

A stylized black and white illustration of a hedgehog is positioned at the top center of the page, above the main title.

AUSTRALIAN

Wildlife

AUTUMN Vol: 2/2015

\$10 (non-members)



Celebrating a new century of wildlife preservation in Australia

Journal of the Wildlife Preservation Society of Australia Limited

(Founded 1909)

Birds of Lord Howe Island

Photography by Michael Hanvey



Flesh-footed shearwater (*Puffinus carneipes*), also known as the Lord Howe Island muttonbird.



Lord Howe woodhen (*Gallirallus sylvestris*). Endemic species saved from extinction thanks to eradication of introduced mammals and a local captive breeding program.



Buff-banded rail (*Gallirallus philippensis*). Normally shy and elusive on the mainland, these birds are widespread and far more gregarious on Lord Howe Island.

Contents

features

- 6** 106th Annual General Meeting
- 8** Birder's paradise: Lord Howe Island - *Michael Harvey*
- 13** 102-year-olds exercise marathon to raise funds for marine turtles
- 14** Flying-foxes: Unique, beautiful and vital to keeping our environment flourishing - *Steve Amesbury*
- 18** Sharks: More victim than villain - *Chrissy Banks*
- 22** The proposed Bargo-Nepean National Park - *Roland Ware*
- 25** Can you tame a 'drop bear'? - *Jesse Blackadder*
- 27** John Gould's Extinct & Endangered Mammals of Australia - *Fred Ford*
- 30** WPSA President's Annual Report for 2014



8



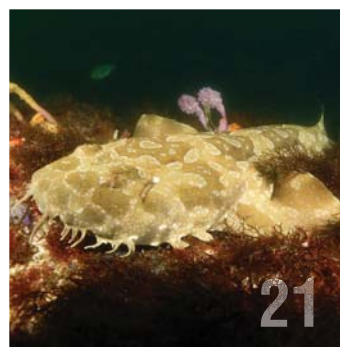
11



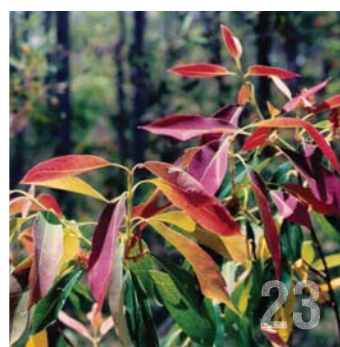
13



16



21



23



26



27

regulars

- 5** From the President's desk
- 28** Book reviews
- 35** Community Wildlife Conservation Award
- 36** The Serventy Conservation Medal
- 37** Be a part of the Australian Wildlife Society's conservation future
- 38** Membership form



Suzanne Medway AM
Editor
Australian Wildlife



Front cover:

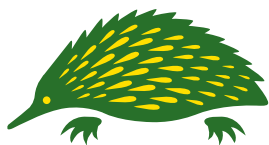
Flying-foxes frequently roost near fresh water. After dipping in the cool water they lick the water off their fur. Photo: Nick Edards

Back cover:

Grey-headed flying-foxes carry their young with them as they forage until they are too heavy. Photo: Nick Edards

Articles and comments expressed in this magazine do not necessarily reflect the opinions of the Editor, Society or members. Articles contributed from outside sources are included for the reading enjoyment of members and to encourage discussion on different points of view.

Articles may be copied or quoted with appropriate attribution.



Australian Wildlife Society

Conserving Australia's Wildlife
since 1909

Australian Wildlife

is the official journal of the Australian Wildlife Society
(Wildlife Preservation Society of Australia Limited).

Founded in 1909, the Society is dedicated to the conservation
of our unique Australian wildlife in all its forms.

Print Post Approval No: PP243459/00117

ISSN 0155-266X

Price \$10 (for non-members)

Membership

Individual Members: \$55

Family Members: \$70

(being husband, wife and children jointly)

Concession: \$50

(pensioner, student, child)

E-mag Members: \$30

(Australian Wildlife magazine will be distributed
via email as a pdf document - no hard copy of the
magazine will be sent)

Associate Members: \$85

(being schools or incorporated or unincorporated
associations with a principal object related to
conservation, nature study or education)

Corporate Members: \$125

(being incorporated or unincorporated associations
not being associate members)

Includes postage within Australia.

Add \$40 for overseas postage

Three Year Membership

Individual Members: \$150

Family Members: \$190

Concession: \$135

E-mag Members: \$81

Associate Members: \$230

Corporate Members: \$340

Includes postage within Australia.

Add \$100 for overseas postage

President

Dr David Murray

Tel: (02) 9556 1537

Fax: (02) 9599 0000

Contact

National Office

Australian Wildlife Society

(Wildlife Preservation Society of Australia Limited)

PO Box 42

BRIGHTON LE SANDS NSW 2216

Tel: (02) 9556 1537

Fax: (02) 9599 0000

Email: info@wpsa.org.au

Accounts: accounts@aws.org.au

Editor "Australian Wildlife":

suzanne@wpsa.org.au

Website: aws.org.au

Correspondence to:

**Hon Secretary:
Australian Wildlife Society**

PO Box 42

BRIGHTON LE SANDS NSW 2216

Directors 2015

Patron

His Excellency General the Honourable
Sir Peter Cosgrove AK MC (Retd)

President

Dr David Murray

Hon Secretary/Chief Executive Officer

Patrick W Medway AM

Vice Presidents

Dr Clive Williams and Ken Mason

Hon Treasurer

Sash Denkovski

Directors

Chris Chan

Noel Cislowski

Stephen Grabowski

Dr Richard Mason

Sandra Reynolds

Scientific Advisory Committee

Dr Mike Augée - mammology/palaeontology

Bernie Clarke OAM - Botany Bay

Dr David Murray - botanical

Prof Richard Kingsford - environmental science

Geoffrey Ross - wildlife management issues

Jennie Gilbert - marine conservation

Vanessa Wilson - wildlife conservation and management

Notice to our members

The Australian Wildlife Society (Wildlife Preservation Society of Australia Limited) is managed and controlled by an elected board of ten volunteer directors. The Society is a registered company limited by guarantee with ASIC and is responsible for complying with all its regulations.

Any member who might like to consider serving as a director of the Society is invited to contact the national office for more details. The most important qualification to serving as a director is 'a commitment to and love of Australian wildlife'.

The Society holds regular monthly meetings on the first Wednesday of each month in Sydney.

The Editor would like to feature a member's profile in the fortnightly email newsletter and occasionally in our quarterly magazine. Members are invited to consider submitting a short article with a photograph for possible publication.

Our Mission

The Australian Wildlife Society (Wildlife Preservation Society of Australia Limited) is an independent, voluntary, non-profit conservation organisation, formed in 1909, and is committed to the preservation of Australia's precious flora and fauna. We act as a watchdog and provide advice to government agencies and institutions regarding environmental and conservation issues concerning all aspects of wildlife preservation. Our mission is to conserve Australia's fauna and flora through education and involvement of the community. We are dedicated to the conservation of our unique Australian wildlife in all its forms through national environmental education programs, political lobbying, advocacy and hands on conservation work.

Our Society has always known that a conservation battle is never really won until the victory is enshrined in legislation. We have always tried to convince politicians of the necessity to include the preservation of Australia's precious wildlife and its vital conservation habitat in all their planning and environmental issues and discussions.

From the President's desk

Dr David Murray - President

“The risk to the health of the Great Barrier Reef posed by current proposals to expand port facilities just for coal loading in Queensland is a risk that should not be taken.”



Many of our members appreciate how important the Annual General Meeting and the luncheon that follows it are for showcasing what the Society has been doing, and for recognising outstanding contributions from individuals and community groups dedicated to the preservation of Australian wildlife. Elsewhere in this issue you will find accounts of those who received their awards on 4 March this year: Helen Bergen and Ray Mjadwesch, who jointly received the Serventy Medal for 2014, and WildMob, who received the Community Conservation Award for their work, particularly with the bridled nail-tailed wallaby (WildMob were featured in an article in the summer issue of *Australian Wildlife*).

Andrew Elphinstone, who received the award on behalf of WildMob, spoke

about how they were going to spend their prize money on solar powered equipment to be used at Avocet to help with their wallaby project. What a wonderful idea.

Solar power is abundant and available everywhere throughout Australia. In remote areas it is much cheaper to install solar panels than to make lengthy connections to an electricity grid powered by coal. As a former student of photosynthesis and plant productivity, it makes sense to me that we should emulate plants in capturing light energy, and leave coal in the ground.

We need to remember that there is no such thing as ‘clean’ coal. The pollution of air and water that accompanies our traditional use of coal is not worth having. The

disruption to rural residential areas and long established agricultural pursuits caused by open cut coal mining is totally unnecessary.

The risk to the health of the Great Barrier Reef posed by current proposals to expand port facilities just for coal loading in Queensland is a risk that should not be taken. We should not have to rely on foreign heads of state for encouragement to protect our Reef and its marine ecosystems, but thank you President Obama for mentioning that it would be good if the Great Barrier Reef was still here in 50 years time. To protect the Reef now we need to make sure that our parliamentary representatives understand all the issues as clearly as our overseas visitors.



White tern on Lord Howe Island

Photo by Michael Hanvey. For more information and photos see page 8.

106th Annual General Meeting

The 106th Annual General Meeting of the Wildlife Preservation Society of Australia Limited trading as the Australian Wildlife Society was held on Wednesday 4 March in Sydney.

David Murray, President, tabled the President's Report for 2014 and highlighted the past year.

The Treasurer's Report for 2014 was tabled and adopted by the meeting.

The current Auditor, Peter James Varley, CA Registered Company Auditor, was confirmed as the Society's auditor for 2015.

Annual President's Luncheon

The President's Luncheon was held after the Annual General Meeting in the historic Cello Restaurant at the Castlereagh Inn in Sydney.

President, David Murray, welcomed life members, members and guests committed to wildlife conservation across Australia.

2014 Serventy Medal

Dr Clive Williams, Vice President of the Society and Chairman of the Judging Panel, announced the winners of the Serventy Conservation Medal



Presentation of the Community Wildlife Conservation Award. L to R: Dr Clive Williams, Andrew Elphinstone and Dr David Murray.

for 2014 to be Helen Bergen and Ray Mjadwesch of Bathurst. Not only have Helen and Ray been responsible for directly saving the lives of many injured animals, they have saved many more by educating the public on how to live harmoniously with wildlife.

They have had many articles published in the press and given many radio interviews. They frequently speak to school and other community groups. Ray has worked hard and successfully to promote fauna friendly fences. As a result of his efforts, the Boundary Road



Presentation of the Serventy Medal for 2014. L to R: Dr Dan Ramp, Ray Mjadwesch, Dr Clive Williams, Helen Bergen, Dr David Murray and Dr Peter Simmons.



Helen with kangaroo joey.



Ray carrying a darted kangaroo.

Reserve Landcare group replaced its rural fencing with fauna-safe fences. Some local landholders have followed suit. Ray and Helen have persuaded Bathurst Council to move away from lethal culling of kangaroos during the Bathurst car race to more fauna friendly management procedures. The work of both Ray and Helen provides an excellent model to follow as, when they discover inappropriate actions affecting wildlife, they provide alternative actions to follow.

