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toowoomba bird
club
inc.

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"To Encourage the Observation and Study of the Birds of the Toowoomba Area"

No. 157 - February 1989.

REPORT ON FIELD OUTING HELD ON 22/1/89.

A small numbers of members met at the Lions Park, Hodgsonvale to be greeted by a flock of Red Rumped Parrotts who displayed themselves in the early morning sunshine so we could see their beautiful colours. A pair of Scaly Breasted Lorikeets appeared to be nesting in a hollow bole of a gum tree while a Little Pied Cormorant was sitting in a tree above the water.

We travelled to a nearby property and were delighted to see and hear a small flock of Grey Crowned Babblers. A secluded gully provided a wealth of small birds including Wrens, Finches, and Warblers. We were disappointed not to have seen the King Parrotts which visit the property regularly to feed. The leaders of our expedition disturbed some Brown Quail on the track by near walking on them. Their ability to fly so well and for a long distance surprised everyone who thought they were only capable of short, low flight

The second property was interesting due to the number of nesting birds. Near the gate a pair of fluffy Black Faced Cuckoo Shrike Chicks sat on a branch near their nest. On the dam an Australasian Grebe was taking her babies for swimming lessons. The stick nest was a marvel of construction suspended in the water on a dead tree, while overhead the mud nest of a Magpie Lark was observed. After a short walk to call the resident Whipbird we saw some more nests of Red Browed Firetails still under construction. One member was startled as he approached a nest by a bird flying out at him later identified as a Double Barred Finch. A total of 38 species was observed on the day.

Editor

CLASSIFICATION OF BIRDS

Part 2 of 3

In part one I showed that two species may be compared to see how closely they are related. However, this does not give the time when each species diverged from others.

It is believed that the birds originated 150 million years ago from a reptilian ancestor. An assumption is made that changes occur in the genes at the same rate. While this is not true in the short term, fluctuations are considered to be even over this long term scale.

How then does one connect the 9 000 living species of birds or the 150 000 species that have ever existed? (6% of the species are alive today)

The geological record suggests that Australia, New Zealand, India, Africa, South America and Antarctica were once joined as a supercontinent, Gondwanaland. Each piece split off at different times, and has moved to its current position.

A flightless ancestor roamed Gondwanaland. After each split evolution resu

ed in differences on each block of land, but flightlessness remained as a property. The descendants were the Emu of Australia, Cassowary of Australia and New Guinea, Kiwi and extinct Moa of New Zealand, Ostrich of South Africa, Rhea of South America, the extinct Elephant Bird of Malaga and the Canary Islands.

The break between Africa and South America has been dated at 80 million years ago. The Atlantic Ocean provided a barrier to the flightless birds between the continents.

So, the difference in temperature between when the D.N.A. strands of Ostrich-Ostrich-Rhea separate, can be related to 80 million years. Other divergences give an absolute value of temperature against time consistent with this measurement.

The authors cited in the Scientific American article have suggested a classification scheme based on the origin of the groups. They divide the evolutionary time scale into segments of 10 million years, and assign a taxonomic category to each segment.

For example, an order is a lineage that branched from other lineages 90 to 100 million years ago. A suggestion for names and times of branching millions of years is given below.

Order	90 - 100
Suborder	80 - 90
Infraorder	70 - 80
Parvorder	60 - 70
Superfamily	50 - 60
Family	40 - 50
Subfamily	30 - 40
Tribe	20 - 30

One result of this procedure is to make groups at the same categorical level approximately equal in their degree of evolutionary divergence.

Keith Treschman

Adapted from "Reconstructing Bird Phylogeny by Comparing D.N.A.'s" by C.Sibley and J.Ahlquist in Scientific American, February 1986.

RAINBOW BEE-EATER INFORMATION SOUGHT.

R.A.O.U. Newsletter December 1988.

Andrew Taplin would like to receive information about locations of any breeding sites of the Rainbow Bee-Eater (Merops ornatus) within Victoria, New South Wales and Queensland. If you can assist contact Andrew Taplin, 1 - 5 Cleveland Terrace, Townsville, Queensland 4810. Ph 077 727215

WELCOME BACK

We welcome back Michael Atzeni to Toowoomba after living in Canberra for some years. We look forward to having his expertise on outings.



