the year 1963 being of special interest. In the north, the rainfall was less than average (Yunta 7.71"), while in the south (Waikerie, 12.62"), the season was excellent, the area between the River and Oakvale having early heavy rains. Nomads were rather scarce in the north, but were very common between Morgan, Calperum and Oakvale. The last two years (1968-9), which followed three disastrous seasons, saw better than average rains especially in the south with an accompanying increase in bird population, with breeding of nomads and static species being widespread and prolonged.

There are a number of temporary swamps which fill after heavy rain and attract a great number of water birds. Unfortunately insufficient attention has been paid to studying these and the water birds must be considered to be inadequately covered in this paper. Areas suggested for future study are the swamps on Oakbank, Oakvale, Pine Valley, Mt. Victor, Koonamore, Benagerie and Mulyungarie Stations, the Billeroo, Siccus, Wilpena and Passmore Creeks and Lakes Frome, Elder, etc.

The North-East has been grazed, on an average, for 100 years and numbers and distribution of birds must have been affected in those areas where overgrazing has occurred, while conversely, the provision of watering points in what was usually a waterless country, has enabled more country to be used as a permanent habitat.

The only reserve in the region is the Koonamore Vegetation Reserve of the University of Adelaide (Section 304, County of Litton), containing 960 acres only, of restricted vegetation communities and hence, the birds of the region are dependent to a large extent on the attitude of the pastoralists in

the control of grazing, artificial watering points, trappers, shooters, etc.

Without the co-operation of pastoralists throughout the entire area, this paper would not have been possible, and gratitude is expressed to all owners, managers, station hands and other pastoral industry workers who have helped in any way. The ready support of the Meteorological Bureau in Adelaide and Yunta is also acknowledged.

1. EMU (*Dromaius novaehollandiae*). A declining species, scattered throughout in small numbers, with greatest congregations (occasionally 50-150) on watercourses and spear grass plains. Nests almost anywhere, on hilltops and in creeks. Average 9 eggs, May-August. (S) Scarce 1968, with heavy breeding in 1969.

\*5A SOUTHERN OSTRICH (*Struthio camelus*). Only known occurrence is of about a dozen, on Redcliffe Station.

Mr. G. E. Moxham, of Morgan, who resided on Redcliffe Station for fifteen years, states "Ostriches were released about 35 years ago by McBrides, who then owned the property. Their numbers have slowly dwindled; for instance, there were about 30 in 1955, while today they number about 12, which remain in two central paddocks on the station. Over the years I have only seen six young survive to adulthood, my theory being that they are shy breeders in this type of country and that eagles and foxes prey on the young. The current population are considered to be old birds, doomed to extinction.

"Aviculturists have recently tried to catch males and have even collected eggs for hatching elsewhere, but I believe that they have had no success."

On January 4, 1970 two male and two female Ostriches were seen on Redcliffe Station, also the remains of two nests containing in all, 20 old eggs. (M).

11. LITTLE GREBE (*Podiceps novaehollandiae*). Common on dams, usually one or two per dam, but occasionally a dozen or so. Nests on tops of logs and posts in dams; adult covers eggs (usually 5) with leaves and water weeds when absent. (S & M) Apparently more common than 50 years ago, probably due to more dams. Mother has been seen to dive, when danger approaches, with young under her wings. (S) Known as Dabchick or Diver to bushmen.

12. HOARY-HEADED GREBE (*Podiceps poliocephalus*). Rather uncommon, seems to prefer swamps after heavy rain, to permanent water. Two on Great Eastern Dam (Lilydale) 2.2.68 latest recording (M).

44. BLACK CORMORANT. (*Phalacrocorax carbo*). Rare, but large flocks have been seen heading north over Manunda, in V formation (S).

45. LITTLE BLACK CORMORANT. (*Phalacrocorax sulcirostris*). Rare, usually singly on dams and natural waters (S, T).

47. PIED CORMORANT (*Phalacrocorax varius*). Rare; only record at Jubilee O.S. (Mutooroo) 2.2.69 (B).

48. LITTLE PIED CORMORANT (*Phalacrocorax melanoleucos*). Rare; only four encountered in last decade (S, T). Bushmen call all species "Shags," with no differentiation.

53. WHITE-FACED HERON (*Ardea novaehollandiae*). Widespread, but uncommon, usually singly or in pairs. Breed in high gum trees, stick nest (S); breeding at Jubilee O.S. (Mutooroo) 2.11.68 (B).

54. WHITE-NECKED HERON (*Ardea pacifica*). Rather rare; sometimes none for whole year. Four at Jubilee O.S. (Mutooroo) 5.2.69 (B) latest record.

58. WHITE EGRET (*Egretta alba*). Rare (S); one at Loch Hazard Dam, (Mutooroo) 28.8.67 (B).

60. NANKEEN NIGHT HERON (*Nycticorax caledonicus*). Rare; occasionally along gum creeks (S).

63. WHITE IBIS (*Threskiornis molucca*). Very rare (S).

64. STRAW-NECKED IBIS (*Threskiornis spinicollis*). Rather rare; seen after heavy rains (T, S) and one at Jubilee O.S. (Mutooroo) November 1968 (B).

66. GLOSSY IBIS (*Plegadis falcinellus*). Rare; two at Cow Hole, (Manunda) November 1965 (S), a small flock at Jubilee (Mutooroo) 3.2.69 (B) and one at Cow Hole (Manunda), March 1969 (S), are only sightings.

67. ROYAL SPOONBILL (*Platalea regia*). Rare; waterholes preferred to dams (S).

68. YELLOW-BILLED SPOONBILL (*Platalea flavipes*). Rare; same comments as 67.

80. BLACK SWAN (*Cygnus atratus*). Generally rare; might see ten a year (S, T). Occasionally several hundred, as on Oakvale Swamp 1958 and 1964 (M). A pair bred four young at Luke's Swamp, (Oakbank), October 1969 and the cygnets rode a lot on the back of one parent (M).

83. CHESTNUT BREASTED SHELDUCK (*Tadorna tadornoides*). Very rare, only recording being three at Spring Dam Station, flying down Manunda watercourse, 4.2.68 (M). Known as Mountain Duck.

84. BLACK DUCK (*Anas superciliosa*). Rather rare, but sometimes 20-40 on waterhole for short time (S); Oakvale and Koonamore (M). Have landed on roofs of shearing sheds in moonlight, mistaking galvanized iron for water (M).

86. CHESTNUT TEAL (*Anas castanea*). Very rare (S).

87. GREY TEAL (*Anas gibberifrons*). Common, being seen in small flocks on most dams, waterholes and bore streams, where they breed, clutch averaging seven (T, S). One noticed nesting 22.10.67, at Gluepot, in hollow 'White Mallee' tree (*Euc. gracilis*), 8' from ground and 350 yards from dam, over limestone and bindyi (M).

