

THE BIRDS OF COMET BORE (NINETY-MILE PLAIN)

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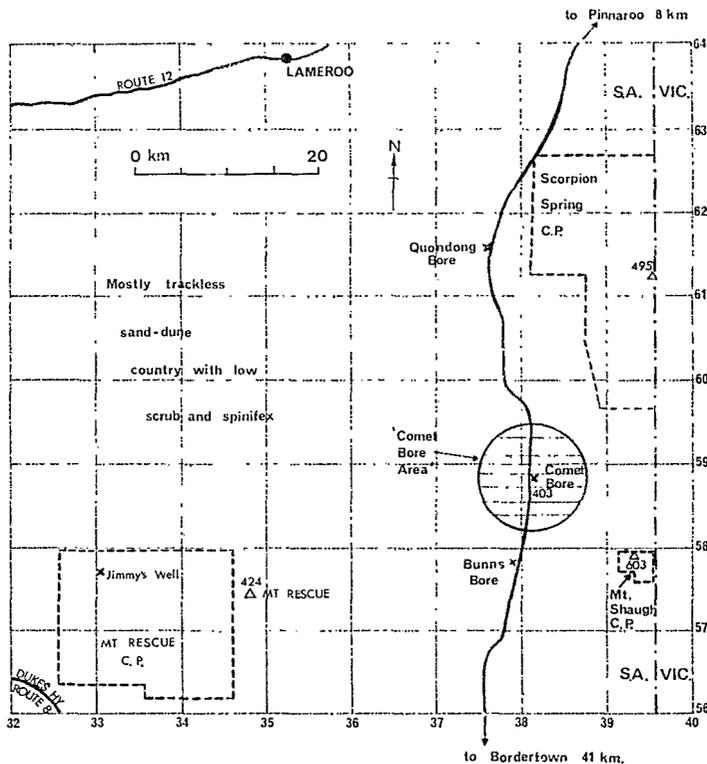
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EXTENT OF SURVEYS

Comet Bore is the unofficial name given to a spot on the Bordertown to Pinnaroo road (381.589), some 8 km north of Bunn's Bore (see map.) As most members of the S.A.O.A. will know, this spot has the distinction of being the site of three S.A.O.A. camp-outs in the past few years — October 1967, October 1971 and March 1975. The area has also attracted the attention of smaller groups of observers, particularly after the highly successful 1967 camp-out, at which the Western Whipbird was rediscovered in this region.

Apart from the main north-south road, which has been progressively up-graded during recent years, there are few negotiable tracks in this country, and most of the observations at camp-outs and on other visits have been made within walking distance of Comet Bore, or along the main Pinnaroo to Bordertown road. Therefore the immediate vicinity, within a range of perhaps five to seven km of the dam has been very intensively covered. In contrast much of the surrounding country is largely uncharted ornithologically, and it is therefore important to know whether the Comet Bore area is fairly typical of this much larger area. It is suggested in the accompanying botanical account that the claypan and its surrounds, an area of perhaps four hectares, may be an unusual feature in this region. However, much of the rest of the Comet Bore area seems to be replicated over a large expanse of country.

Visits have been made to the area in most months of the year excluding January and February and the mid-winter months of June to August, so that the records probably reflect quite well both resident species and most of the migrant and vagrant species. (Table I gives details of the main sources of records.) Further, the second camp-out, in October 1971, coincided with a wet spell, when surface water was widespread and the claypan itself was a small shallow lake. During this period several water birds were recorded. In contrast, the first camp-out in October 1967, coincided with a fairly dry spell, so that the records should also reflect diversity of climatic conditions.



BIRDS AND VEGETATION ASSOCIATIONS

As the botanical account makes clear, the relatively small area covered by observations includes a variety of habitat, which is reflected in differences in avifauna. Irrespective of the presence of water, the claypan is important, as it includes quite a concentration of big mallee. The only other large trees in the region are the stringybarks, *Eucalyptus baxteri*, atop the sandy ridges. The large trees in the claypan appear to support various hole-nesting and tall-tree nesting species, some of which are not common in the area. These include the Galah, the Kestrel, Owllet Nightjar, Magpie and Australian Raven—species common in nearby areas but not here. Similarly, the Goshawk and the Mallee Ringneck have been recorded only from the claypan area. The presence of water, permanent in the small dam, and obviously regular but transitory in the claypan and in the large pools at the side of the main road, also must attract certain species. The half-full claypan in October 1971 produced some unusual visitors, including White-faced Heron, Black Cormorant and Black-winged Stilt.

