



TOOWOOMBA BIRD OBSERVERS inc.

(An Affiliated Group of the Bird Observers Club of Australia)

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MEMBERSHIP: Adults/Families \$20 Students \$10

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'To encourage the observations and study of the birds of the Toowoomba area'

NEWSLETTER No. 255 - May 1997

EDITORIAL:

Lately the club has travelled further afield as well as catering for local interests. Five of our finest spent the Labour Day long weekend in the Moree area trooping around a massive swamp looking at huge numbers of nesting Ibis, Egret and Spoonbills on the Gingham Watercourse. This was suggested to us by Ken Wells who pioneered this trip last year. It was a remarkable experience made all the more enjoyable by our hosts, Tom and Lucy Faithfull. While Ken and Fiona had to settle for Lord Howe Is instead this time, I understand, they too had a thoroughly enjoyable experience.

This newsletter contains the Stockyard/Flagstone Creeks and Coal Creek outing reports as well as a very interesting article by Gloria Glass regarding some unexpected behaviour by Zebra Finches. Cameron Williams of the RAOU has kindly permitted us to reproduce his informative article on birds and the internet.

Few Member's Bird Notes are being submitted lately so please do so if you like reading them.

COAL CREEK OUTING REPORT, 27 April 1997.

Fifteen TBO members and guests attended Coal Creek at Kholo north of Ipswich. Richard Thomis kindly brought along four friends and bolstered out numbers considerably. We also discovered that autumn is definitely the time to visit this area rather than our last oppressively hot and humid trip in December 1994.

On the way down to Coal Creek track we saw Australian Brush Turkeys fairly high in nearby trees as well as an Emerald Dove. One of Richard's friends, Pat Solomon, kindly offered to show us where she had seen the Powerful Owls further along the creek. This offer was accepted with alacrity, and although we failed to view the famous pair of injured owls, we did have wonderful sightings of Little Shrike-thrush and Varied Triller both new to some members. Later on, we saw at close range a magnificent Rose Robin and contrasting Scarlet Honeyeater as well as several Eastern Yellow Robins and Variegated Fairy-wrens.

After a short break in the very pleasant surroundings, we headed over to view a long stretch of the Brisbane River. This reach of the river was strangely deserted with a few Little Black Cormorants, White-faced Heron, Straw-necked Ibis and several Masked Lapwings. High up on the banks we were afforded good views of many vocal Striated Pardalote, Grey Shrike-thrush, Noisy Miner and Lewin's Honeyeaters whilst Golden Whistlers were not to be outdone. High above, we discovered a small flock of disappearing Pelicans riding on a thermal. Close to the where the creek enters the river, Michelle Thompson once again helped us out by glimpsing a high flying White-bellied Sea Eagle.

A very enjoyable morning in which we amassed a total of 44 species.

Ken Mc Keown

Species List: Australian Pelican, Little Black Cormorant, White-faced Heron, Straw-necked Ibis, White-bellied Sea-Eagle, Australian Brush Turkey, Dusky Moorhen, Masked Lapwing, Feral Pigeon, Crested Pigeon, Spotted Turtle-Dove, Peaceful Dove, Bar-shouldered Dove, Emerald Dove, Rainbow Lorikeet, Scaly-breasted Lorikeet, Little Lorikeet, Australian King Parrot, Pale-headed Rosella, Pheasant Coucal, Azure Kingfisher, Laughing Kookaburra, Welcome Swallow, Black-faced Cuckoo-shrike, Varied Triller, Rose Robin, Eastern Yellow Robin, Golden Whistler, Grey Shrike-thrush, Rufous Fantail, Grey Fantail, Eastern Whipbird, Variegated Fairy-wren, Noisy Miner, Lewin's Honeyeater, Scarlet Honeyeater, Striated Pardalote, Silvereye, Double-barred Finch, Olive-backed Oriole, Figbird, Grey Butcherbird, Australian Magpie, Torresian Crow.

