



G'day LFWers and GFWers,

**New Newsletter Name:** The various submissions have been rounded up and, as you can see, we have decided on a name for your newsletter. It has been suggested by several members that it would be good to use one of the Central Australian names for the charismatic **Red-tailed Black Cockatoo**. Across the many traditional languages of Central Australia, there are variations in the chosen spellings, but the name is usually rendered as a variation of the word *irrarnte* or *iranti*.

This is a bird which is usually present around Alice Springs as well as more widely associated with water courses in central Australia, and is always spectacular to encounter. It is a species which is in decline across much of its south-eastern range due to the loss of old and dead trees which it requires for nesting.

Land for Wildlife Alice Springs. June 2012.

Fortunately we still have some healthy populations of these birds here in Central Australia.

As an embodiment of the inextricable links between land and wildlife, we think it is a great emblem for conservation in Central Australia. Thank you to everyone who submitted suggestions for a newsletter name, and congratulations to the many people who suggested *irrarnte* – a perfect icon for the Red Centre. The new look and the name are by no means set in stone, so feel free to have your say and let us know what you think about the changes.



But now... to business!

## CONTENTS

LFW News...

2

<b>GFW News...</b>	<b>2</b>
<b>Articles &amp; Contributions...</b>	
Toxoplasmosis in Wildlife	3
Remote Camera Traps	
<b>Community Notices...</b>	<b>6</b>
Neurada Weed Alert	
Alice Water Smart	
Alice Springs Show	
Desert Smart Eco-fair	
Princess Parrots – highly mobile and could be seen around town	
<b>Webwatch...</b>	<b>11</b>
Zoomusicology	
Richard Waring's Birds Of Australia	
NT Fauna Observations Portal	
Birding For Devils	
<b>On The Bookshelf...</b>	<b>12</b>
Mr JW Lewin; Painter & Naturalist	
Field Guide to the Freshwater Fishes of Australia	
Atlas of Endangered Species	

## Land for Wildlife News...



The winter season continues apace for LFW as we pass the shortest days of the year and start the steady march towards the warmer weather.

On the horizon now, the **Ecofair** is shaping up to be a big event again, starting on the 10<sup>th</sup> of August at Olive Pink Botanic Gardens. Land for Wildlife will have a presence at this event, and will conduct feral dove trap making throughout the day. It'd be great to see a few familiar faces if you feel like coming down to say, "g'day".

Our TNRM funded rabbit control project is currently being acquitted across properties in the vicinity of Heenan Rd in Ross. Initial surveys have been conducted to establish the

level and activity of rabbit populations in the area, and it doesn't look good. One member described coming home from holidays to find their property looking like Coober Pedy!

All properties that we visited had plenty of signs of rabbit activity and LFW property owners all reported having seen rabbits with increasing frequency across their properties, including a good number of young kittens. The first round of control measures have been put out, so stay tuned for the results of follow up surveys to see if our control measures have had any impact.

## Garden for Wildlife News...



The feral dove population continues to climb. Garden for Wildlife coordinators have been conducting regular survey transects across six areas of Alice Springs and the early results are showing feral dove infestation right across town. To make matters worse – they're spreading. Previously not reported as regularly to the south of the ranges, the doves are now very much at home in several areas along Ragonesi Rd, Ross Highway, and Heenan Road.

Garden for Wildlife will be conducting a trap-building workshop at the Ecofair at Olive Pink Botanic Gardens in August to try and revive interest in the community trapping program. Hopefully, we can get a handle on the rising population of this invasive avian pest.

All of our "loaner" traps are currently out in the community and we still have a waiting list of people who are interested in getting a trap. The workshop will be a chance to make a trap of your own, or even whip up a couple of extras that we can add to the pool of "loaners" to get more properties on board and trapping doves.