Perhaps of greater interest than these rather atypical water birds are the typical mallee-heath species. Within a two km radius of Comet Bore, Western Whipbird, Rufous-crowned Emu-Wren, Striated Grasswren, Fieldwren and Red-lored Whistler are all present. None of these birds is easily seen, but all seem to be reasonably common in some part of the vicinity of Comet Bore. The Grasswren and the Whipbird in particular occur in several locations. In the case of the Whipbird, often thought to be extremely localised, this invites one to speculate that it probably occurs in pockets throughout this enormous tract of country. Recent records from the October 1975 camp-out at Billiatt Conservation Park, some 100 km NNW tend to support this view, in that Whipbirds were once again found close to a camp site.

Similarly, in 1969, members of the Bird Observers Club heard Whipbirds near Telopea Downs Station some 20 km SE of Comet Bore (S.A.O.A. Newsletter June 1969). Anyone familiar with this species will attest to the difficulty of seeing as opposed to hearing it, and to the fact that it can be very easily overlooked. From these records, as from those at Comet Bore, it seems that a determined search in this type of country will often be successful. The Rufous-crowned Emu-Wren, again easily overlooked, especially in dull or windy weather, has been located in at least two quite separate

localities within two km of the dam. It appears to be confined to *Triodia* associations, but within this constraint it may be fairly widespread and common in the region.

Two groups of birds are particularly well represented in the area. Five species of Thornbill and in addition the Weebill have been recorded. The sympatry of the Chestnut-rumped Thornbill (although recorded only once) and the Buff-rumped Thornbill is unusual, the latter being close to the northerly limit of its range at this longitude. Similarly, no less than 12 species of Honeyeater have been recorded from the area, and four of them have been recorded nesting. Honeyeaters seem to exhibit strong feeding preferences even within the relatively small area covered. For example, the Yellow-winged Honeyeater, not numerous, is seldom seen far from the *Banksia* regrowth, while the Purple-gaped and Tawny-crowned Honeyeaters favour the inter-dunal plains and particularly the Mint Bush-Mallee complexes. Some Honeyeaters, notably the Purple-gaped and the Tawny-crowned appear to be resident and very numerous, while the more nomadic White-fronted Honeyeater appears to fluctuate considerably in numbers.

COMPARISON WITH NEARBY NATIONAL PARKS

It has already been mentioned that these records relate to the Comet Bore locality and not to the wider region. For this reason, it is interesting to compare them with the few records for other localities in the same general area. The recently dedicated (1970) Conservation Park at Scorpion Springs, an area of 30,366 hectares, lies NNE of Comet Bore (see map) and its southern boundary is only a few km distant. A three-day trip there in October 1973 by Mrs. J. B. Paton and others revealed a substantially similar list of species to those at Comet Bore. Species recorded during this one short visit to Scorpion Springs, but not as yet recorded from Comet Bore, include Black-eared Cuckoo, Rainbow Bee-eater, Tree Martin, Black-backed Wren and Eastern Spinebill. Four of these five species are somewhat nomadic; and their presence in one locality and not the other may be partly due to chance. It can also be noted that the other species, the Black-backed Wren, was recorded in the northern portion of Scorpion Springs. To the WSW of Comet Bore is the long established Mt. Rescue Conservation Park of 28,385 hectares, concerning which see Attwood (1977).

Of the 55 species recorded there, these have not been recorded at Comet Bore: Eastern Rosella, Welcome Swallow, Tree Martin,

Striated Thornbill, Singing Honeyeater and Noisy Miner. Also recorded at Mt. Rescue were three species rare at Comet Bore: Scarlet Robin, Superb Blue Wren and Little Raven. These differences in the bird life of Mt. Rescue may be caused by greater proximity to the Coorong, slightly higher rainfall and greater abundance of large stringybarks.

The small Mt. Shaugh Conservation Park of 3,460 hectares, to the S-E of Comet Bore, (see map) seems to be ornithologically unknown territory, and again this may be due to the fact that access is difficult. On the other hand, to the EN-E, but at a distance of some 100 km, is the huge Wyperfeld National Park. This area has been studied for many years and ornithological records are relatively full. Apart from an impressive list of water birds sustained by periodic flooding of a complex creek and lagoon system, the Wyperfeld bird list is not very dissimilar from that of the Comet Bore region, with which it forms a contiguous wilderness area. The main difference is that Wyperfeld has a 'large eucalypt' association and big mallee, and these areas support populations of Treecreepers, Sittellas and Cockatoos, most of which seem to be absent from the Comet Bore area. However, the Striated Grasswren, Rufous-crowned Emu-Wren and Red-lored Whistler all occur at Wyperfeld. The Western Whipbird has not been recorded there, though it has been heard in the no-man's land between Wyperfeld and the South Australian border (*S.A.O.A. Newsletter* 1969).

SPECIES NOT RECORDED

One pleasing feature of the Comet Bore area is the apparent scarcity of introduced species. Only the Starling has been regularly recorded

and then in small numbers. A small party of House Sparrows was seen around a deserted house several km north of Comet Bore, but none has been recorded strictly within our survey area. Likewise, a single Goldfinch was recorded some km west of the area, but none has been seen in the immediate vicinity.