THE RAOU IN CYBERSPACE

Last year, President Michael provided several American Internet Web Sites for those among us who are not technologically challenged. Now local birders can access a myriad of Australian sites which cater for all avian interests.

Thanks to RAOU volunteer and part-time staff member, Cameron Williams, for the following article and its inherent simplicity for the as yet unconverted.

The Web acts as a relatively simple interface to most of the internet. It is an enormous, ever-expanding collection of documents stored on computers around the world. These documents are linked together by a system called **HyperText**, and can contain text, full colour images, movies, sound files and more recently embedded software. It is these **multimedia** components that are behind the rapid growth in the popularity of the Net.

Cameron has used his computer skills and interest in the Web to create *The Virtual Emu*, the RAOU's Web site. A web site is like an electronic front page and index to the information/organization you are accessing, and it is the starting point for an exploration of all the content relating to that organization.

These RAOU Web sites are only part of the many bird resources available on the Net. In fact one of the most up-to-date sources of information isn't a Web page at all; it's an Internet mailing list based upon **electronic-mail technology**. **Birding-Aus**, the mailing list maintained by Russell Woodford, is a free service where "subscribers" (those who register as being interested in receiving and sending mail) can write an e-mail message and send it to a computer which then distributes the messages around Australia and the globe. Topics discussed range from the latest twitching opportunities to trip reports and serious conservation issues. Some of these useful Australian sites are as follows:-

The Virtual Emu.

Birdwatch

Birding-Aus Homepage

A Select Bibliography

Pelagic Birding Home Page

<http://www.vivnet.net.au/~raou/raou.html>

<http://www.werple.net.au/~raou/birdwatch.html>

<http://www.deakin.edu.au/~russwood/>

<http://www.mac-ra26.sci.deakin.edu.au/fauna.html>

<http://www.zip.com.au/~palliser/>

Birds of Western Aust.
Australasian Raptor Assoc

<http://cygwww.uwa.edu.au/~austecol/birds.html>
<http://www.tasweb.com.au/ara/index.html>

Web sites have bizarre-looking "addresses" that always start with (<http://>) followed by the name of the computer they sit on (e.g. www.vicnet.net.au), the folder (directory) that the home page sits in ([/~raou](http://www.vicnet.net.au/~raou)) and finally the file name of the home page ([raou.html](http://www.vicnet.net.au/~raou/raou.html)). Stick that all together and you end up with the "Universal Resource Locator" (URL or address), in this example of the *The Virtual Emu*:
<http://www.vicnet.net.au/~raou/raou.html>.

Birders can also find many electronic advertisements for tours (note the advertisement above) and products on the Web as well as RAOU publications, projects, observatories, regional groups and special interest groups.

Aren't you glad Cameron kept it simple for you.

Ken McKeown

BOYS WHO WEAR RED AND GIRLS WHO WEAR BLACK!

Biologist, Nancy Burley, while working with a monogamous little Australian bird, the Zebra Finch *Taeniopygia guttata*, discovered that colored plastic bands that she placed on the birds' legs for identification purposes were unexpectedly affecting their attractiveness to the opposite sex. Within five months, Burley noticed that most birds wearing red or pink leg bands were breeding, but that those wearing light green bands weren't. It seemed as if the plastic leg bands were affecting mate choice in the same way as plumage in pigeons and various other birds. Both females and males were showing preferences for certain colored bands - items that had nothing to do with the birds' natural physiology.

Fascinated by her observations, Burley designed a series of experiments to learn which colours were more attractive. She found that red-banded males and black-banded females were more attractive to the opposite sex than unbanded birds. But green-banded males and blue-banded females were less attractive. These results gave Burley an objective tool for studying purely aesthetic traits that had no relationship whatsoever to the animals' genetic fitness. She was able to pursue one of the most intriguing questions in evolutionary biology: how does an animal evolve a preference for a new trait that it has never seen before?