Response from Helen Bergen and Ray Mjadwesch

It is a thrill to have been nominated for the Serventy Conservation Medal. The Serventy family and previous winners of the Medal have set the bar very high, and it's an honour to have our efforts recognised by the Society alongside their work. Thank you so much to Charles Sturt University's Dr Peter Simmons for nominating us and to UTS' Dr Dan Ramp and the Bathurst Local Aboriginal Land Council's Tonilee Scott for supporting it.

We are only two people out of many unsung individuals tirelessly working to advocate for and protect our precious and disappearing wildlife, and we are very lucky to be supported by our community and people like Dr Simmons and Dr Ramp, along with so many groups and individuals also working to the same end. We accept this Medal on behalf of those countless others.

Our work

Our advocacy seeks to educate the wider community about our wildlife, their needs and habitats, and has been driven by the realisation that attitudes

to, and management of, wildlife is often based on inaccurate information.

Our much maligned kangaroos are especially victim to this, and our work is about engaging people and their networks with the science of kangaroos, and facilitating a robustly informed evidence-based practical approach to non-lethal wildlife care and management.

Our Kangaroos at Risk and Bathurst Kangaroo Project are important vehicles for educating communities and researchers that so many common premises about kangaroos are myth, and are not supported by the science which shows kangaroos are a slow-breeding slow-growing species with high juvenile mortality and crashes in populations during drought. The Bathurst Kangaroo Project has become a truly multi-partnered consultative effort and with our partners' vital input, is attracting international interest.

This is a big message that needs to cut through decades of unexamined notions of abundance, pest and plague. And we are hoping the Serventy Medal will help promote this aim. Thank you again.

2014 Community Conservation Award

The award for 2014 was made to the WildMob of Brisbane. Although WildMob has a Brisbane base its work ranges from the Barrier Reef to Tasmania. They have focused their attention on saving endangered species. WildMob chooses to collaborate with partners as the most effective way of making a difference. Accordingly, they have collaborated

with scientists, government departments, educational institutions (both schools and universities), environmental groups and volunteers. Their work began with eradicating invasive weeds on Brampton Island and, while the removal of weeds is still important, particularly in the educational work with students, the work of WildMob is now much more diverse. They have thrown their weight behind continuing the preservation of the bridled nail tail wallaby and are raising funds to build a nail tail nursery on Avocet station near Emerald. In Tasmania they are working at the mouth of the Arthur River in the north west of the State and have focused on weeding in areas of importance to the endangered orange-bellied parrot, surveying seabird populations, monitoring the number of feral cats and Tasmanian devils and gathering data on rare plant life such as endangered orchids. Where possible, educational talks are given to local groups.

Response from Andrew Elphinstone

The WildMob team is thrilled to receive this award from the Australian Wildlife Society. We are a small team of only eight people and we work across many projects ranging from Central Queensland to the Great Barrier Reef islands, and from Tasmania to Norfolk Island.

This award serves as a great motivator to continue giving everything we can to our projects and partners.

In all our project areas we work closely with the local community. We draw on their expertise as well as that of universities and industry partners. This is well known as the collective impact approach. It ensures we have the skills and background knowledge to determine what success looks like for each project.

Importantly, it also means that while we're working to save species now, we're also contributing to our overarching goal, which is to equip communities with the tools to manage their own environmental assets.

If you would like to find out more about us or join a conservation expedition visit www.wildmob.org



Birder's paradise

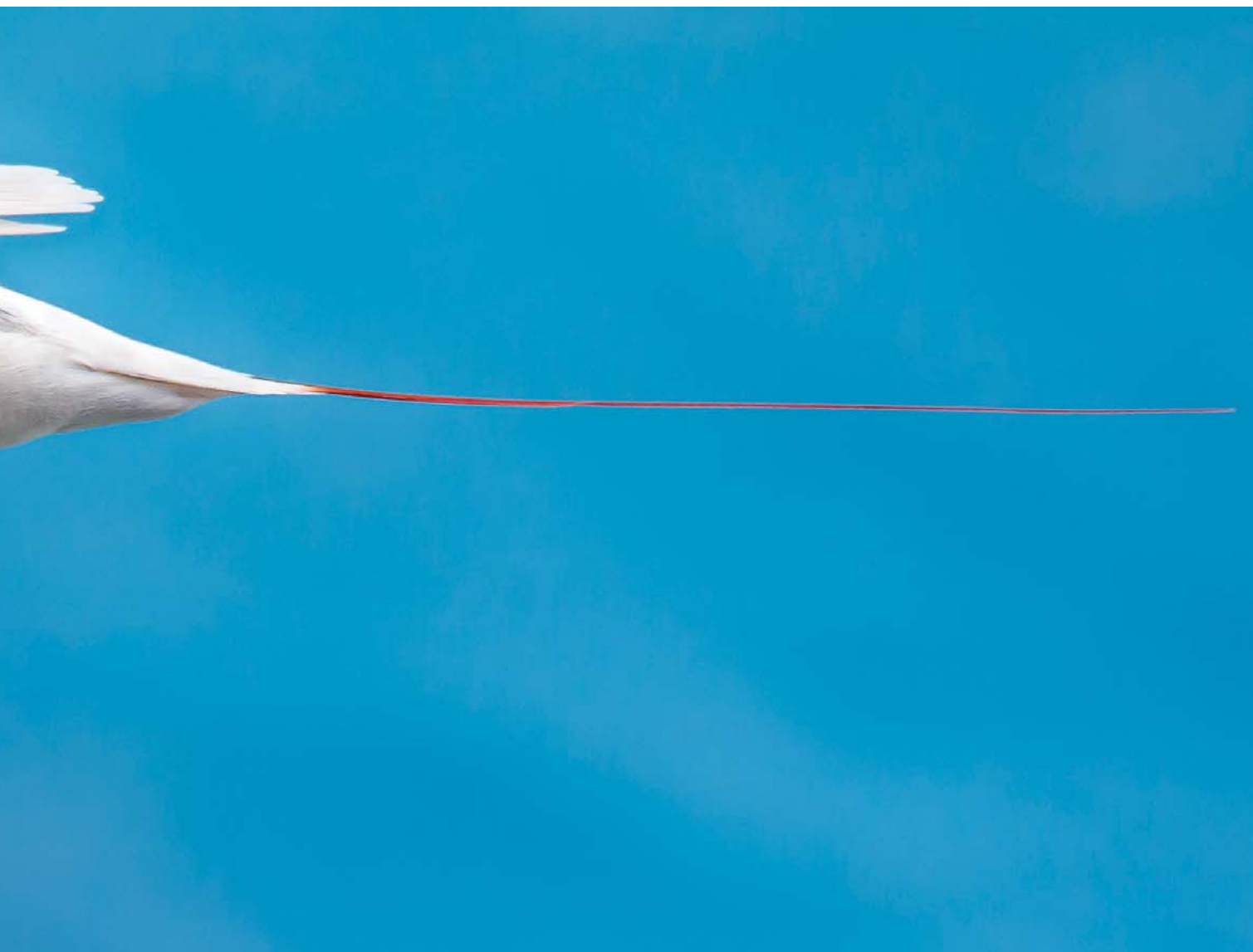
Lord Howe Island

Story and Photos: Michael Hanvey

It would be difficult to conjure up a land mass that more perfectly conforms to a vision of subtropical bliss than Australia's World Heritage-listed Lord Howe Island.

Located some 600 kilometres northeast of Sydney in the Tasman Sea and part of the state of New South Wales, this crescent-shaped island is what remains of a long-extinct volcano. Lord Howe is now only about one-fortieth of its original size thanks to erosion over millions of years. The island is indeed tiny: just 11 kilometres long and a bit under 3 kilometres wide. Dominated by two towering peaks at its southern end, Mount Gower (875 metres) and Mount Lidgbird (777 metres), Lord Howe also boasts a pristine lagoon and the world's southernmost coral reef.

And then there are the birds.



For the birder or bird photographer, a visit to Lord Howe Island is an indelible experience. Over 30 species of birds breed here, including 14 species of seabirds numbering many thousands. All told, Lord Howe's birdlife includes over 130 permanent and migratory species, including several distinct subspecies of Australian mainland birds.

The island is also the site of an inspiring avian success story. The Lord Howe woodhen, a flightless rail endemic to Lord Howe Island, was hunted widely by 19th century settlers, suffering further population declines because of introduced rats and other predators. By the 1970s, the woodhen was on the brink of extinction and only reported in small numbers on the summits of Mount Gower and Mount Lidgbird. A local captive breeding program began in the 1980s which proved instrumental in ensuring the woodhen's survival. Today, the woodhen is again well established on the island and its population is carefully monitored.

Red-tailed tropicbird (*Phaethon rubricauda*).



Lord Howe Island, World-Heritage listed in 1982. Looking south towards Mount Lidgbird and Mount Gower.



Female Lord Howe golden whistler (*Pachycephala pectoralis contempta*), a subspecies of the mainland golden whistler that is endemic to Lord Howe Island.

Other quick facts about Lord Howe Island:

About 240 native plant species have been recorded. The island's crystal-clear waters also support around 500 species of fish and nearly 100 species of coral. Locals are quick to point out that the health of the reef here is excellent, far better in fact than that of the Great Barrier Reef.

Another ecological survival story is that of the Lord Howe Island stick insect (*Dryococelus australis*). After the introduction of black rats by early settlers, the stick insect was for decades believed extinct on the island. But it was rediscovered in 2001 surviving on Ball's Pyramid, a barren 552-metre remnant volcanic stack



Bar-tailed godwit (*Limosa lapponica*). Breeds in Siberia and Alaska. A common summer visitor to eastern Australia and islands.



Common noddie (*Anous stolidus*).

that thrusts upward from the sea 23 kilometres southeast of Lord Howe. Melbourne Zoo subsequently set up a successful breeding program for the stick insect.

Only 400 visitors at a time are allowed on the island and the pace is leisurely to say the least. With few cars, most tourists hire a bicycle and spend a week or so exploring. There is a good range of accommodation and restaurants.

Michael Hanvey is a Sydney-based bird photographer and freelance feature writer. To view more of Michael's bird photography, please visit his Flickr photostream: <https://www.flickr.com/photos/michaelhanvey/>



White terns (*Gygis alba*). A single egg is laid and often balanced precariously in the depression of a tree branch or palm frond.



Ball's Pyramid. Imposing sea stack located 23 kilometres southeast of Lord Howe Island. Favoured breeding site for many shorebirds, including the rare Kermadec petrel. Also home to the extremely rare Lord Howe Island stick insect.



Emerald dove (*Chalcophaps rogersi*).



Lord Howe silvereye (*Zosterops tephroleurus*).



Sooty tern (*Onychoprion fuscata*).



Sacred kingfisher (*Todiramphus sanctus*).

102-year-old's exercise marathon to raise funds for marine turtles



The article that appeared in *New Idea*

Margaret Deas is the oldest member of the Australian Wildlife Society. She turned 102 years young on 31 January 2015. To celebrate her birthday, her goal was to raise funds to support Australia's precious native wildlife. Her aim was to encourage the younger generation to support and love Australian wildlife like she does. Margaret is donating all funds raised to the Australian Wildlife Society.

