"To encourage the observation and study of the birds of the Toowoomba area."

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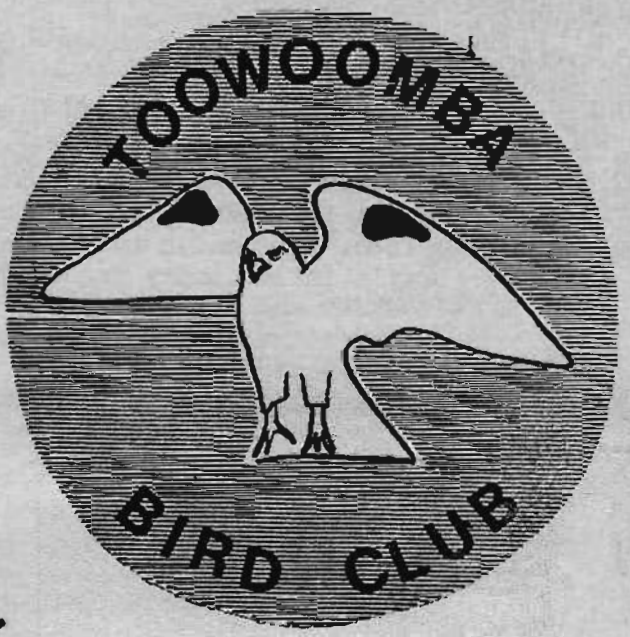

NEWS-SHEET No. 46 - OCTOBER, 1979.

"Spring has sprung, the grass has riz". This line from the old comic poem serves to remind us that Spring has indeed sprung and we are entering what is possibly the most active and interesting time of the birding year. Annual Meeting and Bird Count are coming up fast and the Summer migrants will soon be among us. Rainbow Bee-eaters have been seen and many more will soon make the local scene. It is still useful to record the date of your first sighting of these species on your monthly checklist and, regrettably, at the season's end, the date of the last sighting.

Membership of this Club confers many benefits, not least of which is participation in the Club "grapevine". This puts members aware of any bird which another member has "in the hand". Over the last few years we have seen such birds as White-throated Needletail, Little Bittern, Black-shouldered Kite, Grey Goshawk and Rose-crowned Fruit-Dove. Most recently we have shared Australian Owlet-nightjar and Collared Sparrowhawk. If you missed these birds but would like to be advised in future let's have your phone number for the list.

Bill Jolly has received an interesting letter from one of our newer members, Sue Patterson of Cunnamulla way. Sue mentions many interesting sightings (of which more elsewhere in this issue) but one which really deserves mention here is Grey Falcon (Falco hypoleucos). John Gould writing in his "Handbook to the Birds of Australia" (1865) says "it must therefore still be considered as one of the rarities of the avifauna of Australia". In this year of 1979 it still is one of the rarities, so congratulations Sue.

The Club's Annual Bird Count is shaping up well. Most of the sectors have been covered but we would still welcome offers of assistance from any members not yet committed. As stated last issue a half day contribution can make a lot of difference to the task. Hope to hear from you at or before the Annual Meeting on the 13th October. The date of the Count is, of course, Sunday, October 21st.

On Friday, September 14th Bill Jolly, continuing the Club policy of "encouraging the observation and study of the birds of the Toowoomba area", gave a talk and slide presentation on the subject of Birds. This was delivered to biology teachers attending the seminar Field Training in Biological Analysis organised by John Coman at Yukana Vale Camp. It has now been suggested that school naturalist clubs might care to affiliate with our Club. This would add value to our mutually interested organisations. It is appropriate to mention here that the Toowoomba State High Naturalists Club is assisting again with this year's Bird Count.

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Special endeavours have been made with this month's issue in an effort to have it in members' hands before (or at least, at) the Annual General Meeting. This has been done for several reasons but principally to let members know that one of the subjects for discussion at the meeting will be a possible increase in membership fees. This would only be a small increase but appears necessary in view of today's inflationary trend. The Club's greatest expense is the production of the News-sheet and the Executive feel that in order to maintain our high standard it may be necessary to ask members to consider the increase. The Secretary/Treasurer will provide fuller detail at the meet but it is mentioned here so that members may have prior information of the point and therefore attend the meeting prepared to discuss it.

See you on the 13th.