Overall, the area has yielded some 100 species of which 17 have been certainly recorded breeding, though many more must be assumed to breed. No really systematic search for nests has occurred and several of the visits have been outside peak breeding periods for many species.

It is perhaps, appropriate to comment briefly on species which have not been recorded, but which might reasonably have been expected to occur. In doing so I have largely ignored uncommon nomadic birds, which might have been recorded, but whose occurrence could be viewed as fortuitous. Among the pigeons, neither the Peaceful Dove nor the Domestic Pigeon has been recorded. The Peaceful Dove probably requires more heavily treed areas, and the Domestic Pigeon, like the House Sparrow, probably requires closer communion with man than this area affords. Among the Parrots, the Regent Parrot, which has been recorded from near Bordertown (Condon 1966) probably favours bigger timber, though its occurrence would not be a surprise. Similarly, we have no records of the Eastern Rosella, though as mentioned earlier, it is recorded at Mt. Rescue. The Blue-Bonnet has not been recorded: this seems to be on the edge of its range, and possibly the country is not sufficiently open. It has been recorded regularly on the margins of Wyperfeld (Tarr 1967) but Mack (1970) notes its absence from mallee areas in the north-east of South

TABLE I — MAIN OBSERVATIONS AT COMET BORE

DATES	DURATION (Days)	APPROXIMATE NUMBER OF OBSERVERS	GROUP
A. September 30-October 4, 1967	5	5	Victorian Ornithological Research Group
B. October 6-October 9, 1967	4	60	S.A.O.A. Camp-out
C. November 11-November 12, 1967	2	1	D. Mack
D. April 25-April 27, 1969	3	8	Author <i>et al.</i>
E. October 8-October 10, 1971	3	50	S.A.O.A. Camp-out
F. May 15-May 18, 1972	4	4	D. Close <i>et al.</i>
G. December 23-December 24, 1973	2	2	D. Close <i>et al.</i>
H. March 28- March 31, 1975	4	50	S.A.O.A. Camp-out
I. October 1-October 3, 1976	3	1	Author

Australia. Two relatively common species of Cuckoo, the Pallid and the Black-eared have not been recorded. Cuckoos in general are not common in the area, in contrast to some 'better class' mallee areas, where they are often common. It is perhaps worth noting that no visits have been made to the area in high summer, January and February, and only one short visit in December, and this may account for the absence of records of some spring and summer visitors, such as Cuckoos, and the Rainbow Bee-eater.

Some of the most interesting absences from the list are the Welcome Swallow and both species of Martin. There is little surface water to hold their attention; and conscious efforts have been made to record them without reward.

There are no records of the Redthroat, and the habitat in general is not suitable. The Gilbert Whistler has been recorded some km to the west in *Callitris* scrub, but does not appear to be near Comet Bore.

There appears to be a total absence of the Treecreeper-Sittella group, which again can be attributed to the small size and paucity of trees. The largest trees in the area, on the sand ridges, are stringybarks, which, if it were within its range, might house the White-throated Treecreeper. As it is, the Brown Treecreeper appears not to inhabit this area. Among the rich variety of Honeyeaters recorded, there is one rather surprising absentee, the Singing Honeyeater. Though this species is ubiquitous, it does seem decidedly patchy away from the coast—witness its scarcity in the Flinders Ranges, and Mack's comment (1970) that it avoids mallee in the north-east of South Australia. No finches have been recorded; and the absence of the Zebra Finch is surprising, especially as the dam provides permanent water in a fairly dry area. The final absentee is the conspicuous White-winged Chough, which favours larger trees.

INDICATIONS OF STATUS

In describing the status and abundance of species I have supported the rather subjective comments such as 'common' with two more objective factors; the number and date of visits at which the species was recorded at all. Records relate to nine separate visits to the area; and therefore a species which has been recorded on all occasions is designated (9). In practice some visits have not been fully documented; and therefore very common birds have been recorded less than nine times. As most of the records have come from group visits to

the area involving two or more days' camping, these figures are some indication of seasonal status, though clearly not of abundance. The capital letters immediately following the figures show on which visits the records occurred (see Table I). Species for which there is clear evidence of breeding are marked with a 'Br'. Finally, and a useful innovation used by Cox (1973), I have listed species for which there are unconfirmed records.