Burley hypothesizes that animals may be genetically programmed with what she calls *latent aesthetic preferences*. These hidden preferences show up in behaviour when some mutation alters individuals and suddenly makes them appealing or attractive in a way that stimulates the preference, bringing it out of the closet, so to speak.¹ The colored plastic leg bands that Burley was using in her laboratory to identify the Zebra Finches had just that effect. They were functioning as a pseudomutation, calling into play the birds' predisposition to prefer a novel trait. This mechanism, speculated Burley, may be akin to that of the immune system, which seems designed to respond to the new and unexpected.

As she continued her experiments on Zebra Finches, Burley made other surprising discoveries: traits that are attractive to the opposite sex are possibly threatening to the same sex. She found, for example, that female Zebra Finches preferred to perch next to blue-banded females and avoided the black-banded ones preferred by males. Similarly, males preferred the company of the green-banded males and were not attracted to the red-banded ones preferred by females.

An even more startling discovery was that within mated couples an interesting trade-off was going on. When Burley analyzed the amount of time that each partner was spending incubating, brooding, feeding, and defending the young, she discovered that the more attractive partner, as indicated by the colour of its leg band, was spending less time carrying out those parental functions. If the female wore the more attractive band, she did less work; if the male wore the more attractive band, he devoted less time to parenting. These experiments showed that not only was the unattractive partner putting in more work, or greater parental

investment, per offspring, but its life span was shorter and its long-term reproductive success was lower than that of same-sex attractive birds. "Results lend support to the idea that reproductive effort has a cost, a seldom-tested evolutionary principle," says Burley.²

When Burley set up experiments to test the reproductive success of the attractive males and females, she found that red-banded (attractive) males were twice as successful as orange-banded (neutral) or green-banded (unattractive) males. In part, this was due to the red-banded male's tendency to become polygynous. By doing less work with his mate, he had the time to acquire an additional mate. Similarly, the more attractive (black-banded) females had higher reproductive success than orange-banded (neutral) or blue-banded (unattractive) females.

Going a step further, Burley looked at the sex ratio of offspring of birds wearing the attractive colour band. In experiments in which only males or females were banded, the bird wearing the most attractive leg band produced significantly more of its own sex. Red-banded males had the most sons, and black-banded females had the most daughters. The unattractive birds (blue-banded females and green-banded males) experienced the highest rates of mortality, and the attractive birds the lowest.

As evolutionary biology would predict, parents manipulate the male-female sex ratio so as to produce more of the offspring with superior mate-getting traits - in this case, more offspring of the same sex as the more attractive partner.³ The way in which Zebra Finches manipulate the sex ratio is by selectively rejecting the young, usually within six days of hatching.⁴

Amazingly, the Zebra Finches reacted to colored plastic leg bands as if they were traits that had been inherited. Through her chance discovery, Burley has been able to investigate sexual selection and sex-ratio manipulation unencumbered by biological ambiguity. Choosing a mate on the basis of a colored leg band is clearly an aesthetic choice.

It is also clear that an aesthetic trait can benefit its bearer by enhancing his or her attractiveness as a mate, thereby increasing reproductive success. But other dynamics relating to the role of attractiveness also come into play.

Two of the most well-worn phrases regarding mate choice among humans are "Like prefers like" and "Opposites attract." Although one cannot draw direct correlations between nonhuman and human animal behaviour, Burley's experiments with the Zebra Finches suggest a highly plausible explanation: attractive individuals have more options. "Highly preferred individuals should be more selective of mates because they can afford to be, whereas less desirable individuals must settle for inferior mates or fail to reproduce at all," writes Burley.⁵

Extract from *Sexual Strategies, How Females choose their Mates* by Mary Batten, G.P. Putnam's Sons, New York, 1992, pp. 52-54.

References

¹Burley, Nancy, 1985. The organization of behavior and the evolution of sexually selected traits. In *Avian Monogamy*, ed. P.A. Gowaty and D.W. Mock, pp.22-44. Ornithological Monographs, no.37. Washington, D.C.: American Ornithologists' Union.

²Burley, Nancy, 1988. The differential-allocation hypothesis: an experimental test. *American Naturalist* 132:611-28.

