



AUSTRALIAN

Wildlife

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\$10 (non-members)



Celebrating a new century of wildlife preservation in Australia

Journal of the Australian Wildlife Society
(Wildlife Preservations Society of Australia Limited)

(Founded 1909)

Bush stone-curlew



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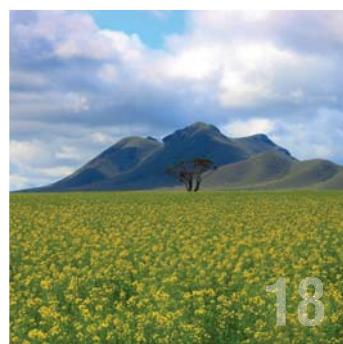
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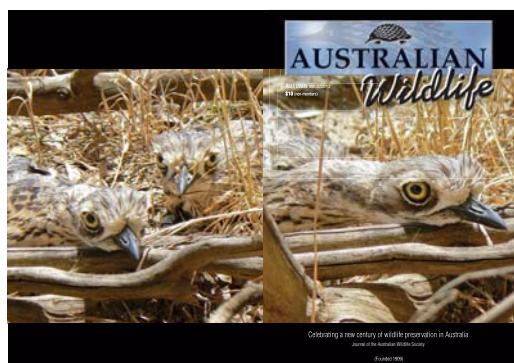
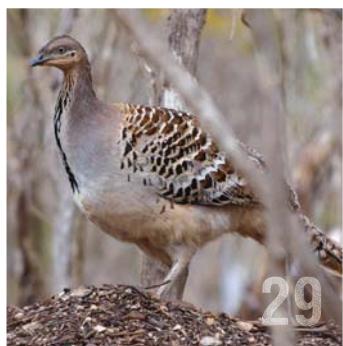


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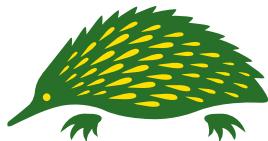


Front cover:
Bush stone-curlew

Back cover:
Camouflaged bush stone-curlews

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.

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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.

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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

Suzanne Medway - President

It has been a distinct pleasure to lead the Wildlife Preservation Society of Australia as President during 2012, the Society's 103rd year, and I am now looking forward to leading the Society in its 104th year during 2013.



One of the highlights of my year has been the continuing contact and interaction with other conservation groups and the wonderful carers who rescue and rehabilitate our unique Australian wildlife.

The Annual Report of the Society, a report on the Annual General Meeting and the President's Luncheon is featured in this issue.

One of the first projects to take up our time during early 2013 was the issue of traditional hunting and killing of endangered or threatened Australian wildlife. The project was launched in 2012 with a request to the federal and Queensland state governments to approve a moratorium on hunting of endangered species until the full effects on native wildlife populations could be properly evaluated. This request was not listened to by either government.

Despite being vulnerable or endangered, many species of rarer Australian wildlife are being hunted or killed without limit under native title law with little or no monitoring.

Currently, the law allows over 50 native animals to be traditionally hunted under Aboriginal and Islander customs. This list includes crocodiles, echidnas, emus, fish, frogs, lizards and snakes. The native title act is 20 years old and many of the animals **you all champion** are still able to be hunted and killed, with no limits.

The Australia Wildlife Society has joined a coalition of wildlife conservation organisations led by Colin Riddell and Bob Irwin to call for endangered or vulnerable native wildlife to be fully protected under the law and, to this end has decided to lobby the federal government, or newly elected federal government, to **alter the 1993 native title act to exclude any of the 50**