SYSTEMATIC LIST

EMU *Dromaius novaehollandiae*

Not numerous, probably because much of the area is too thickly vegetated. The largest party seen was five birds in October 1967. (*D. Kraehenbuehl found it remarkable that Emu droppings in this area contained large quantities of seeds of *Astroloma conostephioides*—Ed.*) (4: B, E, G, H)

BLACK CORMORANT *Phalacrocorax carbo*

Two birds visited the claypan in October 1971 when much of it was a shallow lake (1)

WHITE-FACED HERON

Ardea novaehollandiae

Single birds in October 1967 and October 1971. (2)

WHITE-NECKED HERON *Ardea pacifica*

One bird and a decomposing sub-adult bird October 1976 at the dam. (1)

BLACK-SHOULDERED KITE

Elanus caeruleus

One bird October 1967 and another March 1976. (2)

WHISTLING KITE *Haliastur sphenurus*

Single birds in October 1967 and March 1975. The lack of permanent water in the area probably explains the scarcity of this species. (2)

BROWN GOSHAWK *Accipiter fasciatus*

One or two birds recorded on several occasions, usually in the bigger trees round the claypan. On one occasion, April, 1969, two birds were observed for several minutes, harrying Ringneck Parrots. (4: A, E, G, H)

COLLARED SPARROWHAWK

Accipiter cirrhocephalus

Nest almost certainly of this species six metres up in a mallee. The outside diameter of the nest was 40 cm while the inside bowl measured 17 cm in width. The nest was in the claypan area and a young bird flew from it. (D.C. and J.C., December 1973). An adult bird was seen in March 1975. (2) Br.

WEDGE-TAILED EAGLE *Aquila audax*

Regularly seen, though there seems to be few trees large enough to afford nesting sites. (5: A, B, E, G, H)

SWAMP HARRIER *Circus approximans*

Two birds seen in October 1967, despite the lack of surface water. (1)

BROWN FALCON *Falco berigora*

Only recorded twice. (2: B, H)

NANKEEN KESTREL *Falco cenchroides*

Very common in October 1967, and nesting at the claypan. Subsequently one or two birds have been seen at each visit. Reported breeding on A, using 'old Raven's nest'. (5: A, B, E, G, H) Br.

MALLEE FOWL *Leipoa ocellata*

An old mound about 100 metres from the claypan, October 1967. Single birds seen October 1967 and March 1975. No other mounds have been found, and the species seems to be rather scarce in the area, possibly because of lack of open sandy mallee areas. (2)

STUBBLE QUAIL *Coturnix pectoralis*

This species was recorded in cultivated paddocks just outside the 'Comet Bore circle' (see map) in October 1967. (1)

LITTLE BUTTON-QUAIL *Turnix velox*

A single bird was flushed in December 1973. (1)

SPUR-WINGED PLOVER

Vanellus miles novaehollandiae

Not numerous, but recorded on several occasions, usually single birds or pairs. (3: E, G, H)

BANDED PLOVER *Vanellus tricolor*

Not common. A party of four in October 1967. (2: B, H)

BLACK-WINGED STILT

Himantopus himantopus

A single bird in October 1971 at the claypan lake. (1)

COMMON BRONZEWING

Phaps chalcoptera

Common. (5: A, B, E, G, H)

BRUSH BRONZEWING *Phaps elegans*

Not numerous, though single birds have been recorded on several occasions. (4: A, B, E, G)

CRESTED PIGEON *Ocyphaps lophotes*

Only recorded once in the area in October 1971, though it has been seen regularly in the more open settled districts nearer Pinnaroo. (1)

YELLOW-TAILED BLACK COCKATOO

Calyptorhynchus funereus

Recorded twice in October 1967 and October 1971. (2)

GALAH *Cacatua roseicapilla*

Almost always present but in small numbers and often in the vicinity of the claypan or other isolated clumps of larger trees. Nesting near the claypan in October 1967. (6: A, B, E, F, G, H) Br.

PURPLE-CROWNED LORIKEET

Glossopsitta porphyrocephala

Recorded twice in small numbers, October 1967 and March 1975. (2)

COCKATIEL *Nymphicus hollandicus*

Recorded once in October 1971. (1)

RINGNECK PARROT (MALLEE

RINGNECK) *Barnardius barnardi*

Regularly seen but always in small numbers. Like several of the parrot species it probably needs more large timber. (5: B, D, E, F, H)

RED-RUMPED PARROT

Psephotus haematonotus

Recorded once in October 1971. It is interesting to note that it is described as 'numerically the most common Parrot in the Park' in the Wyperfeld list (Tarr 1967). (1)

MULGA PARROT *Psephotus varius*

Uncommon. (2: B, H)

BLUE-WINGED PARROT

Neophema chrysostoma

A small flock identified by a V.O.R.G. party in October 1967. The Wyperfeld list (Tarr 1967) notes, 'Many of these dull-looking parrots visited the Park during October 1967', and it would seem that the species is not normally present in either area. (1)

ELEGANT PARROT *Neophema elegans*

Recorded twice, including a flock of 25 or more in October 1967. (2: B, E)

BUDGERYGAH *Melopsittacus undulatus*

One record October 1968. (1)

FAN-TAILED CUCKOO

Cuculus pyrrhophanus

Two birds recorded in October 1967.