Just before Christmas in 2011 Margaret was in hospital. She had fallen and broken her pelvis in three places. The doctors said take her home; she is never going to walk again. She walked out of hospital six weeks later. In her life Margaret has experienced a heart attack, two broken hips (and hip replacements), a broken leg, a broken pelvis and a broken ankle. She is a testament to the power of determination, exercise and rehabilitation.

For the last year Margaret has been exercising four times a week with her

she laughs. Yet these days, Margaret is living proof that age is no barrier to keeping fit – and could put celebrity fitness gurus to shame with her impressive form. Despite undergoing two hip replacements, a broken leg, a broken ankle and a broken pelvis – which almost killed her two years ago – Margaret smashed her birthday target of 102 squats. 'I got up to 130!' she smiles. And what does she think of this remarkable achievement? 'I think of how silly I am!' she says. Suzanne credits exercise with saving her mum's life. After breaking her pelvis, Margaret became deeply depressed. 'Mum had lost her spark,' Suzanne recalls. 'Her positivity was gone and she'd lost her

usual zest for life. 'Then John came a year ago and started this exercise group. They would march up and down the corridor, they'd start singing and throwing balls. The difference in her has been a miracle. She's happy; she's full of life. It's amazing!' John says: 'I'm just so proud of how Margaret's gone on – her motivation and her spirit.'

By Keeley Henderson
Photos: Tom Holland *NI*

If you would like to contribute to Margaret's fundraising effort, visit gotofundme.com/khw4w.

physiotherapist, John, with a focus on improving strength and mental cognition. John has included singing in his program and the results with the participants of his program at Thomas Holt Assisted Living Facility are remarkable. John reported to us that she is the best 102-year-old, in both physical strength and cognitive function, that he has seen in his practice.

Margaret was overwhelmed by all the support for her campaign. Challenge day was set for 2 February 2015 and the event was covered by *New Idea*, the Channel 7 *Sunrise* program, *The Senior* newspaper and the local newspaper.

Margaret in fact completed 130 squats on her actual birthday and 102 squats for the media.

To date Margaret has raised over \$5,000 which will be donated to our Society's marine turtle project at the Cairns Turtle

Rehabilitation Centre in Cairns, Far North Queensland. The details of this project are on our website at: http://www.australianwildlife.net.au/project_turtle.html

Marine turtles are categorised from Threatened to Critically Endangered. They have mostly been hunted down for their meat, fat and shells (tortoiseshell) as well as theft of their eggs. These days, the most significant threat for them is a commercial fishing technique called longline fishing that uses hundreds or even thousands of baited hooks hanging from a single line and causes accidental sea turtle deaths.

Dr Jennie Gilbert, our regional councillor in Cairns, has recommended that the project fund a recently rescued large green sea turtle.

The turtle is a mature green turtle aged approximately 80+ and measures 1.1 metres. Jennie said that this is one of the oldest female breeding turtles she has ever rescued.

The turtle, to be named Margaret, was rescued in 25 knot winds and large seas between Cairns and Fitzroy Island by the dedicated staff off the Cairns Dive Centre boat who saw she was in trouble, stopped the boat, and the staff dived over to rescue her. It took eight people to lift her onto the boat! She is suffering from severe starvation from the lack of food resources in the north. The turtle is now safely at Cairns Rehabilitation Centre on Fitzroy Island and started eating 40 squid a day.

The sea turtle will be in care for an extended period and when released will have a satellite tracker attached to her to monitor her movements.

Donors will be able to track the turtle's movements through the South Pacific seas via a special website upon release. In the meantime, donors can follow other recently released turtles at seaturtle.org

All donations are welcomed and will be applied to this project.

Our Society and Cairns Turtle Rehabilitation Centre sincerely thank Margaret for her Herculean effort in such an imaginative and unique way of raising funds.



A resident of Thomas Holt Village contributing towards Margaret's fundraising effort



Flying-foxes

Unique, beautiful and vital to keeping our

Australia's iconic flying-foxes are at risk - and that means our native landscape is too

On 23 December 2014, the Australian Department of Environment (DoE) released a draft policy statement for public comment, on the camp management for grey-headed flying-foxes and spectacled flying-foxes. This document was drafted under the auspices of the *Environment Protection and Biodiversity Conservation (EPBC) Act*, so it only covers actions relating to the management of flying-fox camps for these two threatened species.

DoE recognises the importance of the network of flying-fox camps, which is needed to facilitate the movement of flying-foxes across their range to access feeding sites. This network allows them to pollinate and disperse seeds in native forests effectively: an important

factor in the conservation of World Heritage areas such as the Wet Tropics and Gondwana Rainforests.

There are too many issues with the draft policy statement to deal with here, but the issues of greatest concern to conservationists arise from the following three provisions:

- The 'best practice' mitigation standards proposed in the draft provide inadequate protection for these threatened flying-fox species.
- The proposed standards only apply to a list of 'nationally important camps' drafted by DoE, which would leave significant numbers of animals unprotected.
- Those proposing to disperse camps may be able to do so without requesting approval, or reporting outcomes of their actions to the DoE.

The draft offers 'best practice' mitigation standards to be followed during dispersals of camps that are listed as nationally important. If a proponent adopts these standards they do not need to seek approval for the dispersal. As written, these guidelines say dispersals should not be undertaken:

- When females are pregnant or there are dependent young in the camp.
- When the daytime temperature is expected to exceed 38 degrees Celsius.
- When there are known food shortages in the area.
- It also proscribes the felling or lopping of trees where flying-foxes are roosting.

There are glaring omissions: the proposed standards do not require public consultation, public education,



environment flourishing

Steve Amesbury

detailed planning, a requirement to stop work when there is death or injury, a time limit on the actions, or the provision of personnel to handle injured flying-foxes. While some of these are mentioned in the policy, they are not included in the best practice standards. Nowhere in the policy is reference made to the cumulative impacts of events on these species. In some years, tens of thousands of flying-foxes have died in events such as extreme heat events, cyclones and illegal killing. Surely at such times the precautionary principle needs to be applied, to limit additional avoidable impacts on the species that could result from dispersal?

As mentioned earlier, these mitigation standards only apply to actions on 'nationally important flying-fox camps'. So camps of threatened flying-fox species which are not on the list could legally be dispersed without regard to potential fatalities, the

need for humane practices, or other requirements that are (or should be) included in the best-practice mitigation standards.

In this scenario it is likely that dispersals of nationally listed camps will result in the creation of new 'unlisted camps', which could then be dispersed without needing to employ the proposed standards.

Although DoE states that maintaining a national network of flying-fox camps is important to the recovery of threatened flying-fox species, this policy would allow for those camps to be dispersed without referral, approval or consultation. It is likely that simultaneous dispersals would occur, which could be significant enough to compromise the integrity of this network of flying-fox camps.

Flying-fox camp populations can change rapidly in response to food

shortages and other influences, so an 'unlisted' camp can become a significant camp over a matter of days, but would not be protected by the provisions of this draft policy.

The DoE says a nationally coordinated approach is required for the recovery of these flying-fox species. But how is a nationally coordinated response possible when there is no requirement for proponents to seek approval, nor to report on the outcomes of camp dispersals? The DoE will not even be aware of these actions, which as a result of this policy would be largely uncoordinated.

This draft policy is based on self-assessment: the proponent can use the guidelines to assess whether or not the proposed action should be referred to the DoE. They also self-assess whether the approach they take meets with the proposed standards.



Baby rescued: At this age the baby bat would be wrapped by the mother's wings and latched on to the nipple. This rescued baby is wrapped in a handkerchief and provided a 'dummy' to emulate the natural behaviour. Photo: Steve Amesbury.



Model mother: Although they weigh less than a third of domestic cats, the flying-fox gestation period is six months, and the young remains dependent for 4-6 months. Photo: Nick Edards.

The problem with self-assessment is that it relies on the honesty of the proponent. Sadly, experience has shown that not all proponents operate with integrity. Over the past 12–18 months there have been reports of several dispersal actions by Local Government Authorities which have involved highly questionable activity, including the dispersals at Charters Towers, Perrin Park (Toowong) and the Cairns Library. In some cases official enquiries are still underway.

The lack of compliance enforcement activity is already a matter of concern, and the provisions of this policy will make it even easier for unethical proponents to undertake inhumane and inappropriate actions with impunity. Consider the Queensland court case, *Booth v Boswell*, where the court accepted evidence that a farmer illegally killed around 20,000 spectacled flying-foxes in a single season, with an electrical grid he had been using for over a decade. No action was initiated by any level of government and it was left to a private conservationist, Dr Carol Booth, together with the Queensland Environmental Defenders Office, to take legal action to stop this slaughter.

In a more recent example, in late 2013 a farmer in Mareeba, Roberto Alterio, was fined \$2,000 for misuse of a chemical when he poisoned 144 spectacled flying-foxes. Despite the finding, he was never prosecuted under the federal EPBC Act or the Queensland *Nature Conservation Act*. Yet a few months earlier another farmer in the same area (Richard Thiele) was fined \$18,000 under the *Nature Conservation Act* for poisoning 52 brolgas.

Interestingly, there is rarely a strong rationale for camp dispersals in the first place. Many dispersals are motivated by unnecessary fear or due to dislike. The draft policy is problematic in that it would facilitate unjustified dispersals and in doing so perpetuate an intolerance of flying-foxes, which is a major impediment to their conservation. So why is the DoE proposing a policy that will make it easier for landowners to disperse camps of threatened flying-foxes, when they acknowledge the importance of this network to their recovery? And why allow actions to be taken without any referral, when the DoE says that national coordination is important to the recovery of these species?

This policy reduces the workload on DoE, and shifts the responsibility to another level of government, but conservationists are concerned that this draft policy is not only internally inconsistent, it is misaligned with the department's legislated responsibility to protect Australian fauna, and work towards the recovery of threatened species.

The EPBC Act has been available as a safeguard to ensure a consistent treatment across state borders and to limit the harm that can be done under state policies that fail to take into account issues of national or international ecological significance. Without such a safety net, more threatened species will be at risk. This policy should be abandoned: safeguards for threatened species need to be strengthened, not undermined. Submissions have now closed on this draft policy, but there is still time to talk to your local federal member of parliament or write to the federal environment minister and demand the department be more proactive and forceful in the protection and recovery of threatened species.

Steve would like to thank Dr Carol Booth and Nick Edards for their comments, and for providing access to Nick's flying-fox images.



Another threat: During times when natural food is in short supply, flying-foxes will raid fruit trees. Poorly netted fruit trees are a death trap for bats and birds alike. Photo: Steve Amesbury.



In January 2013 on the hottest day ever recorded in Nowra, over 5,000 juvenile grey-headed flying-foxes died of heat exhaustion at this colony at Bomaderry Creek. Photo: Steve Amesbury.



Sharks more victim than villain

Chrissy Banks

Outside the aquarium a storm unleashed, setting the mood for our adventure; the perfect theatrical backdrop for what we were about to do.