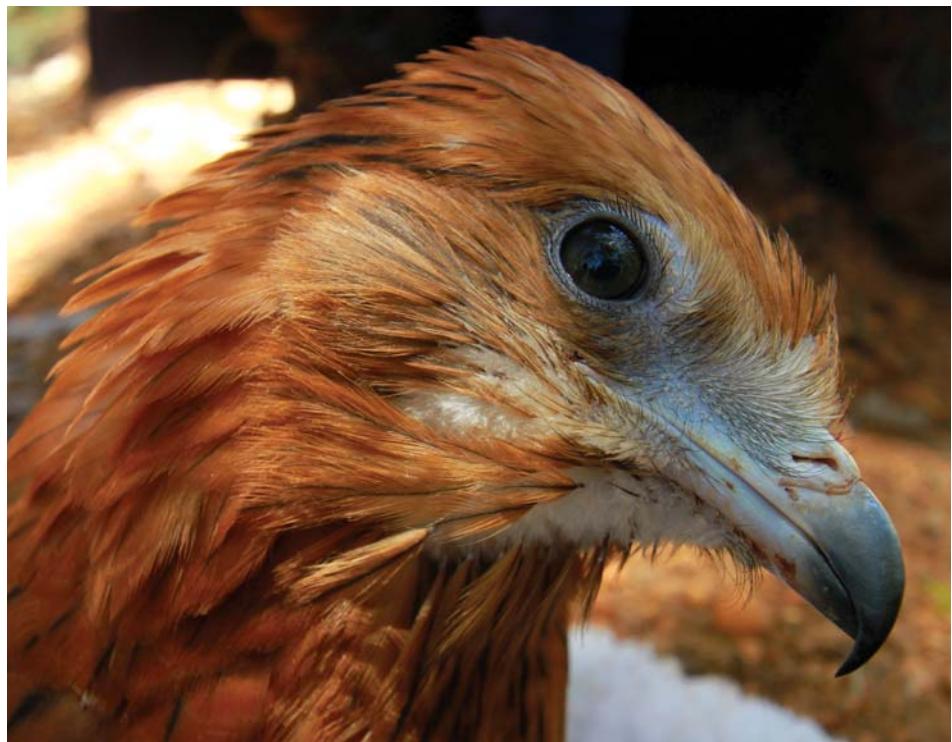
native animals that are listed as endangered or vulnerable species. This will protect all animals that over time are added to the list.

Traditional hunting, fishing and foraging practices currently conducted in Australia under Aboriginal traditions and Islander customs **target over 50 native wildlife species both terrestrial and marine. These include Australian bustards, freshwater and salt water crocodiles, dugongs, echidnas, emus, fish, flying foxes, frogs, goannas, lizards, macropods, magpie geese, possums, shellfish, and snakes, as well as fresh and saltwater turtles.** Mutton birds are also hunted traditionally, although the hunt now carries a strong commercial element.

Colin Riddell and Bob Irwin are leading the campaign and we are delighted that many other wildlife conservation groups have joined. This campaign is strictly about

protecting Australian wildlife species that are on the verge of extinction for future generations of Australians. I am sure that any right thinking person would consider this a worthy goal.

In the coming months, leading up to our 104th birthday on 11 May 2013, the Directors representing the Society will be carefully considering the direction of the Society during the coming year. Specifically on the agenda is the decision to change our marketing name to the **Australian Wildlife Society**. This name has been in use by our Society since 1934 and is the name of our quarterly magazine **Australian Wildlife**. Our marketing name, **Australian Wildlife Society**, has been legally registered and approved. Our Society's mission to preserve and protect Australian native wildlife continues under our new trading name of the Australian Wildlife Society from 18 March 2013.



Square-tailed kites have quite a small beak for their size, but it is especially suited to their main diet of nestling birds. Full story on page 30

104th Annual General Meeting

The 104th Annual General Meeting of the Wildlife Preservation Society of Australia Limited was held on Monday 18 March 2013 in Sydney. Over 30 people attended the meeting.

Suzanne Medway, President, of the Wildlife Preservation Society of Australia, tabled the President's Report for 2012 and highlighted the past year.

The Treasurer's Report for 2012 was tabled and adopted by the meeting.

Election of Directors

Peter Hardiman, Chris Chan, Sash Denkovski and Ken Mason were confirmed as directors and presented with a Director's Commission certificate. Vanessa Wilson and Judith May retired as directors and were each presented with a Certificate of Appreciation for their valued contributions to the Society and the welfare of native Australian wildlife.

Our Treasurer, Tony Cornell, did not stand for re-election. Suzanne Medway moved a vote of thanks to Tony for his valued contribution to the finances of the Society.

The current Auditor Peter James Varley CA Registered Company Auditor was confirmed as the Society's auditor for 2013.