HORSFIELD'S BRONZE-CUCKOO

Chrysococcyx basalis

Common in October, 1967, and odd birds have been seen and heard at other times. (3: B, E, G)

TAWNY FROGMOUTH *Podargus strigoides*

Three birds seen in March 1975. (1)

OWLET NIGHTJAR *Aegotheles cristatus*

Recorded in the region of the claypan on several occasions. A nest with young in the claypan, October 1967. (4: B, E, G, H) Br.

SPOTTED NIGHTJAR *Eurostopodus guttatus*

Commonly seen and heard near the claypan. Like the previous species, this nocturnal bird tends to be recorded round the campsite, though it is probably quite widespread. (3: B, G, H)

SPINE-TAILED SWIFT

Hirundapus caudacutus

One record March 1975. (1)

RED-BACKED KINGFISHER

Halcyon pyrrhopygia

Two birds seen in October 1967. (1)

WHITE-BACKED SWALLOW

Cheramoeca leucosternum

Small flocks recorded on three occasions. Nesting in October 1967. (3: B, G, H) Br.

RICHARD'S PIPIT *Anthus novaeseelandiae*

Not common. Odd birds recorded on four occasions. (4: A, B, E, H)

BLACK-FACED CUCKOO SHRIKE

Coracina novaehollandiae

Usually seen in small numbers (6: A, B, E, F, G, H)

WHITE-WINGED TRILLER

Lalage sueurii

Recorded twice in October 1967 and October 1971. (2)

SOUTHERN SCRUB-ROBIN

Drymodes brunneopygia

Very common and widespread; though more often heard than seen. (7: B, C, D, E, F, G, H)

CHESTNUT QUAIL-THRUSH

Cincoşoma castanotum

Often recorded but usually in small numbers. (4: B, E, G, H)

WHITE-BROWED BABBLER

Pomatostomus superciliosus

Common. Nest with eggs in October 1967. (6: A, B, C, E, F, H) Br.

BROWN SONGLARK

Cinchorhamphus cruralis

Only recorded twice, in October 1967 and October 1971. (2)

WHITE-FRONTED CHAT

Ephthianura albifrons

Only recorded twice, in October 1967 and October 1971. (2)

ORANGE CHAT *Ephthianura aurifrons*

A single male bird in October 1967. (1)

SOUTHERN WHITEFACE

Aphelocephala leucopsis

Several birds seen in October 1967 but not recorded since. (1)

WEEBILL *Smicrornis brevirostris*

Common. (6: A, B, E, F, G, H)

YELLOW-RUMPED THORNBILL

Acanthiza chrysorrhoa

Uncommon, recorded twice in the more open country to the north of the claypan. (2: B, E)

BUFF-RUMPED THORNBILL

Acanthiza reguloides

One specimen (male) collected in stunted stringybark on a ridge on August 5, 1967 by J. Eckert. Race not ascertained. Small numbers and nesting in October 1967. Recorded again in 1971. (2) Br. Presumably these are *A. reguloides reguloides* which was collected at Bunn's Springs, 8 km south, by McGilp in 1931 (Condon 1951).

SLENDER-BILLED THORNBILL (DARK THORNBILL *Acanthiza iredalei hedleyi*

Specimens (one male and one female) collected on August 5, 1967 and one female on July 6, 1969, by J. Eckert, near Comet Bore, and identified as this race. In sparsely-treed heathy plain. Small numbers also recorded in October 1967. (1)

CHESTNUT-RUMPED THORNBILL

Acanthiza uropygialis

Small number recorded near the dam in December 1973. (1)

BROAD-TAILED THORNBILL (RED-TAILED THORNBILL) *Acanthiza apicalis*

Very common and widespread. (6: A, B, E, F, G, H)

SHY HYACOLA (SHY GROUND-WREN)

Sericornis cautus

Very common and in places numerous. Nest and eggs in October 1967. (8: A, B, C, D, E, F, G, H) Br.

FIELDWREN (STRIATED FIELD-WREN)

Sericornis fuliginosus

Seen regularly, but in small numbers, mainly in the more open country to the north-east of the claypan. (6: A, B, D, E, G, H)

STRIATED GRASS-WREN

Amytornis striatus

Common and widespread, but often difficult to see. Favours areas of Triodia. (7: B, C, D, E, F, G, H) Br.