If you have a trap that you are no longer using, please let us know and we can arrange a time to pop around and pick it up. If you have a trap that has fallen into disrepair or is no longer having the success it used to, perhaps this would be a good time to try a different location or to get out the pliers and the work gloves and fix it up in preparation for another year of effective trapping.

The Garden for Wildlife website is shortly to be rebuilt and thoroughly rejuvenated, but remember that the full suite of Garden for Wildlife PDF factsheets are still available at the following address;  
<http://www.lowecol.com.au/lfw/gfw.htm>

Here, you will find all of the vegetation lists for the different areas of town, along with maps to help you find which land unit your property lies on, and the most suitable plant species to be using.

## Articles & Contributions...

*The following is a reproduction of an article by Iona Mitchell that appeared in the Tasmanian LFW newsletter, The Running Postman. Toxoplasmosis looks like just another reason to make every effort to control feral cat populations. The status of toxoplasmosis in Central Australia is uncertain, but we are getting some advice from local veterinary scientists and we will have a follow up article on diseases of wildlife that occur here in The Centre. Iona is the coordinator of Land for Wildlife and Garden for Wildlife down on the Apple Isle.*

### Toxoplasmosis in Wildlife

During early September I received a couple of calls from LFWers in relation to deaths of rufous wallabies (or pademelon) on their properties. In one case the landowner had come across on different days a couple of dead wallabies on his driveway without any

sign of injury or apparent cause of death. In the other case, the landowner had witnessed erratic behaviour (disorientated, out during the day) of a few young wallabies prior to finding them dead or drowned in his dam. It is highly likely that these deaths may have been due to the disease toxoplasmosis caused by *Toxoplasma gondii*.

*Toxoplasma gondii* is a protozoan parasite which is widely prevalent in humans and animals worldwide (Dubey et al., 1998) and has a wide range of warm-blooded intermediate hosts. However members of the cat family (Felidae) are the only known definitive host (Hill et al., 2005). There is only one species of *Toxoplasma*, *T gondii*. This parasite has a complicated life cycle and is host-specific (Fig. 1) and transmitted via a faecal-oral route, or through consumption of infected meat (raw or under-cooked), or by transplacental transfer from mother to foetus (Hill et al., 2005). There are three infectious stages of *T gondii* linked in the complex cycle (Fig 1): the tachyzoites (in groups or clones), the bradyzoites (in tissue cysts), and the sporozoites (in oocysts) (Dubey et al., 1998).

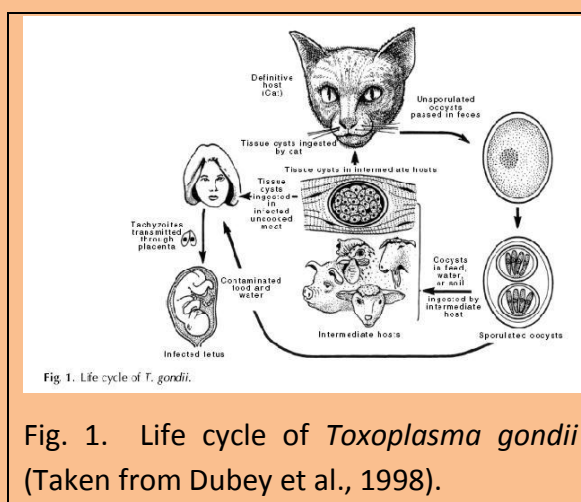
*T gondii* infections usually do not produce clinical disease and rarely produce severe clinical manifestations, this largely being dependent on the virulence of the strain and susceptibility of the host species (Hill et al., 2005). The majority of natural infections are acquired by ingestion of tissue cysts in infected meat or oocysts in food or water contaminated with cat faeces (Hill et al., 2005). The parasite can rapidly multiply within 24 hrs of infection and be spread throughout the body and distant organs via the lymphatic and blood system (Hill et al., 2005). *T gondii* has been recognised as a common opportunistic infection in immunosuppressed patients with AIDS (Dubey et al., 1998), though generally *T gondii* is destroyed by immune cells, particularly the

extracellular forms of the parasite (Hill et al., 2005).