Changes to the constitution

The meeting approved a change to the constitution under Section 9.2 – "Subject to fifteen (15) of the current number of Members present in person are a quorum at a general meeting" be amended to "Subject to ten (10) of the current number of Members present in person are a quorum at a general meeting".

The elected Directors of the Society for 2013 are: Suzanne Medway (President), Patrick Medway (Chief Executive Officer/Honorary Secretary), Clive Williams (Vice President), David Murray (Vice President), Sash Denkovski (Treasurer), Chris Chan, Dick Mason, Noel Cislowski, Ken Mason and Peter Hardiman.

At the conclusion of the meeting Director's Commission certificates



Newly elected Directors – Ken Mason and Chris Chan

were presented to Peter Hardiman, Chris Chan and Ken Mason.

Annual President's Luncheon

The President's Luncheon of the Wildlife Preservation Society of Australia was held on Monday 18 March in the historic Adam Room at the Castlereagh Inn in Sydney.

President, Suzanne Medway, welcomed life members, members and guests committed to wildlife conservation across Australia. She also welcomed the recipients of the Serventy Conservation Medal and the Community Wildlife Conservation Award.

2012 WPSA Serventy Conservation Medal

Dr Clive Williams, Vice President of the Society and Chairman of the Judging Panel, announced the winner of the Serventy Conservation Medal for 2012 as Bob Irwin. Bob has devoted most of his adult life to the conservation of Australian wildlife and to educating people about its unique characteristics. He is well known for establishing the Beerwah Reptile Park (now Australia Zoo) in the 1970s and for working with his late son, Steve, to bring prominence to the contribution of the crocodile to our river systems. Bob was responsible for the discovery

of a rare species of freshwater turtle in the Burdekin River system. This now bears his name, *Elsya irwini*. He has worked tirelessly to bring the plight of dugongs to public attention and achieved changes to the Native Title Act following improper hunting of dugongs and turtles by indigenous groups.

Since leaving Australia Zoo in 2008 Bob has thrown his support behind other conservation groups. He has given his support to wombat conservation in South Australia in an effort to achieve better protection for the southern hairy-nosed wombat and he has been a constant campaigner for the preservation of koala habitat. Following Cyclone Yasi in North Queensland Bob supported C4 (Community for Coastal and Cassowary Conservation) in their successful lobbying to Government agencies to provide feeding stations for the starving rainforest birds. Bob has also participated in scientific research involving radio tracking of crocodiles and koalas.

If there is a cause for endangered wildlife Bob will support it. He has recently set up the Bob Irwin Wildlife and Conservation Foundation to continue his work into the future.

Bob's lifetime dedication to the conservation of wildlife makes him a well deserved winner of the Serventy Medal.

Acceptance speech by Bob Irwin

I am delighted to receive the Serventy Conservation Medal for 2012. I admired Vincent Serventy and his lifetime dedication to the preservation of Australian wildlife.

I will now talk about two issues of conservation that are close to my own heart.

We are going to lose the dugongs in Queensland in the next four years or so if we continue to do what we are doing today.

The ocean's sea turtles will also suffer the same fate!

There are many threats to wildlife – land clearing, droughts, floods, etc – but the area I am campaigning on is the threat to endangered and vulnerable wildlife by the local Indigenous people under the guise of traditional hunting. We believe no one has the right to continue any practice that will lead to a species becoming extinct, be they Indigenous or otherwise.

Although the formation of a coalition to call for an end to traditional hunting of endangered and vulnerable wildlife is specifically targeted at Indigenous people, the only one to call me a 'racist' was the federal minister for the environment, Tony Burke.

I have spent many days with local aboriginal people discussing these issues – some agree with me and some do not. It is hard to get consensus and some will hate me for my efforts to save these animals from extinction.

I recognise the importance of preserving traditional culture, but it is not traditional hunting when they use speed boats, rifles and shot guns!

Under the guise of traditional hunting, some people are now killing six to eight dugongs every day and the same number of turtles for their mates. They are not using them for their own food but selling them to others. They are only supposed to hunt for food for their families or for a ceremony. We have proof that the meat is sent to the market in Cairns. This hunting is occurring for commercial profit, yet, there have



Noel Cislowski, Bob Irwin and Suzanne Medway



Drawing the raffle – Noel Cislowski, Pam Parsons, Clive Williams and Bob Irwin

been no prosecutions to date!