88. BLUE-WINGED SHOVELER (*Anas rhynchotis*). No record. However, Mr. H. M. Bown states that this species used to occur in moderate numbers from 1913-1928 in the Minburra-Waukaringa-Curnamona district, on dams and swamps after heavy rains. Bushman's name was Blue Mountain Duck.

91. PINK-EARED DUCK (*Malacorhynchus membranaceus*). Rare; occasionally singly (M) or small numbers with other ducks (S). A pair on Pigeon Box Dam (Manunda), March 1969 (S). Known as Shoveler or Whistler.

92. WHITE-EYED DUCK (*Aythya australis*). Rare; only records are at Blackfellows Dam (Mutooroo) 5.2.69 when lone specimen observed (B) and three south of Gluepot 1.2.67 (M). Also known as Widgeon or Hardhead.

94. MANED GOOSE (*Chenonetta jubata*). Uncommon; seen usually in groups of 6-10. Occasionally breeds, five per clutch (T). Flock of 63 grazing on short herbage in watercourse at Manunda, March 1969 (S). Known as Wood Duck.

97. MUSK DUCK (*Biziura lobata*). Uncommon; usually singly. Often at Big Cow Dam (Manunda), (S), and Jubilee Dam (Mutooroo), (M & B).

99. BLACK-SHOULDERED KITE (*Elanus notatus*). Rare; odd pairs only and nest at Manunda in large red gum tree (S). Seen irregularly, every two or three years (T). Latest record is of one at Manunda, March 1969 (S).

100. LETTER-WINGED KITE (*Elanus scriptus*). No record.

102. FORK-TAILED KITE (*Milvus migrans*). Normally very rare; occasionally arrive in large numbers in spring (e.g. 1956), then not seen for years (S, M). One at Manunda, October 1968 (M) and one at Sturt Vale, October 1968 (J. Eckert) and small numbers at Kalabity and Frome Downs September 1969 (M).

103. SQUARE-TAILED KITE (*Lophoictinia isura*). Only record is of one at Spring Dam, November 1968 (T).

104. BLACK-BREASTED BUZZARD-KITE (*Hamirostra melanosternon*). No record.

105. WHISTLING KITE (*Haliastur sphenurus*). Uncommon; prefers gum creeks.

107. BROWN GOSHAWK (*Accipiter fasciatus*). Thought to be rare, but hard to identify.

108. COLLARED SPARROWHAWK (*Accipiter cirrhocephalus*). Thought to be uncommon, but difficult to separate from 107. One at Spring Dam, February 1969 (T).

109. LITTLE EAGLE (*Hierax morphnoides*). Uncommon, recent sightings being at Panaramitee, February 1968 (M), Manunda 13.10.68 (M) and Sturt Vale 11.10.68 (J. Eckert).

110. WEDGE-TAILED EAGLE (*Aquila audax*). Moderately common in parts, but a somewhat declining species, persecuted by most pastoralists, station hands, shooters, etc.

At Mafeking O.S. (Pitcairn), 80 dead are hung on a fence (M). Mr. Skipper has fine collection of photographs, taken regularly during breeding. Called Eaglehawk.

113. SPOTTED HARRIER (*Circus assimilis*). Very rare (S).

114. SWAMP HARRIER (*Circus approximans*). No record.

116. GREY FALCON (*Falco hypoleucos*). Rare (T, S).

117. BLACK FALCON (*Falco subniger*). No record.

118. BROWN FALCON (*Falco berigora*). Moderately common (S, T, M).

119. LITTLE FALCON (*Falco longipennis*). Uncommon. Occasionally at Spring Dam and Manunda (T, S).

120. PEREGRINE FALCON (*Falco peregrinus*). Uncommon; a pair has nested at Oratan Rock (Manunda) for years (S).

121. NANKEEN KESTREL (*Falco cenchroides*). Common, except in dense southern mallee, where uncommon (M). Called Sparrowhawk or Chickenhawk.

123. MALLEE FOWL (*Leipoa ocellata*). Moderately common in selected areas, elsewhere absent. Occurs now only in southern mallee, where grazing is absent or not heavy but used to occur in Pitcairn mallee, in 1930's, according to Mr. T. E. O'Reilly. Overall a declining species in urgent need of virgin habitat preservation, especially north of River Murray. No breeding 1966-7 due to drought; occasionally shot for food (M). Known as Pheasant to bushmen.

124. STUBBLE QUAIL (*Coturnix pectoralis*). Common on open grass lands in good seasons, otherwise absent. Breeds extensively; up to nine eggs. When hatched, eggs have a habit of remaining upright, with broken tops (S). Hunted by foxes, judging by the numbers of the latter encountered in open country, where there are no rabbits (M).

128. LITTLE QUAIL (*Turnix velox*). Uncommon mostly, but a nomad that visits in good seasons. Common 1963 and 1968 (M); particularly common at Manunda 1968-9 (S).

130. PLAIN-WANDERER (*Pedionomus torquatus*). No record, but reputed to have been present in the region years ago.

131. BROLGA (*Grus rubicundus*). No record.

137. BLACK-TAILED NATIVE HEN (*Tribonyx ventralis*). Rather common, but varies considerably in numbers and distribution. Often located near dams, bore streams, etc., in dense undergrowth, e.g. lignum bushes. Flocks of 40 at Oakbank and Lilydale in 1957 and 1968 (M) and over 100 at Manunda (S). Common 1968-9, with a sudden irruption in January-February 1969, when hundreds (M) to thousands (S) appeared in lower North-East, vanishing after heavy March rains.

138. DUSKY MOORHEN (*Gallinula tenebrosa*). No record.

139. EASTERN SWAMPHEN (*Porphyrio porphyrio*). Very rare (S).

140. COOT (*Fulica atra*). Rare. Most recent sightings are four on Great Eastern Dam, Radium Hill Powerline, (Mutooroo) 2.2.68 (M) and two at Blackfellow's (Mutooroo) 3.2.69 (B).

141. BUSTARD (*Ardeotis australis*). Very rare generally, where previously quite common, in seasons of good Spear and Mitchell Grass. Single birds sometimes travel as far south as the River Murray between the Eastern border and Morgan, definite sightings during the past decade being at Berri, Loveday, Overland Corner and Ramco (M). Other sightings have been at Mutooroo and Yalpara (M) and Manunda (S) in recent years. Used to be quite common 1913-1928 in Waukaringa-Curnamona District, according to Mr. H. M. Bown, who states that the station people sometimes used to stalk them on the plains, covered with wool sacks. Generally they used to hunt them on horseback and in buggies, waiting until the birds rose with their laborious slow flapping, when a shotgun blast would do the rest. Still considered a delicacy and stragglers are mostly shot, even though it has been declared a "Rare Species." An easy prey, as the bird skulks behind bushes and in long grass. Known as Wild or Plain Turkey and sometimes called Truckies by bushmen. Favourite bush cooking method

was to cut the bird in halves and place in cast-iron camp oven.