Sitting poolside, kitted up in full wetsuit gear, the storm is the last thing on my mind, unable to compete with what I am about to do: swim with sharks! I had expected to be knotted up with nerves, but I'm strangely calm. I glance at the friend I'd coerced into sharing the experience with me. She smiles, more relaxed than she had been ten minutes prior. "If you get me eaten I'll be really annoyed", she'd told me earlier. "They have sharp teeth" and to prove it she'd given me a soft jab with the tip of a shark tooth passed around during the pre-snorkel briefing. "Ow," I'd muttered, to which she'd given me a look that said, "Exactly."

Now she is smiling, keen to get in the water. "It's the suit," she confides in me. "It makes me feel safer." I almost laugh, but the young dive master has one last instruction. "If a shark swims beneath you, stop finning and let it pass by." Its good advice, but he fails to mention *how* close the sharks get to you. None the

wiser we follow him into the main tank. Immediately I see two sandbar whaler sharks zipping off into the distance. I watch them, entranced by their speed and grace, completely unaware of what is coming up behind me.

And then it happens. I feel no disturbance of the water around me. No inner sense tells me something huge is approaching from behind. The first I know of it, my friend is madly gesturing for me to look down. I do. Right at the top of a shark's head! It's so big I can't see the end of it in my peripherals. It's a 2.5-metre grey nurse, and it's right beneath me. It's so close I could duck my head and kiss it. I'm startled into immobility, shocked that I'd not even known the shark was there. So I forget to think, forget to breathe. My heart rate goes through the roof, but its movements are languid and without incident the shark glides ahead. I take a breath and relax realising it meant me no harm. Twice more the shark passes in this manner. The second time I'm more relaxed and by the third pass I'm tempted to touch it (a big no-no by the way, aquarium rules). This shark is utterly captivating.

But not the prettiest of sharks, I have to be frank about that. Grey nurses are all size and teeth, the visual stuff of nightmares. In Africa, they are known as the ragged-tooth shark and for aesthetically good reason. Those teeth literally spill out of their mouths: long, slender, fang-like teeth that curve wickedly inward in rows of three, top and bottom, and are often on full display as the grey nurse regularly swims with mouth agape. Yet while they look fearsome, they really aren't. These teeth are designed to snag, not rip and tear. They are quite fragile and break easily, but will replace over the shark's lifetime. It's worth noting that grey nurses can't eat anything larger than their mouths, so will rarely take anything bigger than your TV remote. They're small-fish specialists, but also take smaller sharks, squid and crustaceans.

Above: Aggregation sites are thought to also be pupping grounds though where they go for gestation is a mystery. 73 million sharks are killed globally, mainly for their fins to be shredded into a soup! It adds no flavour, just texture and is a practice that has a dark and terrible cost. Photo: John Turnbull.

They're scary-looking, yes, but swim with one and you quickly realise they are no danger to you. Sadly, the opposite is true. As a direct consequence of their looks, grey nurses were labelled man-eaters and massacred on a massive scale between the 1950s and 1970s at the hands of spearmen and fisheries. It wasn't until 1984, when the species was critically endangered, that the New South Wales Government led the country in granting them protective status – the first shark species to be protected by law; a welcomed intervention on the cusp of too late. Even now, thirty years on, grey nurses are listed as Critically Endangered on the east coast of Australia and Vulnerable on the west coast, with legitimate concern that numbers are dwindling. So who's to blame? The problem is twofold. Commercial and recreational fishing is a constant problem. Sharks die every day on drum lines and nets, even the protected species, of which Australia has three. Yet their own reproductive biology works against them too.

Grey nurses are slow growing and mature late at 4-6 years when they reach approximately 220 centimetres in size. Not all females are receptive to mating come the season and when they are, they only produce young every two to three years. Ovoviviparous (meaning pups hatch while still in the



Wobbegong sharks rest quietly on the bottom; when they swim they glide using their pectoral fins.
Photo: John Turnbull.

mother) gestation is also slow taking 9-12 months, after which time only one to two pups are born at about a metre in size. Curiously, a mother has up to 15 eggs within her during a pregnancy, split between two separate uteri, and here a fascinating thing occurs: the eldest pup of each uterus eats its siblings. This phenomenon is known as intra-uterine cannibalism, though why it occurs is speculative.

While waiting for birth, and after consuming its brothers and sisters, the surviving two pups feed on unfertilised eggs the mother continues to ovulate. It is unclear if this species mates at specific times of the year, but from reports it is a rough affair. A male shows his interest by biting the female. Females have a tough skin to account for this, but many can be seen with scarring from these 'love bites'. Apart



Smooth rays are capable of weighing up to 350 kilograms, with a disc span (wings) of 2 metres. This unaggressive beauty is Australia's largest stingray.
Photo: Chrissie Banks.



Above: Grey nurse shark (*Carcharias taurus*). *Cacharo* in Greek refers to pointed, sharp or ragged while *taurus* means bull. Grey nurse sharks are slow-swimming sharks recognisable by the two relatively small, rounded dorsal fins on the back ridgeline. They are critically endangered and are listed under the EPBC Act as a threatened species. Grey nurse sharks are not dangerous to man; their diet comprises fish and lobsters. Photo: John Turnbull.

from mating, this species is gender-segregated and either solitary or swimming in small aggregations.

Slow-moving and graceful, the grey nurse (*Carcharias Taurus*) is recognised among the fusiform (spindle-shaped) sharks and despite its name is actually a speckled bronze on top and pale beneath. They are large and stout with females typically growing to 2–3 metres and males, 2–2.57 metres. The maximum recorded length measured 3.18 metres and the heaviest weighed 190 kilograms. These sharks are easily identified by two relatively small, rounded dorsal fins spaced evenly along the back ridge. While capable of putting on a burst of speed, grey nurses tend to be languid, increasing in activity come night to hunt. East coast and west coast populations are segregated from one another, with little being known about the west coast group. Recorded at approximately 192 metres down, they generally cruise the continental shelf enjoying a diversity of reefs and bays.

While they do travel within their coastal territory, clear aggregation sites have been identified on the east coast and classed as critical habitat. Around the country strict guidelines are in place for divers to ensure no harm comes to these beautiful creatures. They are widely recognised as harmless unless

aggravated, at which time they will thump their tail with force to create a loud warning boom to potential threats. An occasional incident has arisen where a shark has tried to steal a fisherman's catch or blundered into a diver in murky waters.

Not monsters at all, these are cool sharks with some cool tricks. A grey nurse can hover in place by taking a great gulp of air into the stomach to achieve neutral buoyancy and facing into the current so that water can wash through their gills. If you look closely enough at a hovering grey nurse, you will see a steady stream of bubbles escaping through the gill slits. They can also extend their jaw 10 centimetres to snag dinner.

These sharks aren't personality drones either. Snorkelling with two species I was fascinated at how differently they interacted with us humans. While the sandbar whalers kept their distance completely, content to ignore us and play tag around the aquarium, the grey nurses stayed close, almost as if they enjoyed the company. One preferred to keep a small distance, though was clearly nonplussed by us being there, while the other got as close as she could without running us down. Oh, okay, I can't help it, the grey nurse is a favourite – right along with the 45-year-old teenage loggerhead turtle,

the massive smooth rays (two creatures with their own survival stories to tell) and the much smaller spotted wobbegong shark in its cave; how can you not like a fish with a name like that?

Grey nurses. I like them. Big and ugly they might be, but gentle and harmless, and this gets me thinking. Is our (my) fear of sharks based mostly on ignorance? I believe it is. Prior to this experience, if I'd seen a grey nurse swim by in the wild I'd have completely lost all cool. It wouldn't have mattered if I could identify the species because I'd have got snagged on a noun: *shark!!!* Instant fear. But having since learned about the species and experienced firsthand its placid nature, I see how wrong that knee-jerk reaction is.

And herein lies another problem: our fear of sharks is fuelled by irresponsible media. Very recently the Australian Wildlife Society Facebook page shared a link to Adrian Peace's article in *The Conversation* explaining the victimising terminology used against sharks in media coverage and the effect it has on readers/listeners. This article articulates what I already know. 'Stalk', 'menace' and 'haunt' are three examples of words we associate with criminal behaviour in literature and visual entertainment. Sharks *are not human!* Therefore it is illogical

and blatantly wrong to describe a shark simply cruising its habitat and hunting for food using these words. It is sensationalising and manipulating to do so. It is feeding our fears of them and this fear has led to some utterly ridiculous 'solutions' of late. The ugly side of the human-shark relationship is that we kill them in the thousands for food, for trade and out of fear. Again we're back to fear. In the previous article (*Australian Wildlife*, Winter Vol. 3/2014) I mention fear as being debilitating and I hold to that. It gets in the way of us making sound choices and judgements – especially where sharks are concerned.

The truth is, grey nurses and many other sharks are safe to share the waters with – assuming you don't behave like a raving lunatic and perpetuate a dangerous situation. I know many experts in shark research are trying to get this message across: sharks don't want to harm us. That some species do is more often than not a case of mistaken identity. Have you ever seen a silhouette from beneath of a surfer against a seal (seal is a favourite food of some of the bigger species of sharks)? It is astonishingly

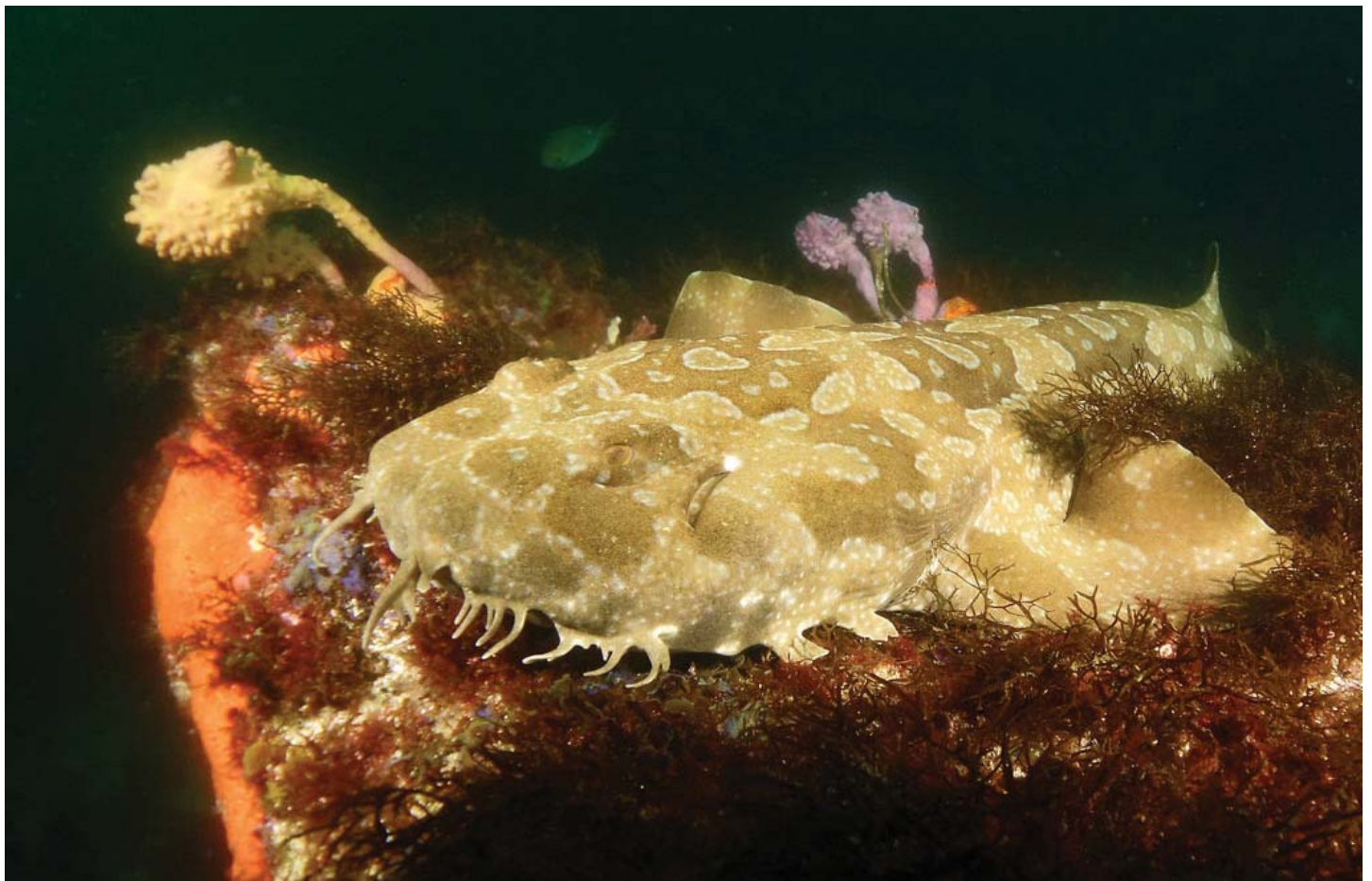
similar and since sharks often come at their prey from beneath, you can understand its mistake. So how do we stay safe in the water? There is a stack of websites dedicated to spelling out safety tips for keen ocean swimmers and it is all commonsense: don't swim in large schools of fish or seals behaving erratically (i.e. clearly getting away from a predator), don't swim in murky water, at dusk and dawn when sharks are actively looking for food, near storm drains where waste may draw sharks in for a nose-around, or near common spear fishing sites and so on. Definitely read up on these safety tips and also remember that we are in their habitat when we enter the ocean, and act appropriately.