Most people would agree that if you go on killing these animals, they will become extinct.

I should warn you while you are eating that what I am now about to say may be a bit hard to take: I have seen many turtles and seen what happens to them when they get caught – these are very large mature animals – one metre across. They are turned upside down, then one flipper is cut off, tomorrow they cut another flipper off, they

continue until there are no more flippers! The animal is still alive but suffering abhorrent pain! This is an extremely cruel practice! I won't tell you what happens when the carapace (shell) is cut off while the animal is still alive, but suffering.

The dugongs are also hunted and dragged out onto the beach and left stranded, to dry out and die on the sand. This is also terribly cruel, absolutely inhumane.

After three years, we finally had the

Native Title Act changed and the RSPCA rules on animal cruelty now apply to everyone – everyone must now comply with the law.

Let me move on to SUSTAINABLE USE OF WILDLIFE – ‘sustainable’ has become a dirty word. It is used by people whose only concern is with money! Not wildlife!

Believe me, this is a lucky country but the one reason people talk about sustainable use of wildlife is if the animal is worth anything. No worth, no value – no one cares!

Look at the sustainable use of wildlife like the kangaroo. I used to live on a property outside

of St George, Queensland. We had uninvited, licensed kangaroos shooters come on to our property night after night. They would cut the fences and leave the gates open. Next morning we would have to go around and have to ‘put down’ all the wounded and half dead animals that the licensed shooters had shot and left for dead.

I do not believe that the kangaroo industry is necessary in Australia.

I remember in the 1970s when they were shooting crocodiles. By 1974 the crocodiles were disappearing from the bush in the north – shot out by shooters. The Government

had to put a stop to this shooting and killing or they would have become extinct. Thankfully, now crocodile populations are coming back in the north of the State.

But we do not need to go to the outback – cruelty to any animal is wrong – we should not let it happen to any animal.

Our society has become one ruled by greed and they are out to destroy the planet.

Humans are the most dominant and destructive species on this planet. Does that give us the moral and ethical right to use and abuse native wildlife as we see fit? Have we as a society reached a point where cruelty to native wildlife is acceptable?

Thank you again for this wonderful award – I had great affection for Vincent Serventy and am delighted to receive this Award named after him.

2012 Community Conservation Award

The award for 2012 was made to the NSW Nature Conservation Working Group (NCWG) based in the Murray catchment area of NSW. The group is made up of dedicated local landholders who have achieved wonders since the group’s formation in 1994. They have managed the rehabilitation to almost 10,000 hectares of remnant native bushland and have focused on the preservation of threatened Grassy Box Woodlands and supported the captive breeding and release of the bush stone-curlew, classified as Endangered under the *NSW Threatened Species Conservation Act 1995*. Curlew conservation is now the key focus of the group.

Apart from conserving habitat for curlews the NCWG has worked at raising awareness of the curlew’s plight among local landholders and has undertaken an active fox-baiting program covering over 18,000 hectares of private land. The captive breeding program has led to the release of 55 young curlews over the past seven years. NCWG has also developed a comprehensive educational program, *Curlew in the Landscape*, which they have presented to schools and other groups in other parts of NSW including Sydney and the Central Coast as well as the ACT and Victoria. They also support graduate students from Charles Sturt University conducting research



President Suzanne Medway welcomed the guests to the President's Luncheon



Deidre Greenhill, Margaret McGurgan and Pam Field

into curlews. They have also written several articles published in Australian magazines.

The NCWG is an excellent example of a community working together for the benefit of endangered Australian wildlife and is a worthy winner of our Award.

Neville and Jan Lubke accepted the award for NCWG.