Toxoplasmosis infection during the first trimester of pregnancy in humans can lead to more severe impairments than infection acquired during the later stages of pregnancy. A wide range of clinical diseases may occur in congenitally infected children; mildly infected children may have diminished eyesight, while severe infections may result in hydrocephalus (enlarged head), convulsions and intracerebral calcification (Hill et al., 2005). Eye (ocular) disease tends to be the most common in congenital infections (Hill et al., 2005). Domestic animals can be infected by *T gondii* with foetal death and abortions occurring in sheep and goats as a consequence of toxoplasmosis, most likely due to ingestion of oocysts.

Toxoplasmosis has been identified as a serious disease of Australian marsupials with reports of animals dying suddenly without any clinical signs or with neurological signs, loss of vision, diarrhoea, and respiratory distress (Obendorf et al., 1996; Hill et al., 2005). Many species of Australian marsupials are highly susceptible to toxoplasmosis largely since Australia's terrestrial fauna have evolved in the absence of felids – the impact of this disease is an important consideration for rare and endangered marsupial species (Obendorf et al., 1996). Toxoplasmosis has been reported in free-ranging eastern barred bandicoots in southern Tasmania from testing for antibodies to *T gondii* in blood sera samples from animals caught in traps (Obendorf et al., 1996). A study in which wild-caught eastern barred bandicoots initially free of *T gondii* died 15 and 17 days post infection following inoculation orally with approximately 100 *T gondii* oocysts (Bettioli et al., 2000). Acute toxoplasmosis infection was confirmed by gross and microscopic examination and clinical observations of the animals that died.

It has also been demonstrated that earthworms, a major component of the natural diet of eastern barred bandicoots, exposed to oocysts can transmit *T gondii* infection leading to the death of bandicoots 11 and 14 days after feeding (Bettioli et al., 2000). Acutely fatal toxoplasmosis has been diagnosed in common wombat, Tasmanian pademelon and Bennett's wallaby (Obendorf et al., 1996). Wallabies, particularly pademelons, and bandicoots are susceptible to dying from toxoplasmosis (pers. comm. Bruce Jackson, DPIW Veterinarian).



What is the risk of birds of prey becoming infected with toxoplasmosis? This question was raised following the observations noted by one landowner who had observed a pair of wedge-tailed eagles often dropping down into the bush reserve adjacent to his property – presumably feeding on wallabies that may have died as a consequence of toxoplasmosis. It is considered that the risk of wedge-tailed eagles becoming infected is minimal (pers. comm. Annie Philips, Wildlife Health Officer). When possible, wedge-tailed eagles which have died or been killed have autopsies done – to date there appears to have been no record of infection with *T gondii*.

A review of toxoplasmosis in wild birds by Dubey (2002) assessed published findings in



international literature of toxoplasmosis in various bird species. A point he noted was there seemed to be some confusion over the identification of *T gondii*-like parasites and hence the correct diagnosis on occasion of toxoplasmosis in wild birds. Sub-clinical *T gondii* infections were found in many bird species, with pigeons and canaries highly susceptible to toxoplasmosis, yet it appeared that predatory birds, such as owls, hawks and kestrels, are resistant to *T gondii* (Dubey, 2002). Toxoplasmosis has been recorded in 'Alala (*Corvus hawaiiensis*) in Hawaii, which is of concern since the 'Alala is one of the most endangered corvids in the world with few birds remaining in captivity or the wild (Work et al., 2000). Efforts to reintroduce 'Alala in Hawaii have included the intensive trapping of non-native mammals to reduce the risk of predation, however the removal of feral cats would also reduce the risk of the 'Alala becoming infected with *T gondii* (Work et al., 2000).



Fig.2. 'Alala or Hawaiian Crow *Corvus hawaiiensis*. Now classified as Extinct in the Wild with *T. gondii* identified as one of the likely contributors to its decline. Pic. Public domain – U.S. Fish & Wildlife Service.