ARTICLE BY LORRAINE WILSON

Shortly after 4 pm on Monday 27th June, I heard bird calls which, from indoors sounded somewhat like ducks in the distance chattering as they flew. Considering I have difficulty identifying flying ducks I almost didn't bother taking up the binoculars and looking for the flock of birds but, the calls became closer and louder and less duck-like. Binoculars in hand I discovered the small flock of black birds, high in the Eucalyptus tree approximately 400 metres from our verandah.

The call most heard was a one-syllable soft caw sound, the other sound li a broken chatter. At first it was difficult to see anything but black feather amongst the branches as they seemed to be cutting off the tender new grow at tips of branches letting them fall to the ground. Then two butcherbird flew to investigate and the flock of black birds rose from the tree displaying beautiful bright red tail feathers and their beaks appeared pale against the black feathers in the late afternoon sun.

Some of the birds appeared to be greyish-black and had orange looking bars beneath their tails.

Unrushed they gently landed again and continued clipping the ends off the young branches high in the tree, still calling the one-syllable caw sound which I answered for almost 10 minutes as I watched them.

Several cockatoos seemed to be sunning themselves for a time, as they were perched high on branches and quite still, the sun behind them, and head feathers fluffed up (or so it seemed from my 'profile view').

All too soon a car passed by on the road beneath the tree and the flock flew away in a N-E direction.

WHO SAID 13 IS AN UNLUCKY NUMBER ??

N.B. I did not see any 'yellow spots' on feathers, in fact noticed no yellow at all (washed out by late afternoon sun?)

The head feathers did not appear very high (as is the crest of the Red-Tailed Black Cockatoo in my book) when the birds were sunning themselves.

MEMBERS BIRD NOTES

White Throated Needletails (flocks)	23/11/88 24/11/88	over range Gilmour Court	N.B.
Sacred Ibis	mid Nov.	Gilmour Court	N.B.
Crows in flight (18)	end Dec.	Gilmour Court	N.B.

HOBBY & CRAFT SPECTACULAR

This is being held on 17th, 18th, & 19th February at the Showgrounds and the Toowoomba Bird Club Inc. will have a display. At the Executive Meeting the theme of 'Redwood Park and its Birds' was chosen. We are also aiming to attract new members and will have a special outing for beginners in March. Please contact Ann Shore if you can help with manning the display.

NOTICE OF OUTINGS

Sunday 26th February: Ravensbourne National Park.
Meet at Lower Picnic Area at 7.30 am
Leader Pat M^cConnell Ph 352980

Sunday 12th March: Beginners Outing. All welcome.
Meet at Northern extremity of Mackenzie St.
(near new estate) at 7.30 am
Leader Keith Treschman Ph 352894

Easter Campout: It was decided not to hold one this year.
The Toowoomba Field Naturalists are holding
a camp out at the Bunya Mountains. Anyone
wishing to join in please contact Barbara
Weller. Ph 329821

Sunday 23rd April: Redwood Park.
Meet at the top entrance in Bridge St;
opposite T.C.C. Quarry
Leader Michael Atzeni Ph 355587

Sunday 28th May: Hood's Lagoon.
Meet at Helidon Picnic Ground at 7.30 am
Leader Pat M^cConnell Ph 352980

Sunday 25th June: Stockyard - Rockmount area.
Meet at Helidon Picnic Ground at 7.30 am
Leader Angala Kilmartin Ph 382404

NATIONAL PHOTOGRAPHIC INDEX OF AUSTRALIAN WILDLIFE

The Index is seeking black and white photos of birds to publish.
If you have any that you think may be suitable please contact Angela.
They will take a photo from your photo and return your photo to you.

The Index also has books for sale to T.B.C. members for 30% below
retail prices.

<u>INDEX PUBLICATIONS</u>	<u>QTY</u>	<u>DISCOUNT</u>	<u>TOTAL</u>	<u>(RETAIL)</u>
<i>The Australian Museum Complete Book of Australian Mammals</i>	___	@ \$36 ea	___	(\$45)
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<i>What Bird Call is That?</i> (incl. 2 cassettes)	___	@ \$28 ea	___	(\$39.95)
<u>INDEX ASSOCIATED BOOKS</u>				
<i>What Bird is That?</i> (T.R. Lindsey)	___	@ \$42 ea	___	(\$29.95)
<i>What Mammal is That?</i> (R. Strahan)	___	@ \$25 ea	___	(\$34.95)
<i>Dictionary of Australian Mammal Names</i> (R. Strahan)	___	@ \$ 7 ea	___	(\$10)
<i>The Wildflower Catalogue</i> (D. Greig)	___	@ \$21 ea	___	(\$29.95)

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