Ron Hopkinson,
Editor.

A SMALL MYSTERY.

Found: One Emu egg
Date: 9/8/79
Locality: In open paddock south of Baker St., about 50m. from McGregor College.

And therein lies the mystery. How did a solitary Emu egg come to be there? I have thought of three possible solutions, all of which are equally improbable.

(1) That the egg was in fact laid where it was found. This is improbable because
   (a) Emus generally lay about 9 eggs
   (b) investigation has brought no evidence of Emus within the area.

(2) That the egg had been snatched from a nest farther afield by a dog or large bird of prey and subsequently dropped where it was found.
   This solution is weakened by the rarity of large birds of prey in the area, and just how far would or could a dog carry an Emu egg?

(3) That a student residing at McGregor College brought the egg and "planted" it where I found it, to cause the mystery that it has.
   Considering how slim were the chances of the egg being found, this solution also seems unlikely.

Perhaps you can discover the correct solution.

John Gregor.

CAPTURE OF A COLLARED SPARROWHAWK.

What could be a bigger thrill for anyone than to actually catch and hold a bird species before it has been recorded in the News-sheet as a new Toowoomba Bird? This was the case with the Collared Sparrowhawk (Accipiter cirrhocephalus); only positively identified on August 2nd, although having been seen previously, but never by two members at a time.

At 6.45 am, September 3rd my dog announced an early visitor. I don't know who was the most surprised, me, the dog, or the bird who sat trapped on the ground in the corner of a wire netting fence covered by a large May bush.

A hurried dash by pyjama-clad figures and the bird was soon held by firm hands, to be inspected, admired, and photographed and then placed in a cage to await further visitors.

A later inspection of the capture site revealed a dead House Sparrow (Passer domesticus), no doubt intended for breakfast. However, after thinking about it, I decided it was his kill and what better than natural food? So I dropped the sparrow into the cage and in a few minutes he was enjoying his meal. Later he ate some fresh meat I offered.

(cont/d.)

CAPTURE OF A COLLARED SPARROWHAWK (cont/d.)

At 4.30 pm, after he had had several visitors we lifted the covers on his cage and he accepted his freedom immediately without so much as a backward glance.

Jane Corbin.

DDT AND THE PEREGRINE FALCON.

Does contamination by the insecticide DDT cause the shells of some birds' eggs to become thinner? If so has breakage of the weaker eggs in the nest caused populations of some birds of prey, in particular, to decline?

By the time that the furious dispute about these questions in Europe and North America died down during the mid 1970s, biologists generally agreed that DDT contamination of the food really does seem to cause the egg-shells of some bird species to become thinner. The groups whose eggs appeared most affected were those at the top of the food chains - the birds of prey and those that eat fish. The falcons seemed particularly susceptible to DDT contamination.

In North America and Northern Europe, populations of Peregrine Falcons declined sharply during the 1950s and 1960s, and thinner shells resulting from DDT contamination came to be regarded as the general cause. The connection between broken egg-shells, organochlorine pesticides, and sudden population declines was first noticed in Britain by Dr. D.A. Ratcliffe of the nature conservancy in 1958. Even so biologists concluded that in Britain this thinning of the egg-shells was not the principal cause of the peregrine's decline. Rather, it seemed, adult birds were dying because of a massive build-up in their bodies of cyclodiene pesticides (the group that includes dieldrin and aldrin).

DDT use in Australia.

In Australia, DDT first made an appearance in 1942. The armed forces used small amounts from that year onwards but the insecticide did not begin to be used in agriculture until about 1947. Other organochlorine pesticides also became part of the agricultural scene at much the same time. Consumption of DDT peaked during the late 1960s and early 1970s.

The Australian continent should be a particularly suitable place to study any connection between the pesticides used for agricultural purposes and any thinning of egg-shells. No pesticides have ever been used over vast areas of the arid inland, and the amounts used in the wheat belts and on the huge tracts of land used for grazing sheep and cattle, have been relatively small. On the other hand, pesticides have been used in very large quantities on market gardens, on orchard crops, and in particular on cotton.

Each of the intensively farmed areas, such as the Murrumbidgee Irrigation Area and the irrigation areas in the Namoi Valley, can be regarded as an isolated island. Egg-shells of susceptible bird species may be thinner near those intensively farmed areas if pesticide are the cause.