And gain knowledge: it is a balm for panic. Make an effort to understand your endemic sharks, where they live and how they behave. They are incredible creatures with interesting lives. Yes, it's true, there are some species to be extremely cautious of: would I swim up to a great white or bullshark and give it a big cuddle? No, I would not – there are no points for stupidity – but ask me if I'd swim in the wild with grey nurses, reef sharks,

lemon sharks, or blue sharks and I'd say 'let's go'. And that's definitely progress.

So am I cured of my unreasonable fear of sharks? I think so. It doesn't mean I'm not nervous of them, that I don't have to control my imagination while kayaking dark waters, that my heart won't jump if I see a fin breach the surface nearby and scarper out of the water with the rest of you, but I'm more educated now and have had wonderful personal encounters that have made a difference in my attitude. Sharks aren't a menace, they are intelligent, diverse creatures with a rightful place in this world. They are a 'keystone species' (an apex creature) essential in keeping the ecosystems of our oceans in balance. Rather than blindly fear them, let's work together to keep their watery world a sustainable and safe habitat – for *them* as well as us.

Now, before I go - I guess you're wondering if I let loose that infamous snorkel-scream while swimming with apex predators? Not once! Not even a tiny squeak! I'm so proud of myself. And my children owe me five dollars. Until next time, happy oceanic swimming.



The spotted wobbegong (*Orectolobus maculatus*) is a carpet shark in the family Orectolobidae, found in the eastern Indian Ocean from Western Australia to southern Queensland, between latitudes 20°S and 40°S. It reaches a length of 3 metres. Photo: John Turnbull.



The proposed **Bargo-Nepean** National Park

Rowland Ware, The National Parks Association

The highly scenic Tahmoor East Gorge

This article is primarily about a splendid piece of scenery called Bargo River Gorge – also known as Tahmoor Canyon. It is roughly halfway between Bowral–Mittagong and Camden–Campbelltown in New South Wales and is also a wildlife corridor of at least regional significance.

Imagine a gorge where colourful and intricate sandstone cliffs overhang and/or abut rock pools and cascades. At Tahmoor East, in the 5½-kilometre-long Bargo River Gorge, there are seven such cliffs – two being at Mermaids Pool, which is about 1,600 square metres and is encased in colourful rock. Mermaids Pool is not the biggest of the pools in the canyon/gorge. Over 5 kilometres downstream there is Junction Pool, which is always at least 6,000 square metres. It is where the Bargo and Nepean Rivers meet. There are several other large pools between Mermaids Pool and Junction Pool. Halfway between these pools is a 100-metre-high cliff that abuts a cascade and small pool.

It is not just the rock and water that is scenic. The gorge also contains at least four vegetation communities. In and near the water the vegetation is dominated by water gums (not eucalypts). On the most sheltered parts of the higher ground there are patches of rainforest trees – especially small coachwoods and large grey myrtles. Higher on the slopes, and in addition to many eucalypt species, there are patches dominated by the blue-grey coast myall which is a species of wattle. Above the cliffs, there was once an abundance of the now Critically Endangered Shale Sandstone Transition Forest.

The gorge/canyon at Tahmoor, from Mermaids Pool to the Nepean River, has been rated as scenery of at least State significance. Apart from the large rockpools, the components of the gorge are not remarkable but if the trees in the gorge were very large, they would hide the cliffs. It is mainly the combination of components that is remarkable.

The potential for recreation

The fact that the gorge is beautiful is one reason for considering it to be very suitable for recreation. It must be

noted that, upstream from the gorge, the Bargo River catchment is over 120 square kilometres yet the river falls 125 metres between the confluence with the Nepean and a small waterfall a few hundred metres upstream from Mermaids Pool. Consequently, during floods, boulders are swept away in many places. It is therefore easy to walk beside many of the large pools which are carved out of bedrock.

The gorge/canyon at Tahmoor is very suitable for outdoor recreation for two other major reasons. It is only a little over 100 metres deep and so people of moderate fitness can enjoy the place. Finally, and very importantly, it is only about 80 kilometres from the centre of Australia's largest city (Sydney) and so it has plenty of potential 'customers' who want to do one-day walks.

For several decades, access to the gorge became difficult, partly because of two large private properties between the cliff-tops and the town. These

Above: Bushwalkers marvelling at the 'dripping cliff' in Bargo River Gorge, downstream from Mermaids Pool.

properties are almost certainly going to be developed soon and we hope that at least a regional park will be created there in the short term – a Bargo–Nepean National Park later.

Biodiversity considerations

The importance of a wildlife corridor depends on three major considerations: the importance of the remnants it links, the extent to which those remnants need to be linked and the effectiveness of the link. The proposed national park is the only significant link between the Greater Blue Mountains World Heritage Area and the large and pristine forest and woodland surrounding the Cataract, Cordeaux, Avon and Nepean Dams. The latter forest also abuts the magnificent Illawarra Forests. Much of the link is about 5 kilometres wide, which is probably much more than adequate. Unfortunately, the link is only about 250 metres wide in a few places but that is wider than many so-called wildlife corridors. Also, the cliffs probably provide significant protection to animals in the gorge.

The World Heritage Area and the other areas could hardly be more important but surprisingly, the World Heritage Area, despite being about 10,000 square kilometres, has around 270 threatened species, including a dozen that are Critically Endangered. The area therefore needs all the help it can get.

Data from the *Atlas of Living Australia* was used to compare the biodiversity within 10 kilometres of Tahmoor with



New leaves on a woody pear, part of the vegetation above and near the cliff tops of Bargo River Gorge at Pheasants Nest near Tahmoor.



An endangered broad headed snake found in the winter of 1997 during a biodiversity survey of part of the Bargo River catchment.

the biodiversity within 10 kilometres of five other small New South Wales towns. We deliberately chose some towns that would give Tahmoor some stiff competition. We then developed a reasonable and transparent method of comparing the towns. After much tedious work we were not surprised that Byron Bay decisively scored higher than Tahmoor. We were, however, surprised that Tahmoor decisively beat Eden and Thredbo. The other two towns are Cooma and Lightning Ridge.

The vegetation of most of the proposed park is extremely pristine. In regard to water quality, the water in about 10 kilometres of the Bargo River is clear but somewhat polluted. In the rest of the Bargo River, and the relevant section of the Nepean River, the water is very clear and is not polluted.

The future

We would like the remnants of Shale Sandstone Transition Forest to be expanded on land which is currently privately owned. We believe that the land above and close to the cliffs should be transferred to the public in exchange for the right to develop the rest of the land. Such a buffer would also be valuable for recreation and it would enhance the wildlife corridor which is of at least regional significance. The developers, of course, see things differently. Their main aim is to maximise profits. Although a nearby natural area increases property values and therefore the profits going to the

developers and the rates going to the council, such an increase is only up to a point.

We believe that the buffer above the cliffs should be at least 150 metres wide. The developers would like it to be narrower than 100 metres. If it is narrow it is unlikely to ever be a part of a national or regional park and it will therefore be left to the council to maintain. The council would like the land to be maintained by the state government but the National Parks and Wildlife Service/Office of Environment & Heritage has been claiming that it is an isolated reserve and they only want to enhance existing reserves such as the Bargo River State Conservation Area near the upstream end of Bargo River. The situation has frustrated us but we are not giving up.

And so we have to emphasise the fact that the gorge at Tahmoor is an essential part of a much bigger corridor. In fact, it may end up being considered an essential part of a coast and ranges corridor from southern Victoria to northern Queensland.

The vegetation along the Bargo River is mainly open forest and it has an altitude range of 643 metres. That is significant when one considers what is likely to happen to wildlife as a result of global warming/climate change.

The proposed national park gains support from the NSW National Parks Establishment Plan 2008 – not



The u-bend of the Gorge at Tahmoor. It is not the deepest part of the Gorge but it has notable cascades and rock pools.

extremely strong support but certainly strong to very strong. The foreword of the plan contains an important point: conservation depends very much on people having 'seminal' experiences in national parks.

What you can do

If you agree with the general thrust of this article, we suggest that you send a letter or email to at least a couple of the following:

Deputy Chief Executive

National Parks and Wildlife Service
PO Box A290, Sydney South NSW 1232
info@environment.nsw.gov.au

Jai Rowell MP

Shop 1, 117 Remembrance Drive,
Tahmoor NSW 2573
wollondilly@parliament.nsw.gov.au

Luke Johnson, General Manager Col Mitchell, Mayor & Simon Landow, Deputy Mayor

Wollondilly Shire Council
PO Box 21, Picton NSW 2571
luke.johnson@wollondilly.nsw.gov.au
col.mitchell@wollondilly.nsw.gov.au
simon.landow@wollondilly.nsw.gov.au

Rob Stokes, Minister for Planning

GPO Box 5341 Sydney 2001
office@stokes.minister.nsw.gov.au

Mark Speakman, Minister for the Environment

GPO Box 5341 Sydney 2001
office@speakman.minister.nsw.gov.au

**** Finally, please send copies to:

rowlandware@bigpond.com and
jashep50@gmail.com



Mermaids Pool. If you look carefully you'll see more than a few people present above the waterfall and nearby.