A study of feral cats [in Tasmania?] by Milstein and Goldsmid (1997) showed that they carry a significant reservoir of intestinal parasites, including *T gondii* (50% of cats examined). As part of this study, random human sera samples (n=190) were obtained from the Hobart Red Cross Blood Transfusion service and tested for Toxoplasma antibodies. Additionally, sera from 12 people in potentially high risk occupations (eg park rangers) were tested. Of the blood donor human sera tested, 50% were positive for Toxoplasma antibodies and 66.7% tested positive in the high risk group indicating that Tasmanian adults are widely exposed to toxoplasmosis (Milstein and Goldsmid, 1997).

Cats have the potential to excrete millions of oocysts from ingestion of a few bradyzoites or tissue cyst which may be present in prey species, such as an infected mouse. Sporulated oocysts have the potential to survive for long periods, even in harsh conditions, and can survive months to years in moist soil (Hill et al., 2005). The infection rate of cats depends on the amount of oocysts in the environment, the more oocysts the more likely prey species will become infected and hence re-infect cats. In Tasmania late autumn and winter appears to be the time when toxoplasmosis infections are most likely to be apparent. General symptoms observed may include motor dysfunction (eg staggering), apparent blindness, unusual behaviour (eg nocturnal marsupials out during daylight). If you notice any abnormal behaviour by wildlife, or unexplained deaths, remember to contact the 'First response to sick or injured wildlife' – the phone numbers are given in Annie Philips article in this edition of the newsletter. Feral cats pose not only a risk to wildlife by hunting and killing, but also the spread of potentially fatal diseases.

**Iona Mitchell**

References

- Bettiol, S. S., Obendorf, D. L., Nowarkowski, M. and Goldsmid, J. M. (2000). Pathology of experimental Toxoplasmosis in Eastern Barred Bandicoots in Tasmania. *Journal of Wildlife Diseases*, Vol. 36(1): 141 – 144.
- Bettiol, S. S., Obendorf, D. L., Nowarkowski, M., Milstein, T. and Goldsmid, J. M. (2000). Earthworms as paratenic hosts of Toxoplasmosis in Eastern Barred Bandicoots in Tasmania. *Journal of Wildlife Diseases*, Vol. 36(1): 141 – 144.
- Dubey, J. P., Lindsay, D. S. and Speer, C. A. (1998). Structures of *Toxoplasma gondii* Tachyzoites, Bradyzoites, and Sporozoites and Biology and Development of Tissue Cysts. *Clinical Microbiology Reviews*, Vol. 11 (2): 267 – 299.
- Dubey, J. P. (2002). A review of toxoplasmosis in wild birds. *Veterinary Parasitology*, Vol. 106: 121 – 153.
- Hill, D. E., Chirukandoth, S. and Dubey, J. P. (2005). Biology and epidemiology of *Toxoplasma gondii* in man and animals. *Animal Health Research Reviews*, Vol. 6 (1): 41 – 61.
- Milstein, T. C. and Goldsmid, J. M. (1997). Parasites of feral cats from Southern Tasmania and their potential significance. *Australian Veterinary Journal*, 218 – 211.
- Obendorf, D. L., Statham, P. and Driessen, M. (1996). Detection of agglutinating antibodies to *Toxoplasma gondii* in sera from free-ranging Eastern Barred Bandicoots (*Perameles gunnii*). *Journal of Wildlife Disease*, Vol. 32(4): 623 – 626.

- Work, T. M., Massey, J. G., Rideout, B. A., Gardiner, C. H., Ledig, D. B., Kwok, O.C.H. and Dubey, J. P. (2000). Fatal Toxoplasmosis in free-ranging endangered 'Alala from Hawaii. *Journal of Wildlife Disease*, Vol. 36(2), 205 – 212.