RUFIOUS-CROWNED EMU-WREN (MALLEE EMU-WREN)

Stipiturus ruficeps

Regularly seen, particularly in Triodia areas to the west of the road. (3: B, G, H)

SUPERB BLUE WREN *Malurus cyaneus*

Small numbers recorded round the dam in March 1975 and October 1976. (2) Eckert (1972) describes the range of this species as in 'better-class mallee country on either side of the Tailem Bend-Pinnaroo railway line', and speculates that it might inhabit a strip of country from Tailem Bend to Ouyen in Western Victoria. He notes that he had not recorded the species in 'the sandy desert country south of the good land below Pinnaroo' and that it had not been recorded at Bunn's Bore. Thus these Comet Bore records seem to be an extension of its range in this area, though it may well be an isolated population at the dam, since the species has a well-known love of water, see Hobbs (1956) and Glover (1956). The species was recorded in 1973 in Scorpion Springs Conservation Park to the north of Comet Bore (Mrs. J. Paton pers. comm.). For Mt. Rescue records, see Attwood (1977).

WILLIE WAGTAIL *Rhipidura leucophrys*

Not numerous, but usually seen around the claypan and the unused quarry 1 km to the west. (6: A, B, D, E, G, H)

JACKY WINTER *Microeca leucophaea*

Recorded once in March 1975. (1)

SCARLET ROBIN *Petroica multicolor*

Recorded once, a male bird in March 1975. (1). See also Attwood (1977).

RED-CAPPED ROBIN *Petroica goodenovii*

Three birds seen in October 1967. (1)

HOODED ROBIN *Melanodryas cucullata*

Uncommon. (4: A, B, E, H)

GOLDEN WHISTLER

Pachycephala pectoralis

Not numerous, but frequently recorded.

RED-LORED WHISTLER

Pachycephala rufogularis

Appears to be quite common and widespread, though it is a secretive and inconspicuous species, more often heard than seen. (5: B, C, D, E, H)

GREY SHRIKE-THRUSH

Colluricincla harmonica

Fairly common, and widespread in the more treed areas. (7: A, B, C, E, F, G, H)

CRESTED BELLBIRD *Oreoica gutturalis*

Very common, though much more often heard than seen. (7: A, B, C, E, F, G, H)

WESTERN WHIPBIRD

Psophodes nigrogularis

Probably quite common, though it seems to have a strong preference for the thick broom-

bush areas. It has proved almost impossible to locate unless it is calling, and the species does not seem to call regularly outside the breeding season. It was rediscovered in this region at the 1967 camp-out, when at least four birds were seen including a juvenile. The species was seen again in April 1969, when a tape recorder was used to attract it. In December 1973 an adult and a juvenile were seen. Several other visits to the area have failed to produce any evidence of the species. D. B. Mack (pers. comm.) claims that some of the calls of these birds are distinct from those of coastal populations on Yorke and Eyre Peninsulas. He also noted that the birds seemed to favour regrowth areas, which had been subject to fire some 15 years earlier. This species is a notorious skulker and may be more common and widespread than has been supposed, or even than these records suggest. (4: B, D, E, G) Br.

MISTLETOEBIRD *Dicaeum hirundinaceum*

One record, an immature, March 1975. (1)

YELLOW-RUMPED PARDALOTE

(YELLOW-TAILED PARDALOTE)

Pardalotus xanthopygus

Common. Nesting in October 1967. (7: A, B, D, E, F, G, H) Br.

STRIATED PARDALOTE *Pardalotus striatus*

Only two records, one in October 1967 and another in March 1975.

SILVEREYE *Zosterops lateralis*

Only recorded on two occasions, May 1972 and March 1975, but on each of these it was quite common. These records are consistent with the nomadic/migratory behaviour of the species. (2)

PURPLE-GAPED HONEYEATER

Lichenostomus cratitius

Very common, widespread and sometimes abundant. Nesting in large numbers in October 1967. Probably the most numerous bird in the area. (7: A, B, C, E, F, G, H) Br.

YELLOW-PLUMED HONEYEATER

Lichenostomus ornatus

One record of two birds in October 1967. (1)

WHITE-EARED HONEYEATER

Lichenostomus leucotis

Not numerous, but usually recorded. (5: A, B, C, F, G, H)

BROWN-HEADED HONEYEATER

Melithreptus brevirostris

Sometimes quite numerous, December 1973, March 1975, October 1976. At other times apparently absent, October 1971. (6: A, B, C, F, G, H)

YELLOW-WINGED HONEYEATER

Phylidonyris novaehollandiae

Usually recorded, but in small numbers, and seems to favour areas of banksia. Quite large numbers in May 1972. (7: A, B, D, E, F, G, H)

WHITE-FRONTED HONEYEATER

Phylidonyris albifrons

Sometimes common (October 1971); or very common (October 1967 and April 1968); but apparently absent at other times (May 1972 and December 1973). Nesting in October 1967, and fledgling birds seen in April 1969. (6: A, B, C, D, E, H) Br.

TAWNY-CROWNED HONEYEATER

Phylidonyris melanops

Very common and widespread, and sometimes abundant. Nesting in large numbers in October 1967. With the Purple-gaped Honeyeater this is one of the most numerous birds in the area. (*D. Kraehenbuehl believes that the abundance of this species could be due to the abundance of Adenanthos terminalis — Ed.*) (8: A, B, C, D, E, F, G, H) Br.