Can you tame a 'drop bear'?

Story and Photos Dr Jesse Blackadder

I was an animal-kid. You know the type. The ones who drag home abandoned kittens, hatchlings fallen from nests, birds with broken wings, even half-dead lizards.

Nowadays, I see the kids like me when I visit schools. Their hands shoot up in the air if I ask if anyone wants to be a vet when they grow up. They're not the only kids who love animals, but their passion is palpable.

As an animal-kid I pestered my parents for pets – puppies, kittens, ducklings,

budgies, mice and, of course, a pony. I guess my parents thought that pets would teach me care and responsibility, which they did (though I never did get a pony). But I wonder now if I didn't learn more important lessons from the wild and wounded creatures I brought home, hoping to heal them and release them.

They weren't endangered native mammals. I suspect most of them were pigeons and only a few survived. I had enthusiasm but little knowledge, and if it hadn't been for a nearby vet who gave advice over the phone, probably none of them would have made it.

Through those creatures – tiny and insignificant as they may have been – I learned that loving an animal doesn't always mean taming it and making it a pet. I learned to love the wildness of those creatures, and let them go when the time came. So when I read that the little prince chose not to tame the beautiful fox, it struck a chord of memory.

All this came back to me when I sat down to write *Dexter The Courageous Koala*, a story about 13-year-old Ashley, a city kid who's desperate for a puppy of her own, and what happens when she misses out on a puppy and instead becomes caught up in rescuing an injured mother koala and her young joey 'Dexter'.

In reality, few kids will be rescuing injured native wildlife – such as koalas, kangaroos, possums or bats – and there aren't many chances for kids to learn about these creatures outside of zoos. It doesn't seem right somehow – these are the creatures that live wild in Australia, and their survival in the future may rest on people's care and concern – their willingness to take action to protect these creatures and their homes.

But stories shouldn't preach. So rather than telling kids what they 'ought' to know about koalas and the threats facing them, I threw my young heroine right in the middle of a difficult koala rescue so she could learn about courage, loving an animal, and the importance of NOT always taming it. Through the story Ashley learns to love young Dexter and ultimately let him be free. And along the way, young readers can absorb a bit about the perils faced by koalas – and what to do if they find injured native creatures – without feeling like it's a lesson on capital E Environment.

The story came out of my own delight in seeing wild koalas. In the past few years I've been lucky enough to see them in my garden in northern New South Wales. Our favourite koala, 'Elsie', had symptoms of chlamydia,

Above: 'Elsie'.

a disease that eventually killed her. Through trying to rescue Elsie I learned about **Friends of the Koala** and their amazing work trying to save injured and diseased koalas like Elsie.

I discovered that caring for injured or orphaned native creatures (not only koalas) is a tough job. It takes many hours, days and weeks of sometimes round-the-clock care, and it can often end in tears. But the joy that carers feel when their charges survive and go back to the wild is inspiring.

So, if you'd like to share a different kind of Australian animal story with the animal-kid in your life, *Dexter The Courageous Koala* might be the one for you. At the very least check out the Australian Museum's spoof page on 'Drop Bears': carnivorous marsupials that kill by jumping from above and biting the neck of their intended prey, including humans (<http://australianmuseum.net.au/drop-bear>). As far as I can see, no one has been able to tame one.



A mother koala teaches her baby to climb a tree in northern New South Wales.

TOP FIVE TIPS ON INVOLVING KIDS IN CARING FOR NATIVE CREATURES

- Do you have pet dogs and cats? Keep them inside at night, put bells on your cat's collar, and keep your dog on a leash if wildlife is about.
- NEVER pick up an injured wild creature before checking with an adult. You might get hurt, and so might the animal.
- If it's safe, move the animal away from danger and into a quiet, dark environment such a cardboard box with a small towel inside. Don't offer food or water.
- Write down where you found the creature – it should be released back in the same area.
- Know the number of the nearest wildlife rescue service. You can also take native creatures to the nearest vet for help (for no charge).
- Remember: only licensed carers can look after native wildlife. But everyone can keep an eye out for creatures that need help.



Dr Jesse Blackadder is an Australian author fascinated by landscapes, adventurous women, animals and very cold places. She wanted to be a vet from the age of five, but ended up becoming an author instead and has published award-winning books for adults and children. www.jesseblackadder.com

JOHN GOULD'S EXTINCT & ENDANGERED MAMMALS AUSTRALIA

F R E D F O R D

I lived in Canberra until completing an undergraduate Science degree at ANU in 1997. My honours thesis was on the endangered smoky mouse inland of Eden and began my research interest in threatened native mammals, particularly native rodents. My PhD, based out of James Cook University, Townsville, focussed on native rodents across northern Australia, in particular the intriguing pebble-mound mice. I also conducted small contracted research projects for the NSW National Parks and Wildlife Service during which I worked on a variety of mammals including endangered mountain pygmy possums and spotted-tailed quolls.

Between 2003 and 2007 I began to investigate bone deposits left by owls in caves to help track down rare and endangered mammals in the south-east. This led to a position at CSIRO's Australian National Wildlife Collection (2007–2010) that specifically looked at the natural mammal fauna of eastern Australia before European colonisation in 1788. This formed the background research and thinking that developed into the information presented in this book.

John Gould's Extinct and Endangered Mammals of Australia takes up the story of Australian mammals that were known to the early explorers and

naturalists as documented by Gould in his landmark three-volume work *The Mammals of Australia*, completed in 1863.

The book describes the relationship of early authors, the public and subsequent generations to these mammals. It also charts how the wholesale changes to the continent since 1863 have caused the wholesale loss of populations of native mammals, ending in the extinction of many species.

Aside from the works of John Gould himself, other key books on Australian mammals from the early and mid-20th century add authoritative accounts



Wallabies, like their close kangaroo relatives, have long tails for balance and large feet and strong legs for jumping great distances.



The thylacine was the largest known carnivorous marsupial of modern times. It is commonly known as the Tasmanian tiger or the Tasmanian wolf.

of the fate of such species, but for many species the more revealing information can be gleaned from newspaper articles describing hunting trips, quirky encounters, garden pests and outlandish claims of near-supernatural attributes of the fauna. For many species the complete lack of information is equally revealing. They disappeared without ever being seen or documented in any meaningful way by European settlers.

Some key stories are extremely well documented, such as the very vocal resistance to the hunting of koalas for the fur trade that resulted in massive public outcry in the 1920s and the need for federal government intervention to prevent the export of skins from Queensland. The thylacine, too, was a species of international conservation concern that was actively persecuted to extinction by the Tasmanian government, who moved far too late to enact protective measures to preserve the species.

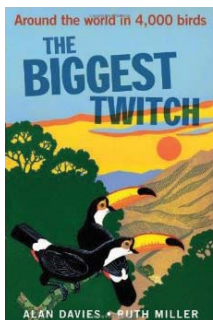


Fred Ford

It took two years to complete my book. Over that time I spent much time poring over the works of Gould, and scanning articles on the National

Library's Trove collection, as well as reviewing museum records of animals and scientific papers about the conservation and history of the species.

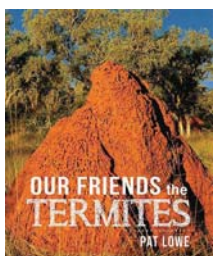
Book Reviews



***The Biggest Twitch: Around the World in 40,000 Birds* by Alan Davies and Ruth Miller**

This book is the story of Ruth Miller and Alan Davies great expedition, searching for birds from Ecuador to Ethiopia via Argentina, Australia and Arizona. We follow this birding odyssey as they rack up the species and the stamps in their passports, sharing in amazing birding experiences such as monkey-hunting Harpy eagles in the Brazilian rain forest, seed snipes in the Peruvian highlands and Lekking bustards in South Africa, all leading to the ultimate question - will they break the magic 4,000? Written in an accessible style, this book will be of great interest to birders, readers of travel literature, and to people who simply enjoy a good adventure!

Publisher: Bloomsbury | RRP: \$29.99



***Our Friends the Termites* by Pat Lowe**

Our Friends the Termites is a fascinating and delightful read for backyard naturalists, entomologists and the simply curious. Take a journey into the micro-world of one of the most maligned creatures on the planet and discover the real story of termites. After years of keen observation in Western Australia's Kimberley region, Pat Lowe shows that there is more to these industrious insects than their propensity to eat houses and furniture. Termites are the earthworms of the tropics, providing nutrients to arid soils. They have been an important food for people and other animals throughout the centuries, and their nests have been used in many human endeavours.

Publisher: Back Room Press | RRP: \$26.95

Order online at http://www.backroompress.com.au/book_termites.html

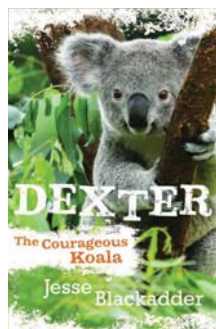


***Bugs in Close-up* by Colin Hutton**

Bugs in Close-Up is a collection of over 200 stunning images of some of nature's most intriguing and bizarre-looking creatures. Bugs are all around us, yet too diminutive to be observed by the human eye. The extreme photographic close-ups illustrate a hidden fauna of alien-looking critters from around the world. This book reveals the details of inter-species relationships (ants 'farming' caterpillars), and giants of the bug world (beetles, stick insects and the like). The incredible photography is supported by informative, extended captions detailing the subjects and, in some cases, how the images were taken.

Publisher: New Holland Publishers Australia | RRP: \$29.99

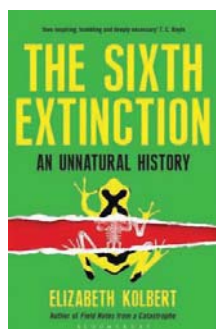
Book Reviews



***Dexter the Courageous Koala* by Jesse Blackadder**

This book is part of a series that celebrates Australia's animals! Ages: 8-12. Twelve-year-old Ashley is going to stay with her Aunt Micky who lives near Byron Bay. Micky has spent many years looking after rescued wildlife, but when a freak storm hits and they discover a baby koala and his mother, Ashley is drawn into the reality of what caring for wildlife, such as koalas, really involves.

Publisher: ABC Books | **RRP:** \$14.99



***The Sixth Extinction: An Unnatural History* by Elizabeth Kolbert**

It took thousands of years for mammoths and giant ground sloths to become extinct. For geologists, these millennia are considered 'geologically instantaneous'. We are witnessing a similar mass extinction in a lifetime. In each of its 13 chapters Kolbert goes to the frontline of extinction, and finds an emblematic species under threat. From this standpoint, up a hill or in a cave, she explores the history of the ideas, the evolution of extinction itself from religious sacrilege to a reality occurring in our own back yards. She meets the geologists, botanists and biologists who are monitoring the extinction and fighting the tide. This could be a depressing book but in a perverse way her message is one of joy.