## Remote Camera Traps

Motion-sensitive camera traps are a technology that has really come of age in the last few years. They are now more or less standard equipment for field ecologists conducting fauna surveys and the technology has improved greatly in user-friendliness, portability, and (crucially) cost.

There are a good range of brands and models now readily available from Australian suppliers. \$300 will get you an entry level model, and \$600-\$700 will see you getting one of the better models on the market. Spending up to a few thousand dollars can get you a suite of cameras that will beam photographs directly to your smart-phone or email account in the comfort of your living room!

When dealing with camera traps (or *trail* or *game* cameras as they have become known in the US) there are a lot of variables to consider. What is the primary situation that the camera will be used in? What sort of wildlife are you hoping to capture images of? Are you interested in capturing still images or video footage? Colour or monochrome? Infra-red flash or visible light? Will the camera be left out for extended periods (some models can easily be left *in situ* for periods of three

months or even up to twelve months depending on the type of usage and type of batteries)? Is it to be left on private property or in a public area where it may get disturbed, damaged, or even stolen?

All of these are questions best considered *before* you shell out your hard-earned.

For GFWers and LFWers, the most interesting potential of these cameras is the possibility of monitoring the wildlife that comes and goes around your property while you are at work, or, even more interesting, while you are asleep at night. Even some of the more affordable models have Infra-red capability giving them the ability to take good quality images at night without disturbing wildlife with bright flashes. For those with nesting birds on your property, the possibilities are very exciting. Setting up a motion sensitive camera where it can film or photograph nesting raptors could provide a fascinating record of wildlife activity on your property. What about those hollow nesting species? Owlet-nightjars, Barn Owls, or cockatoos might all be filmed leaving and returning from their hollows, all without any disturbance to the birds and their young.

If you have a birdbath, dam, or natural water feature on your property, then these camera traps are tailor made to monitor the wildlife activity around these areas in the hours when it is most difficult, and least convenient for you to monitor yourself.

Motion-sensitive camera traps are now in regular use by Low Ecological Services teams in the field, as well as Central Land

Council, NRETAS, and just about any researchers who are studying wildlife in the field. Far from being the domain of the professionals though, this technology is now well within the technological and financial means of the average wildlife conscious property owner, and promises to provide a much more complete picture of the wildlife that lives all around us.



***Reconnyx Hyperfire HC600 (above and below)***

*This is my personal favourite and is the camera that I have had the best results with. The Reconnyx lacks the ability to take video footage, but it makes up for this by having a very sensitive motion sensor, capable of picking up animals as small as crickets, spiders, and beetles. I find that it also metres the light better and provides more consistently well exposed shots, especially at short range. In lieu of video capability it has a setting enabling time-*



*lapse sequences to be shot, which for many applications is just as effective. It takes good quality colour images in daylight and automatically switches to invisible infra-red flash photography after dark. Some practice is required in setting this camera up properly to avoid having foliage in-shot that will constantly move through the night and fill your SD card with images of a piece of waving grass. But once this is allowed for, this is an excellent camera, and would work well for monitoring a bird bath or small mammal activity around the backyard.*



***Bushnell Trophy-cam (above and below)***

*Bushnell are a reputable US firm producing binoculars, spotting scopes and trail cameras targeted mainly at the recreational hunting market. Perhaps because their cameras are designed to be used for tracking large game like pigs and deer, I have found their cameras to be more effective at covering large areas and capturing images of larger animals. It is very suitable for setting up beside a waterhole say, and monitoring for stock movements or camel activity. Having said that, if the settings are adjusted correctly, it can still be effective at photographing small animals like rodents and dasyurids at a baited clearing or along a trapline. It could also be effective for monitoring a birdbath or backyard pond. The Bushnell is able to take video footage as well as still pictures.*





The following is a list of some good websites to look at if you are interested in learning more about getting a wildlife camera for your property;

#### **Trail Cameras Australia**

<http://www.trailcameras.com.au/>

#### **Trailcam Pro**

<http://www.trailcampro.com/>

A US website but good for a wide range of reviews of most products on the market.