145. SPUR-WINGED PLOVER (*Vanellus miles*). Uncommon, being confined to plains; in threes and fours usually.

146. BANDED PLOVER (*Vanellus tricolor*). Common most years in open country adjoining Olary Ridge and northwards, where it breeds extensively in good seasons, e.g. September-October, 1968. Uncommon in the South (M). Unperturbed by interference to nest, e.g. at Manunda, one egg of four was accidentally broken while showing nest to visitors, but the plover removed the broken parts and resumed sitting on remaining three eggs (S). Nests have been observed in herbage of bore streams (M).

[147. GREY PLOVER (*Pluvialis squatarola*). Only occurrence is of a lone bird, thought to be a Grey Plover, at Frome Downs on 3.9.63 (M), but this sighting may be questioned.]

150. RED-CAPPED DOTTEREL (*Charadrius alexandrinus*). Rare in this region. Seems to prefer broader waters. Only sightings have been on bank of Pigeon Box Dam at Manunda in 1962 (S) and two at Luke's Dam, (Oakbank), October 1969, on the margin of a Box swamp, following rain (M).

155. BLACK-FRONTED DOTTEREL (*Charadrius melanops*). Common, being usually seen at edge of most waters. Nested Spring Dam 1968 (T) and Luke's Dam (Oakbank) October 1969 (M).

156. RED-KNEED DOTTEREL (*Charadrius cinctus*). Uncommon, sightings being at Panaramitee and Manunda (S), Jubilee Dam, Mutooroo (B & M) and Luke's Dam (Oakbank) (M). One nested February 1968 at Manunda on edge of rubble road (S).

157. AUSTRALIAN DOTTEREL (*Peltohyas australis*). Common in Olary Ridge and northwards, but uncommon in winter and further south. Usually encountered from 2-20 in a group, on plains away from water and on tracks at dusk, where they display little inclination to move to safety. Thousands arrive most years in Spring at Manunda and breed extensively (S).

164. GREENSHANK (*Tringa nebularia*). No record.

165. MARSH-SANDPIPER (*Tringa stagnatilis*). Rare; one only, at Harvey's (Spring Dam), 5.11.68 (T).

171. RED-NECKED STINT (*Calidris ruficollis*). Very rare; only record is of four at a waterhole on Spring Dam 3.11.66 (T).

173. SHARP-TAILED SANDPIPER (*Calidris acuminata*). Rare; one bird, a lame, quiet specimen, stayed at Manunda on the North Black Oak Dam for a fortnight in October 1967 (S), while a group of about 20 were at Luke's Swamp (Oakbank), October 1969 (M).

181. WHITE-HEADED STILT (*Himantopus himantopus*). Uncommon; prefers waterholes to dams, e.g. dozens at Oakvale Swamp in 1962 or 1963 (M). Five at Mutooroo 5.2.69 (B), several in dam at Sturt Vale 11.10.68 (Eckert), one on Pigeon Box Dam (Manunda), March 1969 (S) and about 15 at Luke's Swamp (Oakbank) October 1969 (M), where breeding amongst Australian Boxthorns (*Lycium australe*).

183. RED-NECKED AVOCET (*Recurvirostra novaehollandiae*). Uncommon; seen occasionally (S); four in seven years (T).

184. SOUTHERN STONE CURLEW (*Burhinus magnirostris*). Extremely rare, possibly extinct, but were common in the North-East during early days of settlement, according to Messrs. Mac Bown and Ted O'Reilly. Occasionally encountered along River Murray (M), and the Oodlawirra area (T).

186. AUSTRALIAN PRATINCOLE (*Glareola isabella*). Moderate numbers in northern parts in some years, with large numbers in selected favourable sites, e.g. Netley Gap, 1962-1963 (T). Often lurk in rabbit holes and fallen hollow trees (S & T). Most recent sightings are a "a few" at Spring Dam 6.10.68 (T), five near Lilydale H.S. 25.4.68 (M) and a pair on a Manunda plain in March 1969 (S).

190. SILVER GULL (*Larus novaehollandiae*). Uncommon, seen occasionally in small numbers. (T S & M). Called Seagull.

194. MARSH TERN (*Chlidonias hybrida*). Rare; one at Three Mile Dam, (Manunda), (S), one at Jubilee Dam, (Mutooroo) 16.1.68 (B) and up to 50 at Luke's Swamp (Oakbank) on 21.9.69 and 11.10.69 (M).

195. GULL-BILLED TERN. (*Gelochelidon nilotica*). Only record is of group of five at Luke's Swamp (Oakbank) on 21.9.69 and 11.10.69 (M).

205. PEACEFUL DOVE (*Geopelia striata*). Uncommon, but widespread in country adjoining red gum creeks, which are preferred to plains and dense mallee.

206. DIAMOND DOVE (*Geopelia cuneata*). Uncommon, inhabiting smaller area than 205. Sightings in past decade have been at Spring Dam (T), Panaramitee, Manunda and Gairloch, Loch Hazard, Jubilee and South-East Hut (all Mutooroo) (M) and Sturt Vale (J. Eckert).

207. COMMON BRONZEWING (*Phaps chalcoptera*). Uncommon over most of region, but more common in mallee, particularly southern, where up to 200 have been observed coming in to a dam on Calperum to drink at dusk (M). Numbers appeared to decline during drought of 1966-7. Normally presumed to be a sedentary species, but one bird, banded by author at Eremophila Flat on Calperum Station 19.9.64 was found dead on 24.11.67 at St. Arnaud, in Victoria, 225 miles south-east, which is an Australian record for distance. It is presumed that the drought was the cause of this unexpected movement.

Sometimes nests through the summer and feeds extensively on seeds of Kangaroo Bush (*Cassia*) (S).

209. FLOCK-PIGEON (*Phaps histrionica*). No record.

211. CRESTED PIGEON (*Ocyphaps lophotes*). Common, except in mallee scrub. Sometimes in flocks of up to 40. Called Top-Knot.

\*211A. ROCK DOVE (*Columba livia*). Uncommon; at some towns and homesteads. Occasionally lone racing specimens rest for a week or two.

212. RED-TAILED BLACK COCKATOO (*Calyptorhynchus magnificus*). No

record, but Mr. T. E. O'Reilly states that he recorded three of these at the Eregundah Creek (Wirrealpa) on 1.1.1930.

216. WHITE COCKATOO (*Cacatua galerita*). No record, but Messrs. Bown and O'Reilly quote that they used to be common on the western fringe between 1913 and 1934, the eastern-most places being Yunta to Wirrealpa.