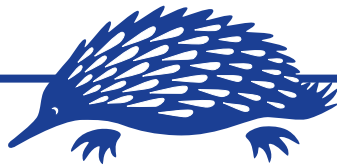
Publisher: Bloomsbury | **RRP:** \$19.99

WOBBYGONG

Photo by John Turnbull



Wobbegong sharks like to hide in caves and ledges during the day



WILDLIFE PRESERVATION SOCIETY OF AUSTRALIA LIMITED

PO BOX 42 BRIGHTON LE SANDS NSW 2216 | (ACN 134 808 790)

WPSA PRESIDENT'S ANNUAL REPORT FOR 2014

A year in review

Mid-2014 the Board held a strategic planning session. A priority to emerge from this was the need to find a permanent national headquarters for the Society to work from, thus allowing Suzanne and Patrick Medway to recover the space in their own home that they have generously provided to the Society over fifteen years. Several possibilities are being considered, and the Board will remain focused on this proposal in the coming year.



President David Murray with Robert Stokes MP Minister for the Environment and Vice President Ken Mason at a community forum at Hurstville on 19 May 2014

A major interest as always has been environmental education, and we have continued our membership of the Australian Association for Environmental Education this year. Furthermore, I have been elected to their NSW Council, to improve liaison. We have again awarded ten scholarships worth \$1,000 each to university students, as detailed below. A second recipient was also selected for the UTS Wildlife Science Ecology Research Scholarship, worth \$5,000.

As with all charities, we are very aware of the necessity to carefully husband our income stream and this is always a major focus for the Directors of the Board of the Society. As we receive no government funding and rely entirely on our own membership fees and return on investments to carry out our wildlife conservation work, seeking more support through sponsorship or partnerships will be an ongoing necessity for all our board members. We identified that the future of the Society lies with a new generation of young Australians who have a passion for wildlife conservation.

Our research indicated that young people who study wildlife conservation at university develop a keen and abiding interest in the subject which can last a lifetime. You too can make a donation to the Wildlife Science Ecology Research Scholarship at any time. Donations are fully tax deductible under our registration as a DGR status Item 1 on the table in section 30-15 of the *Income Tax Assessment Act 1997*.

On a personal note

As incoming President I welcome the opportunity to present to the Board two campaigns that I thought worthy of our support. First, the Cliefden Limestone Caves in southern New South Wales are threatened with destruction by the proposed Needle's Gap Dam. The Board has agreed that we will support the Linnaean Society of NSW in their efforts to protect the caves. Apart from their scientific importance as a source of fossils, these caves provide an extremely important habitat for bats.

Secondly, we are supporting the proposal from the Macarthur Branch of the National Parks Association to preserve a section of the Bargo River Gorge by having it declared a national park. This area is under threat from cliff-top development, and represents a vital corridor for wildlife moving between the Blue Mountains National Park and the coast.



Members at the last AGM

2014 – University Student Grants Scheme

The Australian Wildlife Society was delighted to announce the winners of the ten grants of \$1,000 each to honours or postgraduate students conducting research that will contribute to the conservation of Australian wildlife. The winners for 2014 are:

Amy Northover, School of Veterinary and Life Sciences at Murdoch University.
Project: The ecology of parasite transmission in fauna translocations.

Freda Nicholson, La Trobe University.
Project: Do juvenile hormone analog insecticides disrupt amphibian lifecycles?

Kimberly McCallum, University of Adelaide.
Project: Influence of the spatial arrangement of plants in revegetated systems to gene flow, natural regeneration and long-term viability.

Rebecca Peisley, Charles Sturt University.
Project: Ecosystem services provided by birds in agricultural landscapes.

William Geary, Deakin University.
Project: Carnivores in flames: Predator ecology in a fire-prone landscape.

Jaimie Cleeland, University of Tasmania and the Australian Antarctic Division.
Project: Macquarie Island albatrosses: Assessing the environmental and anthropogenic influences on population and demographic status and trends.

Mark Wong, The Australian National University.
Project: Fine-scale geographic variation in a newly described Australian funnel-web spider (*Atrax sutherlandi*).

Yaara Aharon-Rotman, School of Life & Environmental Sciences, Deakin University.
Project: Migratory shorebird populations are under threat and thus of particular conservation concern.

Blanche D'Anastasi, James Cook University.
Project: The conservation status of Western Australian true sea snakes: Are species disappearing before they have been discovered?

Jonas Bylemans, University of Canberra.
Project: Spawning site identification of Macquarie perch (*Macquaria australasica*, C. 1830) using environmental DNA.

Wildlife Science Ecology Research Scholarship

The 2014 Australian Wildlife Society (AWS) Wildlife Ecology Research Scholarship has been awarded to UTS School of the Environment PhD candidate Sofietje Voerman. Given the nature of her project, the scholarship will provide essential extra funding for experimental design and specialised equipment.



Vice President Dr Clive Williams and awardee Sofietje Voerman

“My research focuses on the native marine seaweed *Caulerpa filiformis*, which has become very well adapted and is spreading. The problem with this species is that it is highly chemically defended and structurally very different to other important coastal seaweeds so it has the potential to have wide-ranging effects on the high biodiversity of marine organisms that call these habitats home,” Sofietje said.

Wildlife conservation projects

The Wildlife Preservation Society of Australia has developed a diverse range of conservation projects and responsibilities in our mission to preserve Australia's unique wildlife, and this is evident in the breadth of our achievements over the last year. We deal with and support a broad spectrum of environmental issues, supporting and/or delivering various wildlife conservation projects and operating in a number of different, and sometimes difficult and isolated, locations across Australia. Some of our wildlife conservation projects focus on preserving a single species, while others deal with national problems on a continental or global scale – such as feral animals or climate change. Our volunteers work in locations all around Australia, from remote areas in the central desert to the capital cities – and all showing a tremendous dedication and commitment to preserving and protecting Australia's fauna and flora for the next generation of young Australians.

2014 Conservation Group Grants

The Board of Directors carefully considers all requests for grants from other wildlife conservation groups and places a special emphasis on native wildlife research, conservation and the preservation of wildlife habitat. The Society makes regular contact with wildlife caring groups across Australia to find out how they are faring, what their main projects are and how we can be of assistance to them in preserving native wildlife and its vital habitat. We lobby organisations and government bodies on their behalf and make donations to assist them in their special wildlife conservation projects.

Wildlife rescue calls

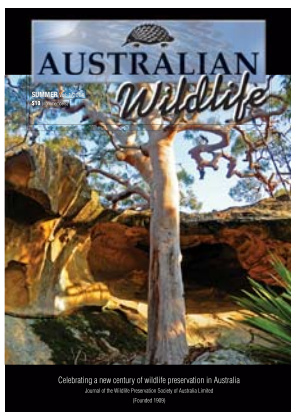
We continue to receive numerous and wide ranging distress calls for help from members of the public about sick, injured and stranded wildlife. We note with some concern that the Victorian government has been asked to remove the bare-faced or common wombat from the list of protected native species, which will allow some local farmers to destroy wombats on their property. We are fortunate to have the support of the various national wildlife rescue services that do such valuable and selfless work to help rescue, save and rehabilitate our native wildlife. We are constantly reminded of the necessity of our organisation to stay vigilant and to continue to protect and preserve our native wildlife from attack and abuse. Recently we became embroiled in a disastrous situation where loggers clearing land were covering over wombat burrows in contravention of their conditions to clear the site. After extensive litigation the matter was resolved but we remain on guard against further breaches of the conditions in their permission to log the site.

Financial Report summary

The Society's Directors and the Finance and Investment Committee continue to exercise tight and effective control over our finances and review and adjust the investment portfolio as required during the year. The investment funds of the Society have continued to grow with the return on our investments now above average for the year. The Committee made a recommendation that the Society's investments be pooled to create a single investment portfolio to maximise the income. We also rely on our Bequest Program to provide much needed funds to expand our wildlife conservation program across Australia and commend this program to all members and their families to consider the benefits to the work of the Society.

Australian Wildlife magazine

Our coloured *Australian Wildlife* magazine is the flagship of the Society and has proved to be extremely popular amongst all of our members.



Summer Cover



Autumn Cover



Winter Cover



Spring Cover

Our fortnightly email wildlife newsletter has also proven to be very popular with our members across Australia and we encourage them to forward the newsletter on to their family, friends and associates to help spread the wildlife conservation word.

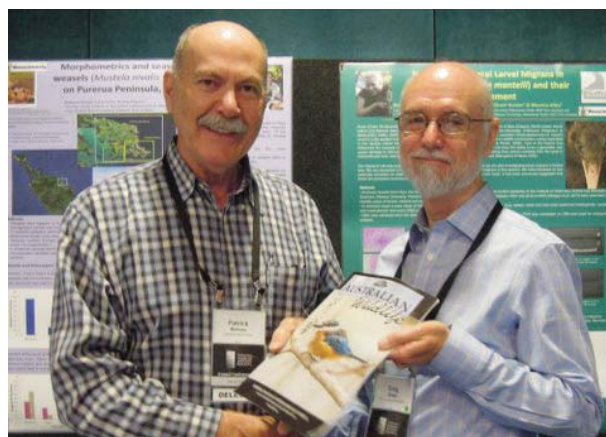
Donations, bequests and gifts

During the year we continued with our bequest program to encourage donors to support our wildlife conservation work across Australia through the website and through general publicity. We are very grateful to all our members for considering using the bequest program to help the

Society with its long-term planning. Please contact the National Office for more details on the Bequest Program and on how to join the Friends of the Society and make a regular monthly donation to support our national wildlife conservation programs.

Conferences and wildlife research seminars

The Society's directors attended and contributed to a number of important wildlife conferences and meetings throughout the year. We actively initiated and sponsored many of these conferences and participated in others. WPSA is an active member of the Nature Conservation Council of New South Wales. Our Society's CEO is a representative on the NSW State Pest Animal Control Council and an appointed member of the NSW Kangaroo Management Advisory Panel. He provides expert advice and assistance on wildlife conservation matters and keeps the Society abreast of environmental and conservation developments by government officials.



Patrick Medway presenting the President of AWMS, Dr Greg Baxter, with a copy of our magazine

Proposal for Wilson's Farmhouse at Rockdale

The Society has been in consultation with the Rockdale City Council to lease the historic Wilson's Farmhouse Cottage at 310 West Botany Street, Rockdale for use as a local Environmental Education Centre for schools in the St George area. The historic cottage was constructed in 1855 and is made of local sandstone and measures 7 metres by 7 metres. With some modifications and restoration work it could be made suitable as a base for an environmental education teacher and staff to work up programs in the Rockdale Wetland Corridor, which stretches from the Cooks River system to the Georges River system. Donations for this special project are very welcome and will be faithfully applied.



Historic Wilson's Farmhouse cottage in Rockdale Wetlands

A special thank you to all our members

May I wish every member of the Society a happy, healthy and prosperous 2015 and thank you all most sincerely for your tremendous support and continued dedication and commitment in helping the Society to preserve and protect our native wildlife for future generations of young Australians.