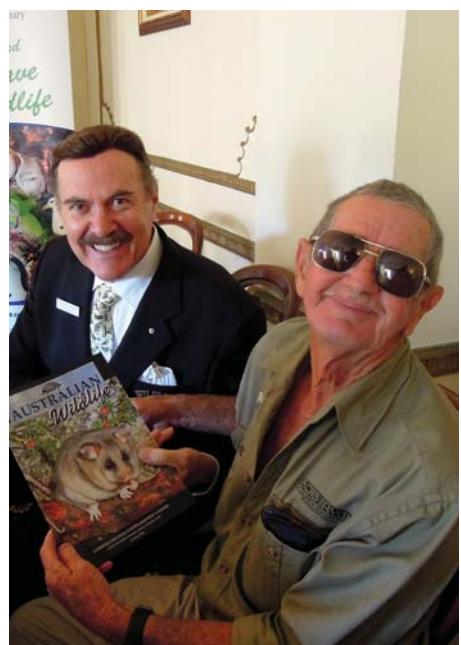
Acceptance speech by Neville Lubke

President Medway, Board and Members of the Society.

It is with much fear and trepidation that we stand here today. As we crossed Castlereagh Street to get here, I couldn't help but think how far we were from the Barham – Moulamein Road, which is adjacent to the 3,000 hectare property where we release our captive bred bush stone-curlews. It isn't nearly as hard to cross.

Although we are such a long way from home, we are very honoured to be here today to receive the Wildlife Preservation Society's 2012 Community Conservation Award.

Thirteen years ago when we birthed the idea of captive breeding and releasing curlews, we could never have imagined the journey we would be taken on. There have been many highs and lows over this time and, although we have been tempted to give up several times, it is support such as this that encourages us to carry on.



Patrick Medway and Bob Irwin admiring a copy of *Australian Wildlife*



Suzanne Medway presented Peter Hardiman with his Director's Commission



Suzanne Medway presented Vanessa Wilson with a Certificate of Appreciation on retirement from the Board of Directors



Judith May received a Certificate of Appreciation from Suzanne Medway on her retirement from the Board of Directors



Peter Hardiman, Noel Cislowski and Patrick Medway

Together we can make a difference, so that future generations will inherit a better world.

On behalf of the Nature Conservation Working Group and the endangered bush stone-curlew, our heartfelt thanks to the Wildlife Preservation Society of Australia for presenting us with this award.

Australian Wildlife Society launch

After careful research the Board has decided to adopt and register a new marketing name for the Wildlife Preservation Society of Australia Limited.

Our new marketing name is - Australian Wildlife Society - or shortened to 'AWS' and will be used to attract new members to the important wildlife conservation work of the Society which was established in 1909. Our national magazine has been called Australian Wildlife since the first edition was published in 1934.

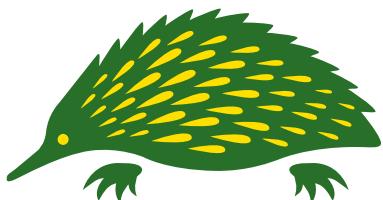
We believe the new shorter name has more appeal to a younger generation of Australians and we trust you will find it more appealing on a day to day basis for wildlife conservation.

Webmaster, Chris Chan, demonstrated the newly developed website. The old website address - www.wpsa.org.au - will now redirect to the new website at <http://www.australianwildlife.net.au/>

Chris also highlighted the new logo, which still incorporates the echidna.

The name change will be a gradual transition undertaken over some months.

At the conclusion of the luncheon, a raffle was held with all the books that have been received for review as the prizes.



Australian Wildlife Society

Conserving Australia's Wildlife
since 1909



Jan Lubke and Neville Lubke accepted the Community Conservation Award for 2012 from the Society's President, Suzanne Medway



Ken Mason, Sue Emmett and Peter Hardiman



Ron and Bev Wilson

COASTAL AND MARINE WETLANDS

COASTAL CARBON ACCOUNTING: NEW RESEARCH INTO AUSTRALIA'S 'BLUE CARBON' POTENTIAL

Understanding the important role of Australia's coastal and marine wetlands in storing atmospheric carbon dioxide will be the focus of a new \$3 million collaborative research program headed by CSIRO in collaboration with eight tertiary institutions, including the University of Technology, Sydney (UTS).

The CSIRO Marine and Coastal Biogeochemistry Carbon Cluster (Coastal Carbon Cluster) was launched at UTS by UTS Deputy Vice-Chancellor Professor Attila Brungs. Over the next three years, the Coastal Carbon Cluster will create new models to collect information on blue carbon, a concept name for the capture and storage of atmospheric carbon in the marine environment.