Mrs. Penny Olsen of the Division of Wildlife Research in Canberra has just completed an Australia-wide survey of the eggs of peregrine falcons. She was assisted by Mr. Jerry Olsen, her husband, who is an amateur naturalist. The study, which took two years to complete, suggested that in certain areas the egg-shells of peregrine falcons have indeed become thinner since the late 1940s, and that the amount of thinning is generally greatest in intensively farmed areas where DDT use has been greatest.

The Olsens studied the egg-shells of 472 peregrine eggs of varying ages. One hundred and sixty-one of these were laid before 1947, when DDT first came into common use. The two researchers measured the thickness of the shells and tabulated the results as a 'thickness index'. They also analysed the membranes of some shells for traces of DDT or DDE (its breakdown product). The eggs came mainly from museum collections, or from private collectors. The Olsens themselves also took a few (addled) eggs on licence from nests in parts of New South Wales and South Australia. However, they tried as far as possible to carry out their study without doing this.

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DDT AND THE PEREGRINE FALCON (cont/d.)

The eggs originated from locations dotted over much of Australia. Some came from parts of the Centre whose isolation made it most unlikely that pesticide contamination had occurred. Others came from the wheat belts, from sheep country, from intensively farmed horticultural areas, or from near cotton growing areas, and some came from the suburbs of Melbourne.

Interpretation difficult.

Evaluating what measurements of the thickness of egg-shells really mean can be very difficult - which helps explain the intensity of the dispute about the relation between DDT and egg-shell thinning that occurred in the Northern Hemisphere. Such factors as the length of time the eggs have been incubated on the nest, the number of eggs in the clutch, and whether the clutch was the first or second of the season have been known to affect the thickness of the shells.

The two researchers were able to rule out the stage of incubation as the possible cause of variation, since the 46 eggs collected before 1947 whose stage of incubation had been recorded showed no significant differences in the thickness of their shells. They were also able to rule out the clutch size as a source of variation, since clutch sizes before and after 1947 did not appear to differ.

Their results leave no doubt that some egg-shells became appreciably thinner in the period after 1947 compared with the one that went before. Of course, even before that date not all egg-shells were of uniform thickness, but the proportion showing a decrease of 15% or more compared with the pre-1947 mean has increased since 1947. Furthermore, while only one of the 161 eggs collected before 1947 proved to be between 15 and 19% thinner than the pre-1947 mean, no fewer than 68 out of 311 collected after that date were more than 20% thinner. The shell of one egg was as much as 38% thinner, and although this may have been a freak occurrence, a number of others were nearly as thin. Unfortunately, the Olsens were not able to pinpoint the exact year when shells began to become thinner since they could not obtain eggs laid in 1947 and 1948. However, by 1949, thinner shelled ones were already appearing.

Checks and double-checks.

Close agreement between the date when eggs with thinner shells began to appear and the time DDT first became widely used does mote, of course, prove that the two are related. The Olsens therefore checked the thickness of the shells in their collection against DDT use in the localities from which the eggs had originally come. This showed that the eggs with thinnest shells generally did come from areas where the most DDT had been used in crop production. Shells from areas where little or no DDT had been used proved to be as thick as they had ever been.

Damning though this evidence may be, it is only circumstantial. It is possible that some other environmental factor has contributed to shell thinning. Other causes put forward overseas include persistent pollutants such as polychlorinated biphenyls (PCBs) in the environment, changes in the climate, and disease.

In the Olsen's opinion none of these seems to account for the sudden and widespread decrease in shell thickness that began to happen around 1947.

Collated from ECOS May, 1979.

A LETTER FROM CUNNAMULLA.

Herewith is an extract from a letter from Sue Patterson of "Gamarren", via Cunnamulla.

"Here is a list of birds I saw one morning in April as I drank a cup of coffee under a tree in the garden":

Collared Sparrowhawk	Hooded Robin	Singing Honeyeater
Crested Pigeon	Rufous Whistler	White-plumed Honeyeater
Galah	Restless Flycatcher	Mistletoebird
Pink Cockatoo	Willie Wagtail	Spotted Bowerbird
Red-winged Parrot	Grey-crowned Babbler	Aust. Magpie-lark
Mallee Ringneck	Wh.-winged Fairy Wren	Wh.-breasted Woodswallow
Blue Bonnet	Chestnut-r. Thornbill	Aust. Magpie
Welcome Swallow	Spiny-ch. Honeyeater	Aust. Raven.
Red-capped Robin	Blue-f. Honeyeater	

Sue Patterson.