217. PINK COCKATOO (*Cacatua leadbeateri*). Rare. Appears to be holding its numbers during the last few years, after many years of decline, principally due to trapping, particularly in late 1950's. Feeds a lot on paddymelon seeds (M, B) and also have been noticed eating cones of Stone Pine trees at Manunda H.S. (S). Largest number seen is 50 on Calperum 23.1.66 (M). Nests in mallee and does not appear to extend north from Yunta and Cockburn. Known as Major Mitchell Cockatoo.

218. LITTLE CORELLA (*Cacatue sanguinea*). Common, principally around gum creeks, where they breed extensively. Screeching of large flocks along creeks has caused horse teams to bolt, according to Messrs. Bown and O'Reilly.

220. GALAH (*Cacatue roseicapilla*). Very common. "Heard from different sources that there were none at Tiverton in 1915, when they came down from the north," (T). Breeding may continue for months, e.g. still feeding young at Manunda, early April, 1969 (S).

225. COCKATIEL (*Nymphicus hollandicus*). Common nomad in good seasons and almost entirely absent in dry seasons. In 1956 and 1968 common throughout, nesting extensively in a variety of hollow trees (M). In 1962 common in north and 1963 very common in the south and along River Murray (M). Less common in 1969. Called Cockatoo-Parrot by bushmen. This species appears to drink less than other parrots.

226. REGENT PARROT (*Polytelis anthopeplus*). Rare, only inhabiting, in small numbers, the southern mallee, Oak Bore (Calperum) and south of Gluepot being northernmost sightings (M). Known as Rock Pebbler.

228. RED-WINGED PARROT (*Aprosmictus erythropterus*). Very rare, probably

casual. Only known recording is of a pair at Duffield's Well (Mutooroo), 9.9.66 (B), who "was surprised to see a pair stay around the well for about half an hour, before flying off." Despite further searching by several parties, none has been recorded since.

229. ROSELLA (*Platycercus elegans*). No record of any of genus *Platycercus*, but Mr. H. M. Bown, who lived in Waukaringa area from 1913, states that, without a doubt, reddish-coloured rosellas used to occur, to about 1920, at Yalpara and Minburra.

231. RINGNECK PARROT (*Barnardius barnardi*). Widespread, but in small numbers throughout. Appears to be on decline.

233. RED-BACKED PARROT (*Psephotus haematonotus*). Rare, only occurring on the extreme western boundary of region (east of Mt. Bryan to Oodlawirra). Recorded as far east as Dewhirst's, near Tuilkilkey (T). Called Grass Parrot.

234. MULGA PARROT (*Psephotus varius*). Moderate numbers generally, ranging from uncommon on northern plains to rather common in mallee. Were present in thousands in southern mallee, particularly Calperum, in 1963-4, since when their numbers have declined appreciably (M).

235. BLUE BONNET (*Northiella haematogaster*). More common over a wider range of country than 234, without ever being really common. Absent in mallee, prefers open country.

236. SCARLET-BREASTED PARROT (*Neophema splendida*). No record, very rare. However, there is no doubt that they were trapped at Canegrass and Gluepot (1958-61) and in Calperum (north from Stony Pinch) in 1964-66 (B & M).

237. BOURKE PARROT (*Neophema bourkii*). Very rare. Only record is of two near Olary Creek (Mutooroo) 2.9.69 (B).

NEOPHEMA PARROTS. *Neophemas* (thought to be Elegant Parrots) (*N. elegans*) occur in small numbers, generally in groups of 6-8, throughout and especially Olary Ridge and northern plains, e.g. Bimbowrie and Waukaringa (M). Elegant parrots reported by J. Eckert, in October 1968, at Sturt Vale and a small group over Gairloch Dam (Mutooroo) 13.10.69 (M).

243. BUDGERYGAH (*Melopsittacus undulatus*). Very common in good seasons, absent or almost so in poor seasons. In 1956 and 1968 they arrived in thousands over entire area, but in 1963 and 1969 confining more to southern parts. Breeds extensively, using hollows of any tree, mainly mallee, black oke, sugarwood and box trees. In 1968, every small mallee spout seemed to have a breeding bird (M). Arrives spring, departs summer, on same pattern as Cockatiels. Large flocks in 1956, 1963 and 1968 leave little doubt about the authenticity of old bushmen's claims that "Shellies" were in clouds, years ago, especially 1917 (Mr. Bown), "big enough to cast a shadow." In extreme heat, hundreds have been known to seek shade under canvas or shrubs with man and also under a standing bullock team, according to Messrs. Bown and O'Reilly. Estimate of one flock at Spring Dam, in November 1968, is 10,000 (T), and of 20,000 or more near Samson's Well H.S., north-west of Morgan on January 4, 1970 (M).

246. PALLID CUCKOO (*Cuculus pallidus*). Rather uncommon spring migrant that departs by autumn. Bushmen call it Brain Fever Bird, on account of its monotonous penetrating call. One young bird observed being fed by Yellow-fronted Honeyeater at Oulnina Park 13.10.68 (M). Common during early spring 1969 (M).

247. FAN-TAILED CUCKOO (*Cacomantis pyrrhophanus*). Rare, having been seen only at Manunda (S) and Oodlawirra 31.8.68 (M).

248. BLACK-EARED CUCKOO (*Chrysococcyx osculans*). Uncommon. Few records until recently. Single specimens at Morganvale, Oakbank, Panaramitee and Southern mallee (M) and Sturt Vale (J. Eckert), all since October 1968 and three at Manunda 17.8.69 (M).

249. HORSFIELD BRONZE CUCKOO (*Chrysococcyx basalis*). Uncommon, odd birds being recorded over a wide area. Occasionally notice young being fed by wrens, principally Purple-backed (M).

252. BARN OWL (*Tyto alba*). Assumed to be rather rare, only sightings being one near Burra (T) and one south of Gluepot 17.8.66 (M).

253. MASKED OWL (*Tyto novaehollandiae*). Rare; only recorded at Manunda (S).

254. BOOBOOK OWL (*Ninox novaeseelandiae*). Probably rather common, being recorded at several sites, principally in roofs of straw barns.

257. TAWNY FROGMOUTH (*Podargus strigoides*). Rather common. Mainly noticed by being disturbed in scrub in day time. Defends nest fiercely if approached too closely, otherwise makes an ideal photography subject. Adults have been caught by hand for banding (M). Known as Mopoke.

258. OWLET-NIGHTJAR (*Aegotheles cristatus*). Common in scrubs, where frequently, in evenings and at dawn, heard whilst flying (unattractive, grating call) or seen squatting on tracks (M).

259. SPOTTED NIGHTJAR (*Eurostopodus guttatus*). Thought less common than 258. Seen five or six times in recent years (T), Canegrass (M) and one at Manunda 30.1.69 (S). Nests on bare ground in October-November; one egg.