STRIPED HONEYEATER

Plectorhyncha lanceolata

One recorded on August 26, 1975 by R. J. Goodfellow. (1)

YELLOW-THROATED MINER

Manorina flavigula

Small isolated populations in clumps of taller trees. Four birds seen 3 km west of the claypan in October 1967, and another four seen in March 1975. (2)

RED WATTLEBIRD

Anthochaera carunculata

Usually recorded, but varies from abundant (October 1971), to just a few in December 1973. Nesting in October 1967. (6: A, B, E, F, G, H) Br.

SPINY-CHEEKED HONEYEATER

Acanthagenys rufogularis

Common, but more often heard than seen. (6: A, B, E, F, G, H)

GOLDFINCH *Carduelis carduelis*

One record, October 1967. (1)

HOUSE SPARROW *Passer domesticus*

Never recorded at Comet Bore itself, but a party of four or so birds was seen several km north round an abandoned piggery. (1)

COMMON STARLING *Sturnus vulgaris*

Usually recorded, but normally in small numbers, 2-5 birds. (5: B, E, F, G, H)

MAGPIE LARK *Grallina cyanoleuca*

Odd birds seen on three occasions, October 1967, October 1971 and March 1975. (3)

MASKED WOODSWALLOW

Artamus personatus

A flock of 400 or more October 1967, and another flock in October 1976. (2)

WHITE-BROWED WOODSWALLOW

Artamus superciliosus

Small flocks, 10-20 birds in October 1967 and March 1975. (2)

DUSKY WOODSWALLOW

Artamus cyanopterus

Common in October 1967, and small numbers in March 1975. Young birds with adults in October 1967. (2) Br.

GREY CURRAWONG *Strepera versicolor*

Usually recorded, but in small numbers. (4: B, F, G, H)

GREY BUTCHERBIRD *Cracticus torquatus*

Usually recorded, but in small numbers and seems to favour the *Callitris* clumps on the dunes. Nest with three young in October 1967. (6: A, B, E, F, G, H) Br.

AUSTRALIAN MAGPIE *Gymnorhina tibicen*

Not numerous, though there are usually a few birds around the claypan. (6: B, C, E, F, G, H). The absence of large trees may explain the small numbers. Most of the records have been made on the assumption of a clear dichotomy between Black-backed and White-backed subspecies. Condon (1966) specifically mentions hybridization only to the north and west of the River Murray. Both Black-backed and White-backed have been recorded from Comet Bore, usually without reference to hybrids. However, recent works by Black (1975 a & b), and particularly by Burton and Martin (1976), have aroused a further interest in the relationship between various forms of the Australian Magpie. Burton and Martin have suggested a hybrid 'index' based on the dorsal pattern, and have plotted isopleths for central and western Victoria. These isopleths run in a general east-west direction, and sample extrapolation into eastern South Australia suggests an index of between three and four for the Comet Bore area. (Sample points at Warracknabeal and Doon North, some 160 km south-east, yield mean indexes of 4.0 and 3.2 respectively.) Clearly we cannot necessarily extrapolate these isopleths without reference to various geographical features, but it is interesting to note that two birds closely observed in October 1976 were both judged to be of hybrid index three.

AUSTRALIAN RAVEN *Corvus coronoides*

Quite common, usually present in the area of the claypan and other areas with taller trees. (5: B, E, F, G, H)

UNCONFIRMED RECORDS

Inevitably there are records for the area which are not completely authenticated, but which are possible.

BARN OWL *Tyto alba*

Reported heard in March 1975. No sight records, and it would seem that typical nesting sites are not available.

GREY-FRONTED HONEYEATER
(YELLOW-FRONTED HONEYEATER)*Lichenostomus plumulus*

Recorded by Keith Hindwood at an unspecified date (J. Eckert pers. comm.). Comet Bore is at the southern edge of this species' range in this longitude. It is not recorded at Wyperfeld either (Tarr 1967). Therefore the absence of records other than this one may not be surprising.

LITTLE RAVEN *Corvus mellori*

Reported twice in October 1967 and October 1971. The area is well within the species' known range (Condon 1968), and it has also been reported from Mt. Rescue (Attwood 1977); but there can be little doubt that the local species is *coronoides*.

LITTLE CROW *Corvus bennetti*

Reported heard in October 1967. According to Condon (1968), Pinnaroo is the southern edge of its range.

ACKNOWLEDGEMENTS

It will be clear from the records cited that I am grateful to the many members of the S.A.O.A. who have visited Comet Bore during the three official camp-outs. There are too many of them to mention by name, but their records in total were invaluable. In addition, I am grateful to D. Mack, J. Eckert, D. Close and J. Cox, J. Paton and F. Chapman for their personal records. Finally, to add a note of 'interstatism', I must thank the V.O.R.G. group who joined our camp-out in 1967, and who supplied some very careful and detailed records.