SIGHTING OF A LETTER-WINGED KITE IN TOOWOOMBA.

A Letter-winged Kite (Elanus scriptus) was sighted by Al. Young, who is a zoologist, on August 19th in Platz St., Toowoomba. He reports that it was an immature speciman and he watched it for five minutes while it was perched on a power line. He reports that although the black shoulder mark was not as clear as on the similar Black-shouldered Kite (Elanus notatus) his identification is based on the distinctly elongated black underwing marking which he viewed as the bird alighted on the line and again as it took off.

This cousin of our Club emblem is widespread in the drier parts of Australia. Perhaps the steadily worsening drought in inland N.S.W. and Queensland will force others into our area to be seen and recorded by two Club members.

Mike Russell.

Editor's Note: This report is one of several we have now had on this species in the district. In view of the several sightings of Collared Sparrowhawks recently and the irruption of Black Kites (Milvus migrans) into our area last year it would pay members to be "raptor-minded" when moving about the area.

FIELD DAY REPORT - 16.9.79. - DOLLEY'S PROPERTY, Withcott.

Our first task on this beautiful spring morning was to humour the resident hereford bull with a morsel of fresh hay, whilst our small group invaded his paddock in search of a variety of species. At the bottom of the paddock, we entered a thicket of trees and bushes, inhabited by various small birds, which the members of our party rapidly identified.

After resting beside a trickle of water (which normally is a creek), we trudged uphill towards the home paddock, sighting a Mistletoebird, amongst others - all appearing quite busy and contented, despite the dry and dusty haze of the mid-morning surrounds.

As we relaxed and cooled in the shade of the house, we were treated to the graceful splendour of two Wedge-tailed Eagles soaring high across the dusty-blue above us.

After morning tea, the group moved on to explore the Withcott end of the Blanchview Road, where we met up unexpectedly with John Coman and a party of local biology teachers who were pursuing a field excursion of their own. Thus reinforced, we examined the trees and bushes alongside the road in pursuit of Little Wattlebirds (which did not appear), and scanned the skies in the hope of identifying a high-flying bird of prey (which did appear - but was not identified). Nonetheless more close views of Wedge-tailed Eagles were allowed, and our lunchtime stop beside a creek was brightened by a visit from a brilliant Scarlet Honeyeater.

A total of 52 species were identified in the course of a thoroughly enjoyable field trip.

Mick Dolley.

Species List - Withcott - 16.9.79.

Straw-necked Ibis
Maned Duck
Black-shouldered Kite
Wedge-tailed Eagle
Aust. Kestrel
Masked Lapwing
Feral Pigeon
Bar-shouldered Dove
Crested Pigeon
Galah
Scaly-breasted Lorikeet
Pale-headed Rosella
Laughing Kookaburra
Rainbow Bee-eater
White-backed Swallow
Black-faced Cuckoo-shrike
Golden Whistler
Rufous Whistler
Grey Shrike-thrush
Leaden Flycatcher
Grey Fantail
Willie Wagtail
Eastern Whipbird
Grey-crowned Babbler
Golden-headed Cisticola
Superb Fairy-wren

(cont/d.)

Species List (cont/d.)

Variegated Fairy-wren	Striated Pardalote
White-browed Scrubwren	Silvereye
Speckled Warbler	Red-browed Firetail
Weebill	Zebra Finch
White-thr. Gerygone	Double-barred Finch
Yellow-r. Thornbill	Common Starling
Varied Sittella	Common Mynah
Little Friarbird	Olive-backed Oriole
Noisy Miner	Aust. Magpie-lark
Lewin's Honeyeater	Pied Butcherbird
Brown Honeyeater	Australian Magpie
Scarlet Honeyeater	Pied Currawong
Mistletoebird	Torresian Crow.

RESIDENTIAL SCHOOL - FIELD ORNITHOLOGY.