261. FORK-TAILED SWIFT (*Apus pacificus*). A transient nomad. Only recordings are that thousands were seen in February-March 1968 and 20 on 1.3.69 at Spring Dam (T).

263. KOOKABURRA (*Dacelo novaeguinae*). Very rare. One bird, for a year in 1962-3, ranged between Manunda and Panaramitee, in the gum creeks (S) and one at Tiverton on Yunta Creek in September 1964 (T). Usual habitat is along River Murray and in wetter country.

264. RED-BACKED KINGFISHER. (*Halcyon pyrrhopygius*). Rather common migrant, arrives mid-September, departs by autumn. Nests in tunnels in creek banks, where earth has remained on the roots of a fallen tree, in mounds of dams and excavated areas. When disturbed, flies to nearest tree or shrub and starts its continuous, monotone call. Another favourite perching/calling site is a TV antenna.

265. SACRED KINGFISHER (*Halcyon sanctus*). Transient migrant that prefers the River Murray (M). Observed Manunda (S) and at South-East Hut (Mu-

tooro), 5.10.63 (M). Breeds in hollows of Box trees. Monotonous call of five staccato notes.

266. RAINBOW BIRD (*Merops ornatus*). Common migrant, arriving late September, departing March-April. Nests in earth banks and even on sloping land. Groups of 30 occasionally seen. Waits on dead limbs before darting after insects. Wrongly called Kingfisher in North-East.

270. WELCOME SWALLOW (*Hirundo tahitica*). Common, especially around buildings and dams. Frequently uses verandahs of huts for nesting sites.

271. WHITE-BACKED SWALLOW (*Cheramoeca leucosternum*). Uncommon generally, but occasionally quite common around suitable localities, especially water-holes. Nests in creek banks.

272. TREE-MARTIN (*Petrochelidon nigricans*). More common than 271. May occur in hundreds around waters.

273. FAIRY MARTIN (*Petrochelidon ariel*). Uncommon; appears to prefer wetter localities. Nests have been noticed in buildings by dams (M). Nest each year by water-holes at Manunda (S).

274. PIPIT (*Anthus novaeseelandiae*). Very common, but absent in scrubs.

275. GROUND CUCKOO-SHRIKE (*Pteropodocys maxima*). Uncommon. Groups usually 2-6 birds. Observed in recent years at Manunda (S), Spring Dam (T), Calperum, Chowilla, Oakbank, Morganvale, Oulnina Park, Tuilkilkey, Sturt Vale and Pine Valley (M) and Mutooro (B). Nest with two eggs at Spring Dam, 14.11.68 (T).

276. BLACK-FACED CUCKOO-SHRIKE (*Coracina novaehollandiae*). Rather uncommon, generally in small flocks, but 20 noticed in one flock at Spring Dam (T & M) on 4.8.68. Nest of fine fibre and bark, is small and flat, in a tree fork and usually contains 3 eggs. Called Blue Peter, Blue Jay, Storm Bird or Summer Bird in the north.

277. LITTLE CUCKOO-SHRIKE. (*Coracina robusta*). Distribution uncertain, due to similarity with 276, but one observed for ten minutes at Oulnina Park 3.2.68 (M).

278. WHITE - WINGED TRILLER. (*Lalage suerii*). Common migrant in good years, virtually absent in poor seasons. Common in 1956, 1962-3, rather common 1968. Arrives early October usually, but one pair observed 3.8.68 at Lilydale (M). Has been noticed nesting near other black and white birds, e.g. Willie Wagtails and Magpie-Larks (T & M) and also White-winged Choughs and Apostle Birds at Lilydale, October 1958 (M). Sometimes called Caterpillar-Eater.

280. SOUTHERN SCRUB ROBIN. (*Drymodes brunneopygia*). Rare overall, but rather common in better class mallee that is not overgrazed. Occasionally recorded beyond mallee zone, latest being at Gairloch, (Mutooroo), 5.2.69 (B), where there is good vegetative cover of mulga, black oke, *Cassia*, *Kochia* and *Eremophila* principally.

282. CHESTNUT-BACKED QUAIL-THRUSH (*Cinclosoma castanotum*). Uncommon, existing only in mallee with undergrowth not overgrazed, e.g. portions of southern mallee (M) and occasionally in Wheal Motley Hills (Levi Range), (T).

284. CINNAMON QUAIL-THRUSH (*Cinclosoma cinnamomeum*). Rather common in its more open habitat, which appears to extend north of Telechie (Kalabity) and Curnamona, where it occurs in same country as Wedgebills (M).

286. WHITE - BROWED BABBLER (*Pomatostomus superciliosus*). Common, particularly savannah lands. Known as Hopping Jenny or Happy Family.

287. CHESTNUT-CROWNED BABBLER (*Pomatostomus ruficeps*). Inhabits portions of area of, and less common than, 286. Has been noticed in Mutooroo that 286 and 287 inhabit separate territories around watering points only four miles apart (M).

288. LITTLE GRASSBIRD (*Megalurus gramineus*). Only record is of one at Luke's Dam (Oakbank), 11.10.69 (M), but this species could easily be overlooked.

289. REED WARBLER (*Acrocephalus stentoreus*). Transient migrant only, that has been only occasionally recorded around dams, (Cockburn, September 1964) and among

reeds of gum creeks and bore streams (Wirrealpa and Frome Downs, September 1963), (M).

291. BROWN SONGLARK (*Cincloramphus cruralis*). Common visitor, in good seasons, on open lands; particularly common 1968-9. Known as skylark or cock-chit-a-wheeler to bushmen. Still present with its spring song at Spring Dam, 30.3.69 (T).

292. RUFOUS SONGLARK (*Cincloramphus mathewsi*). Rare; occurred in large numbers at Tuilkilkey during spring 1961 (T). Fairly common in savannah woodland, late 1968, at Spring Dam (T).

293. WHITE - FRONTED CHAT. (*Ephthianura albifrons*). Common plains bird in better seasons, e.g. 1968. Bushmen call it Tin-tac.

294. CRIMSON CHAT (*Ephthianura tricolor*). Very common visitor in good seasons, frequenting *Atriplex* and *Kochia* plains. Very thick 1956 and 1968 especially, also 1963 in southern parts (M). In 1967-8 were first recorded in January, viz., Mutooroo 16.1.68 (B), Panaramitee 20.1.68 (M), Manunda, end January (S) and Radium Hill 2.2.68 (M). By the end of April 1968, no fully plumaged males could be found, although hundreds to thousands of uncoloured birds were located in the North-East and Eastern Flinders. (Adult males are believed to have an eclipse plumage.) By early August, the birds were still common, with a few showing some colour, while by September, they appeared fully coloured. Breeding is known to have occurred, in Bluebush and Blackbush (*Kochia*) in early February 1968 at Grampus and in October 1968 at Harvey's (Spring Dam). By January-February 1969, the thousands of birds had virtually disappeared. The writer noted that the birds arrived in the North-East at the identical time that the first heavy rains fell (January-February 1968) after a severe drought, and bred immediately. A further migration to the south occurred in spring, when annual herbage was prevalent. By February 1969, hardly a bird could be found between Morgan and Wertalooona (M), and only small numbers were present later in 1969. Called Red Canary by bushmen.