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APPENDIX I

THE VEGETATION OF COMET BORE

D. KRAEHENBUEHL (February, 1972)

The flora of the mallee-heath association at Mount Rescue National Park, Upper South-East, South Australia, has been discussed in some detail; first by J. E. Coaldrake in 1951; and later by Ray Specht and Patricia Rayson in 1957.

Although Comet Bore (mean annual rainfall about 350 mm) lies only 13 km east of Mount Rescue National Park, its terrain and vegetation differ in some respects. The same deep layer of white sand, and high dune ranges, stretches across the plain towards the Victorian border; but there are minor occurrences of laterite (buckshot gravel) outcropping, and even occasional large red sandstone boulders encrusted with mosses and lichens. The claypan at Comet Bore is another natural formation which is possibly unique to the area.

The principal plant Families and Genera represented at Comet Bore include the following: EPACRIDACEAE (*Astroloma*, *Brachyloma*, *Leucopogon*); FABACEAE (*Daviesia*, *Dillwynia*, *Eutaxia*, *Phyllota*, *Pultenaea*); MYRTACEAE (*Baeckea*, *Calytrix*, *Eucalyptus*, *Leptospermum*, *Melaleuca*); PROTEACEAE (*Adenanthos*, *Banksia*, *Grevillea*, *Hakea*); RUTACEAE (*Boronia*, *Correa*, *Phebalium*, *Zieria*). Brown Stringybark (*Eucalyptus baxteri*) and Native Pine (*Callitris verrucosa*) are the most common tree species of the high consolidated dunes. Shrub layer species include Tea Tree (*Leptospermum coriaceum*), Broom Bush (*Baeckea behrii*), *Calytrix tetragona*, *Melaleuca acuminata*, *Casuarina muelleriana*, S.A. Christmas Bush (*Bursaria spinosa*), two Honeysuckles (*Banksia ornata* and *Banksia marginata*, here reduced to a low shrub), *Acacia calamifolia*, Flame Heath (*Astroloma conostephioides*), *Bertya mitchellii* and *Zieria veronicaea*.

On the interdunal plains, the Mallee Eucalypts are represented by Blue Gum (*E. leucoxylon*) — here a dwarf tree — *E. incrassata* and Narrow leaf Mallee (*E. foecunda*). Other characteristic trees and shrubs include: Native Cherry (*Exocarpos sparteus*), Bitter Quandong (*Santalum murrayanum*), Grass Tree (*Xanthorrhoea australis*), *Solanum simile*, *Casuarina pusilla*, *Grevillea pterosperma*, Holly leaf *Grevillea* (*Grevillea ilicifolia*), *Adenanthos terminalis*, two wattles *Acacia farinosa* and *Acacia microcarpa*, Red Mint Bush (*Prostanthera*

aspalanthoides), *Baeckea ericaea*, *Phebalium pungens* and Porcupine Grass (*Triodia irritans*).

Lhotzkya alpestris, *Brachyloma daphnoides* and *Micromyrtus ciliata* favour buckshot gravel areas. In addition there are a host of smaller perennials, bulbuous plants, creepers and annuals which would be too great to enumerate here in detail.

Fine large trees of Black Tea Tree (*Melaleuca lanceolata*), Square fruit Mallee (*E. calycogona*) and *E. dumosa* border the fringes of the claypan at Comet Bore. When the claypan is flooded (as in October 1971) many aquatic plants thrive in the muddy water, the seeds of which are probably wind borne or conveyed there on the feet of waterbirds. Nardoo (*Marsilea drummondii*), Toad Rush (*Juncus bufonius*), *Trithuria submersa*, several *Ranunculus* spp., a *Hydrocotyle* sp., *Lythrum hyssopifolia*, *Limosella aquatica*, *Calocephalus rhizocephalus* and *Crassula helmsii* comprise part of this assemblage of plants; but a massed sward of yellow flowering Bulbine Lily (*Bulbinopsis semibarbata*) made a spectacular show round the edges of the claypan.

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NOTE BY J. H. HATCH (November, 1976)

A visit to Comet Bore by this writer in October 1976 confirmed reports that considerable damage has been done to the claypan area in the previous year or so. Unknown persons, obviously using mechanical equipment, have covered most of the claypan with a layer of sand, cleared several large trees from the claypan itself, and in addition cleared two new swathes of country probably covering about ten hectares. Fortunately these latter areas are already covered in mallee regrowth.

Normally such localised damage would be unimportant, but in this case the uniqueness of the claypan makes it significant. This damage to crown land was quite unauthorised, but clearly in remote areas it is difficult to prevent. Only vigilance will prevent its recurrence in this or other areas.