³Burley, Nancy, 1986. Sex-ratio manipulation in color-banded populations of zebra finches. *Evolution* 40:1191-1206.

⁴Ibid, p.1191.

⁵Burley, Nancy, 1985. p.31.

Gloria Glass

KIRRAMA WILDLIFE TOURS

Klaus & Brenda Uhlenhut

Cape York Birding Adventures**2 January - 16 January 1998****Location: Pajinka Wilderness Lodge****Klaus Uhlenhut and Gordon Beruldsen**Special rates for a 4 day, 5 day and 8 day birding event
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PO Box 133 Silkwood QLD 4856**Ph: 070 655 181 Fax: 070 655 197****E-mail: kirrama@4kz.com.au****OUTING REPORT STOCKYARD/FLAGSTONE CREEKS - 23 March 1997**

A heavily overcast morning with the range clothed in low cloud did not presage much joy for the birders at the start of our outing. However, little breaks started appearing in the cloud and Michael Atzeni arrived with the news that he had seen a pair of Glossy Blacks on his way down Flagstone Creek Rd. Leaving Jim Grant behind to wait for any latecomers, the rest of us bailed in to Jack Lund's van and returned to the spot. Luckily, they were still there, perched in the top of a dead tree, far too busy about their mutual preening to care about the captive audience below and giving us unusual views of their anatomy, feathers and colouring.

Following that little jaunt we pursued our way on to Stockyard Creek after some were lucky enough to glimpse an Azure Kingfisher as it darted up the waterway. Here we also recorded a Large Cormorant, Speckled Warbler and Mistletoebird. A small flock of suspiciously large cormorants flew over in the distance, most likely Pieds, a rarity in the area, but unfortunately not a good enough look to be certain. Further on, a pair of Wedge tailed eagles were seen gliding in the thermals over the higher land to the west while hundreds of Tree Martins hawked over paddocks bordering the road.

Many brief stops were made along the way to check on a variety of small bush birds including a flock of Chestnut-breasted Mannikins which we put to flight. When they settled obligingly closer, the majority were seen to be juveniles, lacking the distinctive dark facial colour and banding across the chest of the adults.

I personally have never seen the valley so green and lush, that being especially noticeable as we got up to the narrow craggy areas around Rockmount. Attractive always, but thus time, with water still running, very special. At Rockmount where the rasp-like call of a Spangled Drongo caught our attention, we split up after a short stop; some returning via Preston to Toowoomba while others went back to try for more luck along Flagstone Creek. The latter group had a rewarding stop at the junction of the Upper and Lower Flagstone Ck Roads, recording six more species including Cicadabird, White-throated and Scarlet Honeyeaters.

COMING EVENTS

May Outing:

Location: Hampton
Date: Sunday, 25 May
Leader: Michael Atzeni 076 392 761
Time: 7:30 a.m.

Info: Meet at the Esk turnoff at Hampton. We will be the property of Colin Rose near Hampton, which backs onto remnant rainforest, and Rod and Dianne Smiths' property at Pechey. We will finish off at the Highfields Primary School library which houses an interesting showcase of mounted birds. BYO everything.

World Environment Day:

Location: Lake Annand, Toowoomba
Date: 1 June
Time: 10 a.m - 4 p.m.

June Outing:

Location: Braemar State Forest No.4
Date: Sunday, 29 June
Leader: Malcolm Wilson 076 622 604
Time: 7:30 a.m.

Info: This state forest near Kogan is well worth the trip according to Malcolm. Meet Malcolm at the Thomas Jack Park at Dalby. Stop after the second set of traffic lights on the left side of the road. As this state forest is approximately 50 km further on and needs local knowledge, the club will travel in convoy. A good variety of habitat including belah, brigalow, cypress and eucalypts. Perhaps a Glossy Black or two. BYO everything.

July Outing:

Location: Helidon
Date: Sunday, 27 July

Info: More in next newsletter.

Reminder to Leaders

Leaders should take the Attendance Book and First Aid Kit on all Outings. All attending members and visitors should sign the Attendance book for insurances purposes.

If undeliverable return to
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