295. ORANGE CHAT (*Ephthianura aurifrons*). Less common, usually, than 294.

Present in large numbers in 1968, becoming more common by February 1969 (M), but uncommon later in 1969. Known as Bush or Saltbush Canary to bushmen.

296. GIBBER-BIRD (*Ashbyia lovensis*). No record. Known as Desert Chat in the North.

297. WHITEFACE (*Aphelocephala leucopsis*). Common plains bird, that breeds in a wide variety of sites, usually involving a hollow, even an old pair of boots hanging in a bullock bush. (*Heterodendron olaeifolium* (S).

302. WEEBILL (*Smicromis brevirostris*). Common dweller, in eucalypt scrubs only, whether gum, box or mallees. Known as Tit.

303. LITTLE THORNBILL (*Acanthiza nana*). No record, but could easily be misidentified.

305. YELLOW-TAILED THORNBILL (*Acanthiza chrysorrhoa*). Uncommon, small numbers occurring over wide range. Particularly noticed around homestead gardens (M).

307. SLENDER-BILLED THORNBILL (*Acanthiza iredalei*). No record, but approaches the western boundary of the area covered by this article.

308. CHESTNUT-TAILED THORNBILL (*Acanthiza uropygialis*). Rather common, especially on plains. Often with 297. Has been recorded nesting in abandoned 4" galvanized iron water piping, disconnected above ground (M). A marvellous mimic of parrots, cockatoos and butcher birds, especially when caught in a bander's mist net.

310. BROWN THORNBILL (*Acanthiza pusilla*). Rufous-rumped variety is common in hills, especially in association with *Dodonaea lobulata* (Hop Bush), e.g. Levi Range, Oulnina Park and Eastern Flinders (M).

313. SHY GROUND-WREN (*Hylacola cauta*). Rare. Southern mallee, e.g. Chowilla to Morgan (M) and Tuilkilkey mallee (T).

314. RUFOUS FIELD-WREN (*Calamanthus fuliginosus*). Apparently rather common on Old Koomaloo, Balah and Redcliffe Stations, where they inhabit plains supporting Bluebush and Blackbush (*Kochia*

spp.) and Saltbush (*Atriplex* spp.). A shy species that may well occur in similar habitat elsewhere in the North-East.

315. REDTHROAT (*Pyrholaemus brunneus*). Common in low bush country, but less common south of Olary Ridge and east of Radium Hill Power Line except for Eremophila Flat (Calperum). Particularly common Levi Range, Oulnina Park, Martin's Well and northward (M).

320. STRIATED GRASS-WREN (*Amytornis striatus*). Rare, occurring only in selected southern mallee (M).

325. BLACK-BACKED WREN (*Malurus melanotus*). Uncommon; in southern mallee (Canopus, Morganvale, Chowilla, Calperum, Gluepot, etc.), oke and mulga scrubs of Lilydale, Sturt Vale and Oakvale and rather open country south of Yunta (M).

327. BLUE AND WHITE WREN (*Malurus leucopterus*). Common in plains country supporting Bluebush and Blackbush (*Kochia* sp.) and Saltbush (*Atriplex*).

328. PURPLE-BACKED WREN. (*Malurus lamberti*). Less common than 327; also avoids dense mallee scrubs.

330. GREY FANTAIL (*Rhipidura fuliginosa*). Uncommon, but widespread, although avoids dense mallee. Considered to be nomadic, as, after being absent for months, suddenly appears in moderate numbers for a few weeks and then departs, leaving a straggler or two.

332. WILLIE WAGTAIL *Rhipidura leucophrys*. Common and widespread; at least a pair at most waters. An unusual nesting habit was noticed at Amateur Hut (Lilydale) in October 1958, when a pair lined the disused nest of a Welcome Swallow on a rafter of the hut verandah over the back door, successfully raising two young (M).

335. RESTLESS FLYCATCHER (*Myiagra inquieta*). Uncommon to rare. Considered nomadic like 330 (M). Called Scissors Grinder.

336. JACKY WINTER (*Microeca leucophaea*). Same comments as for 330.

338. RED-CAPPED ROBIN (*Petroica goodenovii*). Uncommon generally; numbers may vary from nil to plentiful some seasons, inhabiting all classes of country except open and gibber plains, showing a special preference to native pine and savannah mallee and black oke country (M). Called Robin Red-breast by some bushmen.

341. HOODED ROBIN (*Petroica cucullata*). Less common than 338; inhabits most classes of country in an apparently irregular fashion and thought to be nomadic (M).

343. GOLDEN WHISTLER (*Pachycephala pectoralis*). Very rare; occasionally noted in southern mallee and River Murray (M) and east of Burra (T).

344. RUFOUS WHISTLER (*Pachycephala rufiventris*). Uncommon, but widespread. However numbers vary and is probably nomadic. Avoids mallee and plains, preferring black oke, pine and mulga scrubs (M).

346. GILBERT WHISTLER (*Pachycephala inornata*). Apparently rare; only one, at 14 Mile (Lilydale) November 1959 (M).

348. GREY SHRIKE-THRUSH (*Colluricincla harmonica*). Uncommon inhabitant of all classes of scrublands.

350. CRESTED BELLBIRD (*Oreoica gutturalis*). Uncommon overall, but moderate numbers in its habitat of mallee and black oke scrubs. This bird has never been observed drinking by author and many acquaintances.

351. WEDGEBILL (*Sphenostoma cristatum*). Common in its range, which is known in the north to extend from Cockburn to Kalabity to Balcanoona down to Harvey's (Spring Dam) and Rock Paddock (Manunda) and east through Devenborough Downs to Duffield's Well and Blackfellows' Dam (Mutooroo), (M, S, T & B). Mainly inhabits Nitre or Dillon Bush (*Nitraria schoberi*) and wattle bushes of watercourses, principally *Acacia victoriae* (Casha) and *Acacia tetragonophylla* (Dead Finish) in northern and *Acacia colletioides* (Wait-a-While) in southern parts. Occasionally occurs down to River Murray at Chowilla and Calperum (M).

353. BLACK-CAPPED SITTELLA (*Neositta chrysoptera*). Uncommon to rare. Flocks of up to a dozen occasionally observed in scrubs, e.g. Spring Dam (T), Mutooroo, (Nov. 1964), Hawks Nest (Sept. 1958), Chowilla (14.10.65) and southern mallee fringe (M).