It will be Australia's largest ever blue carbon accounting, mapping and measurement study, according to CSIRO's Dr Andy Steven.

"Understanding the importance of blue carbon to Australia's ecosystems and economy is of national significance, yet currently our knowledge and estimates of national coastal carbon stocks are limited," Dr Steven said.

"Protecting and restoring coastal marine environments to store atmospheric carbon can prove more economical than forest regrowth and can boost fishery and tourism industries."

There are clear advantages to the use of coastal vegetation in the fight to reduce global greenhouse gas emissions, explains Coastal Carbon Cluster Co-Leader, Professor Peter Ralph from UTS.

"Seagrass, mangroves and saltmarsh capture carbon up to 100 times faster than forests and store it for thousands of years," Professor Ralph said.

"Coastal vegetation occupies only two percent of the world's seabed area, but is responsible for half of the carbon transfer to ocean sediments.

Coastal Carbon Cluster Co-Leader Professor Carlos M. Duarte from the University of Western Australia believes the blue carbon project is timely.

"Australia's coast nurtures a large proportion of the world's seagrass and mangrove forests, but many of these have been damaged in the past."

"Conserving and restoring our coastal habitats is a cost-effective way to mitigate climate change by rebuilding carbon sinks, while delivering valuable ecosystem services to society."

The Coastal Carbon Cluster has secured \$3 million over three years from CSIRO's Flagship Collaboration Fund and Wealth from Oceans Flagship, with in-kind support from the following institutions: University of Technology, Sydney, University of Western Australia, University of Queensland, Southern Cross University, Edith Cowan University, Griffith University, University of New South Wales and the Australian Institute of Marine Science.

The CSIRO Flagship Collaboration Fund facilitates involvement of the wider Australian research community in addressing the nation's most significant challenges and opportunities. Flagship Clusters are three-year partnerships between Flagships, universities and other public research agencies.

See www.csiro.au/Coastal-Carbon-Cluster for more information.

COASTAL CARBON CLUSTER

Marine and Coastal Carbon Biogeochemistry Cluster

CLUSTER FACTS

AUSTRALIA'S LARGEST EVER COASTAL BLUE CARBON ACCOUNTING, MAPPING AND MEASUREMENT STUDY

CSIRO's Coastal Carbon Cluster will foster vital scientific research to strengthen our low carbon economy and prevent future excessive greenhouse gas emissions.

Currently, our estimates of coastal carbon stocks around Australia are limited along with a poor understanding of the processes responsible for sequestering the carbon. The CSIRO Coastal Carbon Cluster aims to improve methods in estimating how much carbon is stored in coastal areas.

In a carbon economy, we need to be confident in our ability to estimate carbon sources, sinks and their rates of change. CSIRO is a world leader in biogeochemical modelling. As Australia moves towards a low carbon economy, the development of robust quantitative models is necessary to underpin mitigation strategies. The Cluster will collate the limited existing Australian coastal carbon data as well as deliver new data to enhance CSIRO's modelling capacity to predict national coastal carbon budgets.

Wetland vegetation (seagrass, mangroves, saltmarsh) occupy only two per cent of the world's seabed area, but are responsible for 50 per cent of the carbon transfer to ocean sediments. As this carbon can remain stored for millennia, there is great interest in the concept of blue carbon—atmospheric carbon that is captured and stored (sequestered) by marine environments. The destruction of coastal wetlands can lead to decreased storage potential of carbon and subsequent increases the threat of greenhouse gas emissions.

PROJECTS

The Coastal Carbon Cluster will accelerate the development and delivery of data streams based on its biogeochemical and ecological models as well as enhancing our ocean colour capability that can:

- better evaluate and predict primary productivity and its importance to environmental and economic services
- assess the implication of climate-induced changes on biogeochemical cycles, including ocean acidification, and

- estimate sequestration rates including the application of blue carbon and other strategies for carbon burial.