The Department of Continuing Education, University of New England, Armidale, N.S.W., is to conduct a course with the above title in the period November 9-16th, 1979.

The school, designed for observers with a basic knowledge, aims to make their study of birds more systematic, principally through improving their orientation to the environment. Lectures will be complemented by excursions that encompass a wide variety of habitats: the tablelands and gorges of New England, the rainforests near Ebor and Dorrigo, the lush coastal belt and seashore. There will be a high ratio of tutors to students.

Closing date for applications is Monday, October 22nd. Further details can be obtained from the Editor. As there is a limited number of vacancies it is suggested that you act promptly if you would like to join in.

AUSTRALIAN BIRD CALLS, SERIES TWO.

We have received advice from John N. Hutchinson of Balingup, W.A., that he now has available the second in his recordings of Australian bird calls. This is available as a stereo record or cassette. Series one is also still available. The price of both Series One and Series Two records and also cassettes is $9.00 each (including postage within Australia). We have a list of the calls contained on both series so if you are interested contact the Editor.

MEMBERS' BIRD NOTES.

Square-tailed Kite. 8.9.79. Flagstone Creek. RGH.
Collared Sparrowhawk. 2.9.79. "Ringmere", Withcott. EJ. WJ.
9.9.79. Flagstone Creek. REH. RGH.
Grey Goshawk.(white phase) 30.8.79. Nr. Oakey. DN.
Little Eagle. 3.9.79. Airborne over town area. REH.
Peregrine Falcon. 18.9.79. Kingsthorpe. JC.
Australian Hobby. 18.9.79. Cohoe Street. EJ.
Grey Falcon. 30.8.79. "Gamarren", via Cunnamulla. SP.
Brown Falcon. 30.8.79. Nr. Oakey. DN.
Common Sandpiper. 10.9.79. "Gamarren", via Cunnamulla. SP.
Australian King Parrot. 9.9.79. Middle Ridge. REH. RGH.
Crimson Rosella. 10.8.79. Esther Street. LN.
Brush Cuckoo. 14.7.79. Memory Street. MA. LA.
Shining Bronze-Cuckoo. 30.8.79. Esther Street. DN.
Pheasant Coucal. 21.9.79. Range Highway. EJ.
Tawny Frogmouth. 27.8.79. Esther Street. DN. LN.
Rainbow Bee-eater. 1.9.79. Preston Road. MW.

(cont/d.)

MEMBERS' BIRD NOTES (cont/d.)

White-backed Swallow. 16.9.79. Withcott. EJ. WJ.
Scarlet Robin. 1.9.79. Preston Road, MW.
Leaden Flycatcher. 30.8.79. Esther Street. DN.
(female) 21.9.79. Toowoomba Grammar School. MW.
Red-backed Fairy-wren. 25.8.79. Jubilee Park. MA.
White-throated Honeyeater. 8.9.79. Flagstone Creek. RGH.
White-naped Honeyeater. 19.8.79. Echo Valley. MA.

LA: Laurie Atzeni. MA: Michael Atzeni. JC: John Coman. RGH: Rod Hobson. REH: Ron Hopkinson. EJ: Eileen Jolly. WJ: Bill Jolly. DN: David Newlands. LN: Lyn Newlands. SP: Sue Patterson. MW: Margaret Warren.

FIELD DAY FOR OCTOBER.

The Field Day for this month, of course, has been given over to the Club's Annual Bird Count. Participation in this most important day on the Club calendar will involve you in a day, or half day, of concentrated birding. Members who have indicated their willingness to take part will by now have received a letter from Bill Jolly setting out in more detail the areas they have been assigned. Final arrangements will be made at the Annual Meeting on October, 13th.

It's not too late to join in, so if you find you can make it we can assign you at the meeting.

FIELD TRIP FOR NOVEMBER.

This will take the form of a week-end camp-out at Goomburra. It's a good time of year for camping and the venue affords a most pleasant and enjoyable campsite.

It has been said that there are no friendships like those made around a camp fire. If you think this could be true then this trip is for you. The date is November, 17th/18th.

PUBLICATIONS RECEIVED.

Q.O.S. Newsletter - August, 1979.
The Darling Downs Naturalist - September, 1979.
ECOS. (CSIRO Magazine) - August, 1979.
Urimbirra - June and August, 1979.

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