354. BROWN TREECREEPER (*Climacteris picumnus*). Common inhabitant of savannah scrubs of all classes.

357. WHITE-BROWED TREE-CREEPER (*Climacteris affinis*). Considered rare, but would easily be mistaken for 354. Only recordings are in Chowilla (May 1964) and Calperum (23.1.65), (M) and at Sturt Vale, a report from Mr. John Eckert on 12.10.68.

358. MISTLETOE BIRD (*Dicaeum hirundinaceum*). Rather common autumn visitor, frequenting any plant with mistletoe, but particularly *eucalypts*, quandongs and mulgas. Departs within a few weeks in southern parts (M), while may be present most of the year at Spring Dam (T).

360. YELLOW-TAILED PARDALOTE (*Pardalotus xanthopygus*). Uncommon; mallee.

362. STRIATED PARDALOTE (*Pardalotus striatus*). Common, especially in eucalypt scrubs.

363. RED-BROWED PARDALOTE (*Pardalotus rubricatus*). No record; occurs towards Cooper's Creek.

364. SILVEREYE (*Zosterops lateralis*). Rare or very rare. Only known sightings have been at Manunda; "occasionally pass through" (S).

366. BLACK HONEYEATER (*Certhionyx niger*). Absent to rare in most years, but must be transient in certain seasons, e.g. when it reached River Murray in moderate numbers in 1963 (M). Sightings have been at Calperum Sept. 1963, (M). Plumbago 6.9.65 (Mr. G. O. Furness) and Sturt Vale 15.10.68 (John Eckert). Partial to *Eremophila maculata* (Spotted Emu Bush) and *Leptospermum coriaceum* (Green Tea Tree).

367. PIED HONEYEATER (*Certhionyx variegatus*). Thought to appear more often

than above, but in smaller numbers. Sightings are of one north of Overland Corner 17.9.61, one Calperum Sept. 1963, two at Martin's Well 1.9.68, six at Koonamore 15.9.68 and four at Lilydale (a pair with two nestlings), 12.10.68 (M) and one at Manunda (S). In addition G. O. Furness reported about 72 at Plumbago in September 1965 and John Eckert observed a few at Sturt Vale in mid-October 1968. Seems to follow the flowering of *Eremophila maculata*.

368. SINGING HONEYEATER (*Meliphaga virescens*). Common and widespread, preferring mulga and black oke scrubs to plains and avoiding mallee. Singly or pairs only.

369. FUSCOUS HONEYEATER (*Meliphaga fusca*). Very rare; only record is of one at Manunda 20.1.68 (S).

370. YELLOW-FRONTED HONEYEATER (*Meliphaga plumula*). Uncommon in southern mallee, but occurs in moderate numbers in western mallee, e.g. Oodlawirra, and hills of the North-East (particularly Oulnina Park), Mt. Chambers and Eastern Flinders. Appears to have an affinity with Gum Coolabah (*Euc. intertexta*). A tame, confiding species (M).

372. PURPLE-GAPED HONEYEATER (*Meliphaga cratitia*). Very rare; only sightings have been at Manunda, where seen rarely, in creek gums (S).

374. WHITE-PLUMED HONEYEATER (*Meliphaga penicillata*). Very common along gum creeks and in the larger box tree flats. Not noticed more than three miles away from above habitat (M). Called Greenie.

375. YELLOW-PLUMED HONEYEATER (*Meliphaga ornata*). Common in mallee, particularly southern. Not known beyond mallee scrubs (M).

376. WHITE-EARED HONEYEATER (*Meliphaga leucotis*). Uncommon mallee resident. Singly or in pairs. Southern and Oodlawirra mallee (M), Tuilkilkey and Spring Dam mallee (T). Same areas as No. 375, which, however, is far more common (M).

378. BROWN-HEADED HONEYEATER (*Meliphreptus brevirostris*). Un-

common to rather rare; southern and western (particularly Oodlawirra) mallee (M) and Tuilkilkey mallee (T). Small flocks of about 8 (M). Feeds on flowers of Tobacco bush (*Nicotiana glauca*) (T).

383. YELLOW-WINGED HONEYEATER (*Phylidonyris novaehollandiae*). Very rare; probably accidental. Two or three observed years ago at Tuilkilkey (T). Normally frequents wetter lands.

384. WHITE-FRONTED HONEYEATER (*Phylidonyris albifrons*). Uncommon to common, depending on vegetation. Seems to prefer mallee, but also occurs in mulga and oke scrubs and along red gum creeks, e.g. Sturt Vale, Bimbowrie, Panaramitee and Mutooroo (M). However, is likely to be encountered, in season, wherever eremophilas flower, particularly *Eremophila alternifolia*, *maculata*, *longifolia*, *freelingi*, *duttoni*, *santalina* and *serrulata*, e.g. Lilydale, Canopus, Calperum, Morganvale, Balah, Canegrass, Levi Range and Eastern Flinders (M). Nests have been discovered in *Eremophila maculata* bushes. Considered as nomadic as any honeyeater.

386. STRIPED HONEYEATER (*Plectorhyncha lanceolata*). Uncommon to rather rare. Only sightings have been in southern mallee (Calperum to Gluepot) (M) and in the black oke and mulga scrubs of Sturt Vale, Lilydale, Oakbank and Mutooroo (M & B), where is moderately common. Nests may be encountered between September and November, on the ends of drooping branches of mulga or black oke trees, e.g. nest being constructed, mainly of emu feathers and wool, in black oke tree at Morganvale 13.10.69 (M).

390. NOISY MINER (*Myzantha melanocephala*). No record. Occurs towards Burra and Hallett (T) and along River Murray (M).

391. YELLOW-THROATED MINER (*Myzantha flavigula*). Common, with a definite preference to eucalypts, but occasionally beyond. Sometimes encountered in flocks of 30 and more.

392. BLACK-EARED MINER. (*Myzantha melanotis*). Rare; only definite records are in Calperum and south of Gluepot (M).

394. LITTLE FRIAR BIRD (*Philomena citreogularis*). Casual or accidental. One only recorded, at Manunda, in July 1968 (S).

397. RED WATTLEBIRD (*Anthochaera carunculata*). Uncommon; in western mallee (Oodlawirra) (M), Spring Dam (T), more common towards Hallett (T). Furthest inland report is at Manunda, where one stayed for a week from 4.5.68 (S). Seldom stray far into mallee north of River Murray (M).