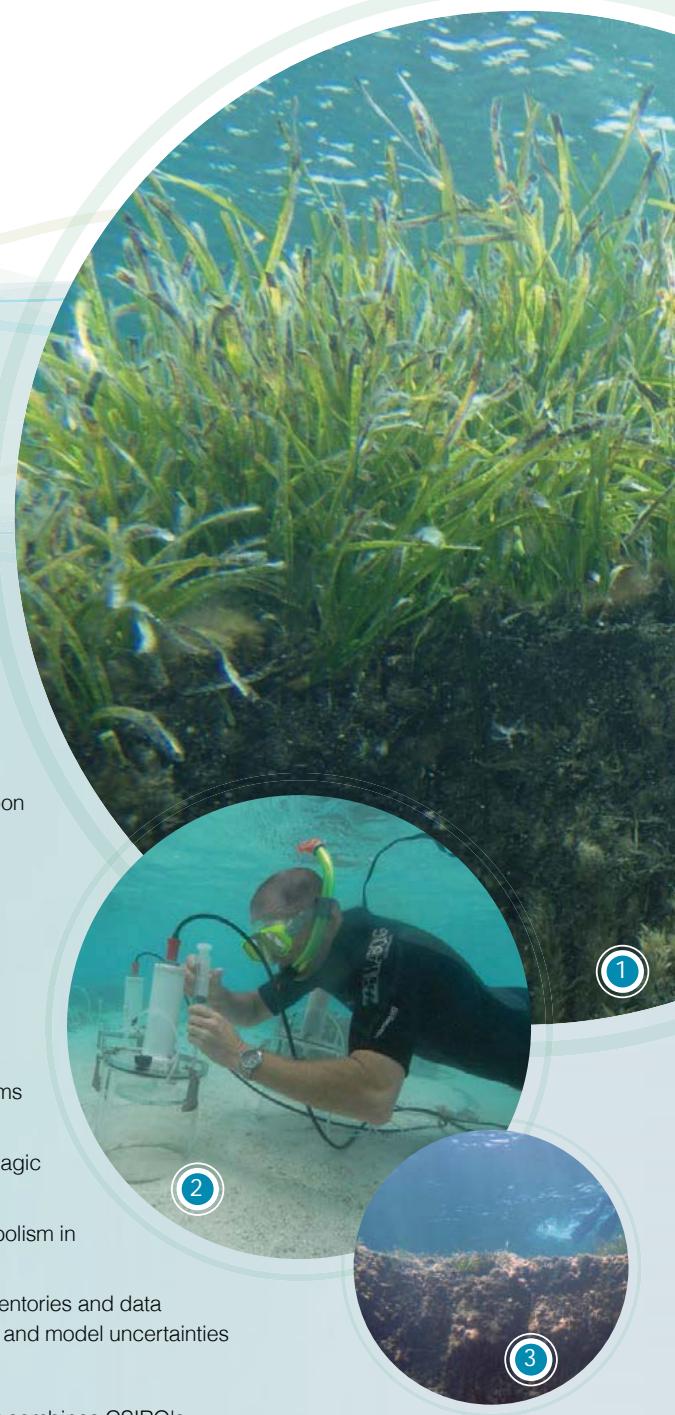
The Coastal Carbon Cluster is comprised of four work packages:

1. Carbon sequestration, stoichiometry and stores potential of representative Australian coastal ecosystems
2. Benthic community metabolism and benthic-pelagic coupling
3. Pelagic community metabolism in Australian coastal waters
4. Scaling up to regional inventories and data assimilation, and parameter and model uncertainties

Cluster partners

The Coastal Carbon Cluster combines CSIRO's Wealth from Oceans Flagship with the research capabilities of:

- University of Technology, Sydney
- University of Western Australia
- University of Queensland
- Griffith University
- University of New South Wales
- Australian Institute of Marine Science
- Southern Cross University
- Edith Cowan University