#### **Outdoor Cameras Australia**

<http://outdoorcameras.com.au/>

#### **Faunatech**

<http://faunatech.com.au/products/surveillance.html>

Australian company who are agents for some of the better brands of wildlife cameras.

## **Community Notices...**

**6<sup>th</sup> and 7<sup>th</sup> of July** – Come along and say “g’day”, at the LFW/GFW stall at the Alice Springs Show at the Australian Plant Society site.

### **Alice Water Smart**



### **Playing our part to make Alice water smart**

Alice Water Smart Homes and Businesses encourage you all to take advantage of our great service.

## **FREE Home Water Efficiency Consultations**

Register now for your free Home Water Efficiency Consultation for:

- A \$50 water smart rebate voucher
- Tailored advice to reduce your water use
- Help identifying the best rebates available for you
- There are up to \$2700 worth of rebates per household
- A consultation can provide access to a free Garden Watering Consultation with professional gardeners and up to \$800 of irrigation rebates

To arrange a time, call 8953 1030 and speak with Jethro or Richard or email your interest and contact details to [homes@alicewatersmart.com.au](mailto:homes@alicewatersmart.com.au)

### **desertSMART Eco Fair**

**10<sup>th</sup> – 12<sup>th</sup> of August 2012**

This year's Eco Fair is shaping up to be another great event. LFW/GFW will be running a feral Spotted Dove trap building workshop, and all through the day you will be welcome to drop past the stall and try your hand at building a trap to take home or donate towards the trap-loan program.

### **PRINCESS PARROTS**



The rare **Princess Parrot** *Polytelis alexandrae*, has recently been seen in sizeable flocks of up to one hundred birds around AWC's Newhaven Sanctuary 350 kilometres north-west of Alice Springs. Since being seen regularly at Newhaven through May and June, there have since been other reports of the birds in the vicinity of Rainbow Valley to the

south of town and Tnorala to the west of Hermannsburg.

There are historical reports of Princess Parrots frequenting the River Red Gums in the Todd River, and these days the birds are occasionally still reported around town. As the birds seem to be on the move at the moment there is a chance that we might have a few more of these birds moving through or near town in the coming months. This is a species of conservation significance and we have very little detailed knowledge of their movements, so any sightings are of interest to researchers. If you see wild Princess Parrots around town, or anywhere on your travels around Central Australia, you can report your sightings to Birdline NT at [birdscentral@gmail.com](mailto:birdscentral@gmail.com)

Or call the Parks & Wildlife office in Alice Springs on **0401 115 725**.

To make sure you know what to look (and listen!) for, have a read of the following section and keep your eyes peeled.

Princess Parrots are similar in size and shape to the common Australian Ringnecks *Barnardius zonarius*, that we see around town, but there the resemblance ends. The Princess Parrot has bright, lime green shoulder patches, a rose pink beak, and a delicate pastel pink shade across the cheeks and down the throat. The crown and nape of the neck have a pale blue wash and there is a violet-blue patch on the rump at the base of the tail. Adult Princess Parrots also have very long tail feathers (particularly the males) which are almost twice the length of the same feathers on the ringnecks.

They also have a distinctive call which is very different to any other parrots that you might see around town. If you would like to listen to a recording of the Princess Parrot's call, you

can visit the following link; [http://xeno-canto.org/browse.php?query=Princess+Parrot+%28Polytelis+alexandrae%29+1&species\\_nr=espqhs](http://xeno-canto.org/browse.php?query=Princess+Parrot+%28Polytelis+alexandrae%29+1&species_nr=espqhs)

And for a summary of what little information we have on the species you can visit; [http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon\\_id=758](http://www.environment.gov.au/cgi-bin/sprat/public/publicspecies.pl?taxon_id=758)

**NB:** Make sure you check the supplementary attachment from NRETAS about a new weed alert – Neurada. All is explained in the attachment, so please keep an eye out for this new invasive species and help to stop it spreading.