398. SPINY-CHEEKED HONEY-EATER (*Acanthagenys rufogularis*). Common usually, but quite variable and apparently nomadic. Have been rather scarce since 1963-4, when very prevalent, particularly in southern mallee (M). Occurs in all classes of scrub to the edges of rather open plains, feeds on several species of *Eremophila*, *Eucalyptus pileata* and *incrasata* and especially fruit trees (apricots) of homestead gardens! Two banding records of the author are interesting—one bird banded at Oak Bore, (northern Calperum) 20.3.64, was found dying at Cooltong 3.7.65, 28 miles south and another, banded at Eremophila Flat (southern Calperum) 5.9.64, was discovered dead at Robertstown, 92 miles west, about 13.1.67, the latter being an Australian distance record.

\*398A. GOLDFINCH (*Carduelis carduelis*). Uncommon to rare; northernmost sightings have been at Spring Dam (T), Manunda (S) and Mutooroo (M and B), all involving small numbers.

403. ZEBRA FINCH (*Peophila guttata*). Common, but numbers vary considerably with seasons, 1968-9 being a continuous breeding season. Breeds in bushes, mainly *Acacias* and also in eaves, chimneys, etc., of homesteads and huts. Prefers open country to heavy scrub. In hot weather, congregates in hundreds by water. Two incidents at Manunda are worth relating (S). One pair built a nest in a small tree 5' from ground and hatched five young, despite the fact that a caterpillar tractor was dismantled and repaired immediately adjacent to the nest. On another occasion, a pair built in a tank-sinker's wagon and when the operator moved his plant, he placed the nest with young in a nearby bluebush, but parents continued

feeding the young unconcernedly. Often called waxbills by bushmen.

\*403A. HOUSE SPARROW (*Passer domesticus*). Common around towns and most homesteads and buildings, seldom extending far from same. Population appears static after earlier colonization.

\*403C. STARLING (*Sturnus vulgaris*). Common. Often encountered miles from habitation, particularly at watering points. Considered to be increasing in numbers and range. Especially common along Broken Hill Railway Line.

405. MAGPIE-LARK (*Grallina cyano-leuca*). Common in favoured locations near permanent water; elsewhere rare. Occasionally congregates in flocks of 30-50. In October 1958, observed nesting near Cronje Hill (Lilydale) with four other species, in an acre of Black Oke scrub near a leaking pipeline. The other four were Apostle Bird, White-winged Chough, Willie Wagtail and White-winged Triller, so that all three mud nesters of the family \*Grallinidae were represented, while four were black and white. The only dissension among the five parties was if the Magpie-Larks approached too close to the Apostle Birds' nest; all birds raised their young (M). Nest building at Manunda in March 1969, after rains (S).

406. APOSTLE-BIRD (*Struthidea cinerea*). Common in permanent habitat within Mutooroo—Lilydale and Chowilla—Hypurina, beyond which is nomadic. Further-most recordings beyond permanent habitat are at Duffield's Well (Mutooroo), (B), Radium Hill and Wadnaminga (M), Manunda and Grampus (S), Tuilkilkey (T), Mulga Hill, Oak Park, Sturt Vale, Canopus, Canegrass, etc., and south to River Murray between Morgan and Chowilla (M). Unknown north of Olary Ridge. Does not appear to use the same nest, tree or site again, often nesting several miles away in the next season. An intelligent species, that is especially fond of household scraps and grain thrown to poultry at homesteads and boundary riders' huts.

For further reading, vide paper in *S. Aust. Ornithologist* 24 (1967) pp. 139-145 by author. Have been observed in flock of 100 (B), but usually 8-15. Known as Lousy Jacks to northern folk.

407. WHITE - WINGED CHOUGH (*Corcorax melanorhamphus*). Uncommon to rare in north, moderate numbers in southern (M) and western mallee (T & M) and in watercourse country of Lilydale and Mutooroo (M & B). Apparently absent north of Olary Ridge. Sometimes occur in flocks of 50-60. Have been recorded on Calperum using same nest for four consecutive years, until the added weight of another rung of mud each year caused the eventual collapse of the nest (M). Called Jay and sometimes Apostle Bird.

408. WHITE-BREASTED WOOD-SWALLOW (*Artamus leucorhynchus*). Uncommon, perhaps rare, but position obscure, as not recorded until recently, over a dozen being encountered at 3 Mile Dam (Oakbank) on 9.1.69 (M), a pair were nesting high in red gum tree at Jubilee Dam (Mutooroo) 10.1.69 (M) and about 30 at Luke's Dam (Oakbank) October '69 (M). A pair, presumably two mentioned above, reported nesting at Jubilee on 2.11.68 and feeding two young 3.2.69 (B). Were recorded on River Murray (Lake Merreti) in October 1966 (M).

409. MASKED WOOD-SWALLOW (*Artamus personatus*). Common to very common visitor in favourable seasons, otherwise rare or absent. Often with 410, in large flocks.

410. WHITE - BROWED WOOD-SWALLOW (*Artamus superciliosus*). Common to extremely common visitor in favourable seasons, e.g. 1963-4.

411. BLACK-FACED WOOD-SWALLOW (*Artamus cinereus*). Uncommon. A northern species that was recorded during October 1968, when small numbers were at Manunda and Lilydale (M) and at Sturt Vale (John Eckert).

412. DUSKY WOOD-SWALLOW (*Artamus cyanopterus*). Uncommon. Seems to prefer River Murray districts and Flinders Ranges to the North-East. Never in flocks like 409-410.

413. LITTLE WOOD - SWALLOW (*Artamus minor*). Not recorded. Other observers have observed species at Lake Merreti and in Flinders Ranges.

414. BLACK-WINGED CURRAWONG (*Strepera versicolor*). Rare scrub

dweller. Small numbers are present in southern mallee (Calperum, Chowilla; Hawks Nest, Gluepot, etc. (M)). Also isolated colonies at Mallee Dam (Oakbank), Loch Hazard-Myall Tank (Mutooroo), (M) and on Sturt Vale (John Eckert). Have seen eight come in to drink (M). Unknown further north. Known as Bell or Black Magpie.

415. PIED BUTCHER-BIRD (*Cracticus nigrogularis*). Uncommon; recorded Mutooroo, Lilydale and Chowilla (M). Frequents River Murray more.

416. GREY BUTCHER-BIRD (*Cracticus torquatus*). More common than preceding in the North-East. Known frequently as Derwent Jack. Clutch is of 2 or 3 youngsters (M).

417. AUSTRALIAN MAGPIE (*Gymnorhina tibicen*). Common; the black-backed form is in the north and east of the region, while the white-backed inhabits the western fringe only. The line of separation appears to extend from Morgan (M) to Yunta, (M, S & T) north of which the black-backed continues its range (M). Hybrids may occur up to 10-15 miles either side of line (M).

420. AUSTRALIAN RAVEN (*Corvus coronoides*). Common.

421. LITTLE RAVEN (*Corvus mellori*). Unknown; see 422.

422. LITTLE CROW (*Corvus bennetti*). Thought to be rather common, but we are not familiar with the field differences between 421 and 422.

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