David Murray PhD, PRESIDENT | 31 December 2014



Sulphur-crested cockatoo. Photo by Michael Ritchie

Visit the Australian Wildlife Society website at www.aws.org.au to find out the latest on what is happening in our fight to preserve Australia's unique wildlife

[HOME](#) | [NEWS](#) | [AWARDS](#) | [GRANTS](#) | [PROJECTS](#) | [FAQ / LINKS](#) | [CONTACT US](#)



Australian Wildlife Society

Photo courtesy of IT'S A WILDLIFE





Protecting ALL Australian Wildlife with new Native Title Act.
[Click here to support »](#)



UNIVERSITY OF TECHNOLOGY SYDNEY

Wildlife Ecology Science Research Scholarship

You may be eligible to submit an application for the newly established Australian Wildlife Society Research Scholarship to help you complete your degree. [More information »](#)

Applications close: 28 February



Conserving Australia's Wildlife since 1909

Australian Wildlife Society

Help conserve our unique native Australian wildlife.
[Join our Society »](#)

[RETURN HOME](#) | [RETURN TO TOP](#)

[ABOUT US](#) | [OUR HISTORY](#) | [DR SERVenty](#) | [ANNUAL REPORT](#) | [OUR POLICIES](#) | [BECOME A MEMBER](#) | [AUSTRALIAN WILDLIFE MAGAZINE](#) | [CONTACT US](#)
[SERVENTY CONSERVATION MEDAL](#) | [COMMUNITY WILDLIFE CONSERVATION AWARD](#) | [UNIVERSITY STUDENT GRANTS](#) | [CONSERVATION GROUP GRANTS](#) | [NEWS](#) | [LINKS](#)
[FAQ](#) | [SCHOOL PROJECTS](#) | [BILBY](#) | [COOPER'S PADDOCK](#) | [FLYING FOX](#) | [NUMBAT](#) | [MARINE SEA TURTLE](#) | [SOILS HABITAT](#) | [TOWRA POINT](#) | [WOMBAT](#)



Australian Wildlife Society

Community Wildlife Conservation Award

The Australian Wildlife Society Community Wildlife Conservation Award is an annual award to a community conservation group that is making a major contribution to wildlife preservation in Australia.

Our Society is very conscious that we need to join together with other conservation groups to save and protect all native Australian wildlife populations in all its many and varied forms across Australia.

The Australian Wildlife Society wants to recognise and help these conservation groups continue with their good work on behalf of the whole community. Our Society knows that many organisations and thousands of volunteers are already working tirelessly to save our threatened species, as well as the humble and more common Australian species, and the precious wildlife habitat in which they live.

The Award

Our Society will present a crystal trophy and a cash award of \$2,500 to the winning conservation group that is helping to save our precious Australian wildlife.

Nominations

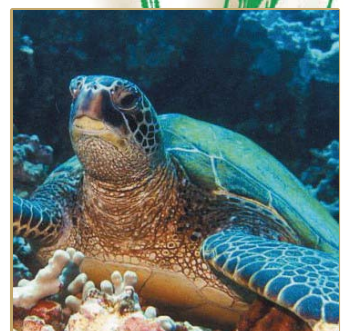
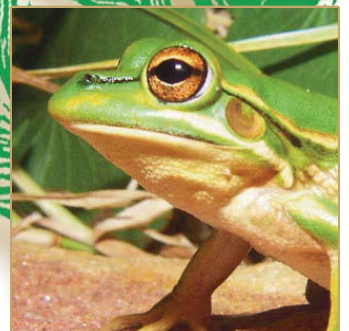
Nominations for the Australian Wildlife Society Community Wildlife Conservation Award should be made in writing to be received by our Society by 31st December. Nomination forms can be downloaded from our website at www.australianwildlife.net.au. Completed nomination forms can be sent to the Australian Wildlife Society by email to info@australianwildlife.net.au or faxed to 02 9599 0000 or mailed to PO Box 42 Brighton Le Sands NSW 2216

Selection Procedures

The decision on the granting of each year's award will be decided by a full meeting of the Council of the Australian Wildlife Society.

For further information, please contact the National Office on Tel 02 9556 1537.

Founded in 1909 and dedicated to the conservation of Australia's unique wildlife





Australian Wildlife Society

The Serventy Conservation Medal

The Australian Wildlife Society created the Serventy Conservation Medal in honour of three members of the Serventy Family.

In memory of Dr Vincent Serventy AM, who was a member of the Wildlife Preservation Society of Australia for more than fifty years, President for thirty years and was the President of Honour. Over the sixty years of his environmental work in Australia, and internationally, Vin worked to realise his vision of a world whose people understand that we do not own this earth, but are trustees for its future, and that we should live in harmony with nature. He has justly been called the '*father of conservation in Australia*'.

In memory of Lucy Serventy who seventy years ago became a Life Member of the Society and so began a lifetime interest in conservation.

In memory of Dr Dominic Serventy, who as the elder of the eight strong Serventy clan, played a leading part in encouraging their interest in natural history. He is regarded as among the world's greatest ornithologists.

Our intention is to award the medal to those who labour as a volunteer in the conservation field for a love of nature and a determination that is should be conserved.

Medal Design

The medal has been designed by Australia's foremost sculptor Stephen Walker. The Australian Wildlife Society also gives a cash reward of \$1,000 to the winner. Many conservationists in the past have suffered financially for their devotion to the cause. This cash award will be some tribute for their dedication. The bronze medal will be a constant reminder that the conservation movement has remembered their work in the past, just as history will remember the same achievements in the future.

Nominations

Nominations for the *Serventy Conservation Medal* should be made in writing to be received by our Society by 31st December. Nomination forms can be downloaded from our website at www.australianwildlife.net.au. Completed nomination forms can be sent to the Australian Wildlife Society by email to info@australianwildlife.net.au, or mailed to PO Box 42 Brighton Le Sands, or by fax 02 9599 0000.

Selection Procedures

The decision on the granting of each year's medal will be decided by a full meeting of the Council of the Australian Wildlife Society.

For further information, please contact the Secretary of the National Office on telephone 02 9556 1537 or by email info@australianwildlife.net.au

*Founded in 1909 and dedicated to the
conservation of Australia's unique wildlife*



A vertical collage of five images. From top to bottom: 1. A white rabbit with long ears sitting on a wooden surface. 2. A brown and white bird in flight against a blue sky. 3. A close-up of a bat's face with large eyes. 4. A butterfly with blue and orange wings resting on a rock. 5. A grey kangaroo lying down on a dirt surface.

Australian Wildlife Society
PO Box 42
Brighton Le Sands NSW 2216
Tel: (02) 9556 1537
Fax: (02) 9599 0000
Email: accounts@aws.org.au

All donations of \$2 or more are tax deductible.



Name: Dr / Mr / Ms / Mrs / Miss

Address:

State:

Postcode:

Phone: Home

Work

Email:

☐ I want to join the Friends of WPSA and give by automatic deduction each month to help protect our unique native wildlife and its important habitat

I will give via: Credit Card (please complete authority form below)

**Regular Payment
can be made by EFT**

BSB: 062000

Account No: 1043 2583

Account Name: Wildlife

Preservation Society of Australia

I am paying by: ☐ Visa ☐ MasterCard Card Security Code (CSC) _____

[illegible]

Name on card

Signature

☐ \$10 per month ☐ \$15 per month ☐ \$25 per month ☐ \$50 per month☐ My choice of \$ per month

Signature

Date _____

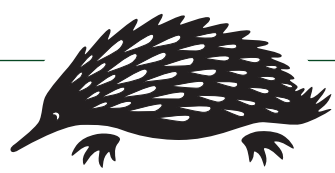
This authorisation is to remain in force until cancelled by the donor and in accordance with the terms described in the Agreement below.

Deduction will be made on 15th of each month.

CREDIT CARD AUTHORITY

1. The Donor will be advised 14 days in advance of any changes to the Credit Card Authority arrangements. 2. For all arrangements relating to the Credit Card Authority arrangements, the Donor will need to call AWS on (02) 9556 1537 or write to PO Box 42, Brighton Le Sands NSW 2216 or email info@wpsa.org.au. 3. Account details should be checked against a recent statement from your Financial Institution. 4. It is the donor's responsibility to ensure sufficient funds are available when the payments are due to be drawn. 5. If the due date for payment falls on a non-working day or public holiday, the payment will be processed on the next working day. 6. For returned unpaid transactions, the following procedure will apply: AWS will advise the Donor of the unpaid transaction and request alternative arrangements to be made for payment if possible. 7. All Donor records and account details will be kept private and confidential to be disclosed only at the request of the donor or Financial Institution in connection with a claim made to an alleged incorrect or wrongful debit. 8. This authorisation is to remain in force until cancelled by the Donor.

Membership Form



WILDLIFE PRESERVATION SOCIETY OF AUSTRALIA LIMITED

PO Box 42 Brighton Le Sands NSW 2216

Membership

Become a member of the Wildlife Preservation Society Limited

Simply fill out this form.

Name:.....

Address:.....

City/Suburb:..... Postcode:

Telephone:..... Fax:

Email:

Membership category (please tick)

- ☐ Individual: \$55
- ☐ Family: \$70
- ☐ Concession (pensioner/student/child): \$50
- ☐ E-mag (emailed as PDF, no hardcopy will be sent): \$30
- ☐ Associate (library, school, conservation groups): \$85
- ☐ Corporate: \$125
- ☐ Life: \$1,000

(Includes postage within Australia. Add \$40 for overseas postage)

Three year membership (please tick)

- ☐ Individual: \$150
- ☐ Family: \$190
- ☐ Concession (pensioner/student/child): \$135
- ☐ E-mag (emailed as PDF, no hardcopy will be sent): \$81
- ☐ Associate (library, school, conservation groups): \$230
- ☐ Corporate: \$340

(Includes postage within Australia. Add \$60 for overseas postage)

Payment details (please tick)

☐ Direct Debit ☐ Cheque ☐ Money Order ☐ Mastercard ☐ Visa Card Security Code (CSC) ____

Card Number: Amount \$.....

Name on Card: Expiry: Donation \$.....

Signature: **Total** \$.....

Mail to the: Wildlife Preservation Society Limited
PO Box 42, Brighton Le Sands NSW 2216.
Email: accounts@aws.org.au Website: www.wpsa.org.au

Direct debit: BSB: 062 235
Account No: 1043 2583
Account Name: Wildlife Preservation Society of Australia

Note: All cheques to be made out to the Wildlife Preservation Society of Australia

Consider - A Bequest

Another way which you can support the work of the Wildlife Preservation Society of Australia (Australian Wildlife Society) is to remember us in your will.

If you would like to make a bequest, add the following codicil to your Will:

I bequeath the sum of \$..... to the Wildlife Preservation Society of Australia for its general purposes and declare that the receipt of the Treasurer for the time being of the Society shall be complete discharge to my Executors in respect of any sum paid to the Wildlife Preservation Society of Australia Limited.

"The challenge to the present adult generation is to reduce the increasing pressures on the Earth and its resources - and to provide youth with an education that will prepare them emotionally and intellectually for the task ahead."

106th Annual General Meeting



Above: Directors of our Society.
L to R: Dr David Murray, Noel Cislowski,
Ken Mason and Patrick Medway AM.

Right: Guests at the luncheon.



Below left: Guests at the Luncheon.
L to R: Margaret McGurgan, Colleen
Keys, Elly Bluett, Denise Emmett and
Sue Mason.

Below right: Guests at the luncheon.
L to R: Elly Bluett, Sue Mason and
Margaret McGurgan.