## Webwatch...

### Zoomusicology

[http://www.zoomusicology.com/Site\\_1/Introduction.html](http://www.zoomusicology.com/Site_1/Introduction.html)

There is nothing that can be written here that will better describe the content of Dr. Hollis Taylor's website than the introduction available at the link provided.

When you think about it, *zoomusicology* is a fairly self-explanatory term. Dr. Taylor is a regular visitor to Alice Springs and has made an eight year study of the songs of our local Pied Butcherbirds.

Music and nature are often complimentary interests, and if you are one of those who shares them, then you should find much of interest at this website.

### Richard Waring's Birds of Australia

<http://rwsboa2011.blogspot.com.au/>

Richard Waring is an Alice Springs blogger extraordinaire. Richard travels widely for work and indulges his passion for birds and bird

photography wherever he goes and blogs about it on his return.

Although primarily focused on the local birdlife, Richard has interesting encounters with other wildlife as well, and the blog reads equally well as a travelogue of remote Central Australia.

### NT Fauna Observations Portal

<http://ntfaunaobs.nt.gov.au/>

This recently opened website from NRETAS, allows anyone with fauna data to enter it for inclusion in the NT Fauna Atlas.

You'll need to complete a very simple registration process, but after that you can enter observations for moderation and inclusion in the atlas.

Notably, the site excludes invertebrate and fish observations presumably due to the difficulty of positive identification, and the taxonomic uncertainty of many of these species in the NT.

### Birding For Devils

<http://www.birdingfordevils.com.au/>

John Weigel is the director of the Australian Reptile Park and the Devil Ark – the mainland facility on the NSW Central Coast housing an insurance population of Tasmanian Devils.

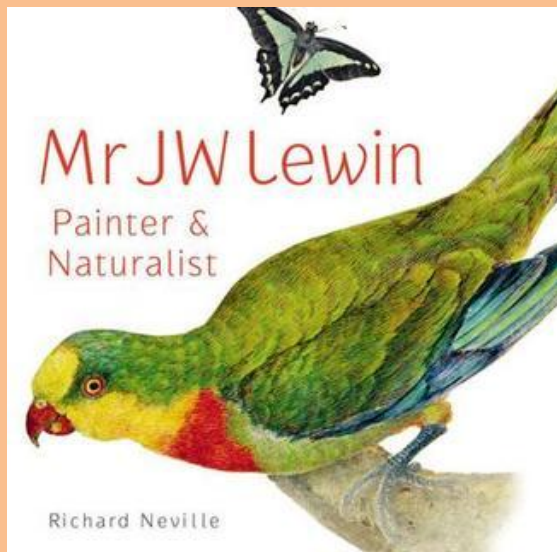
As one of the country's leading herpetologists, John also has a dirty secret – he's a bird nut. At the moment, John is in the middle of an all-out tilt at breaking the Australian record for the most bird species identified in a single calendar year (704 set by Sean Dooley in 2002). The year is only just more than halfway gone and John is already well into the 600s and rapidly closing in on the magical 700 barrier. Barring an absolute disaster, it looks like John will smash the existing record.



All of this is part of John's efforts to increase awareness of the plight of the Tasmanian Devil, and to help raise funds for the continuing management of the breeding population at the Devil Ark.

John has recently been in Alice Springs ticking off all the local birds for which The Centre is famous, and you can keep up with the rest of his odyssey on the website.

## On The Book Shelf...



### Mr. J. W. Lewin: Painter & Naturalist

By Richard Neville

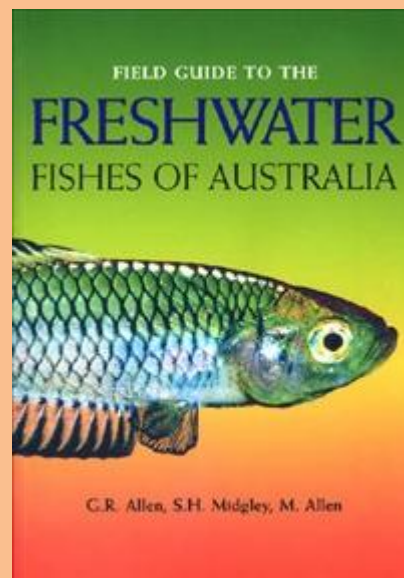
This book might appeal to those with an interest in early Australian natural history and natural history art. John Lewin stands with John Gould as one of the prominent natural historians and artists in the earlier part of European discovery of Australia's flora and fauna.

As well as producing the first illustrated book published in Australia (*The Birds of NSW*, in 1813), Lewin produced hundreds of depictions of the fauna of the young colony, when it was all still fresh to European eyes.

As a testament to his lasting influence there are at least two Australian species named

after him, Lewin's Rail *Rallus pectoralis*, and Lewin's Honeyeater *Meliphaga lewinii* – but I'm sure there are probably other animals and plants named after him as well. Interestingly, Lewin may also be partly responsible for the adoption of the name Koala. The animal we all know by this name now, *Phalacroctes cinereus*, was known by many different names in aboriginal languages across its range, but an 1803 watercolour by Lewin is annotated "*Coola, an animal of the opossum tribe from New South Wales.*"

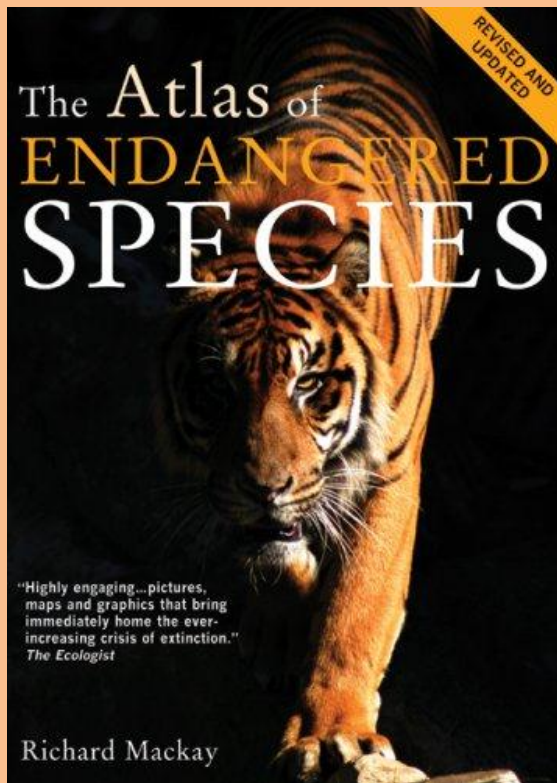
The book reproduces over 150 of Lewin's works and examines his life and contributions as the first professional artist to arrive in Australia as a free man.



### Field Guide to the Freshwater Fishes of Australia

By G.R. Allen, S.H. Midgley, and M. Allen

Following a recent presentation on fish of the Lake Eyre Basin to the Alice Springs Field Naturalists Club, arid-zone wetland specialist Angus Duguid recommended this volume as one of the authoritative works for fish enthusiasts in the field.



## **The Atlas of Endangered Species**

By Richard Mackay

This is an epic work which sets out the threatening processes and summarises the status of all the most endangered species on Earth. Rather than going through an exhaustive list of each individual species, it treats the species as groups. For each it provides maps, graphics and discussion of the ecosystems in which the species are found.

It's not all doom and gloom, and the book also covers the successes of conservation initiatives that are helping to save species from extinction.

.....

Thanks for all the emails and photographs this month everyone. Please keep them coming for the next edition.

Cheers,

Jesse, Chris, and Bill