1 Posidonia or seagrass common to Australian waters.

2 Sampling advective benthic chambers in permeable carbonate sands on Heron Island.

3 Posidonia reef.

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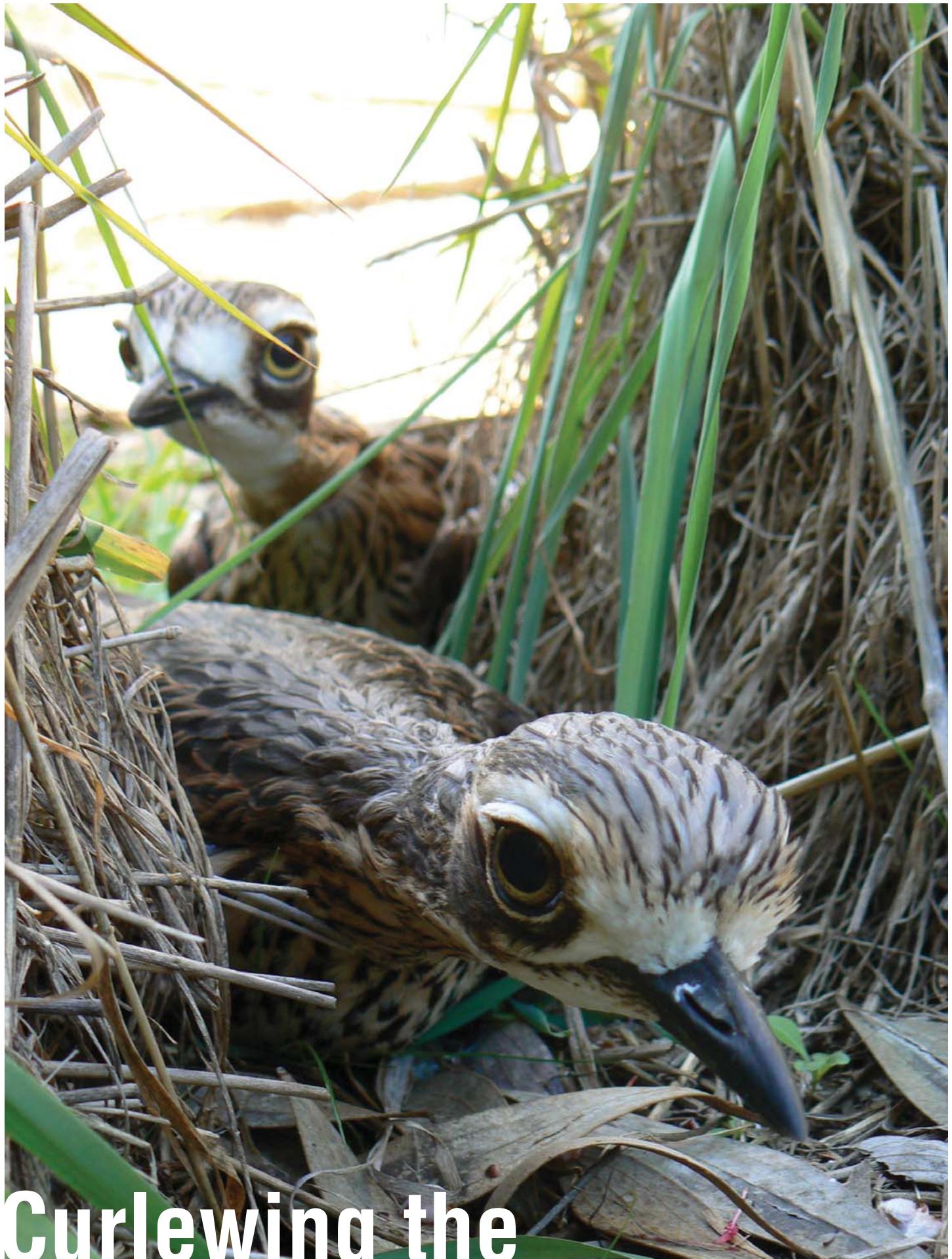
THE UNIVERSITY
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University





Curlewing the landscape

Jan Lubke, Secretary,
Nature Conservation Working Group



Captive pair of curlews and eggs

Have you heard or seen a bush stone-curlew lately? If you live in northern Australia you are probably fortunate enough to answer "Yes" to this question, however if you live in south eastern Australia, where this ground dwelling woodland bird has been steadily disappearing from the landscape, you would probably say "No" and ask "What is a bush stone-curlew anyway?"

The bush stone-curlew (*Burhinus grallarius*) is a most interesting, unusual and often very secretive bird, standing between 50 and 60 centimetres tall. It has long skinny legs with thick knees, which gives rise to its alternative name of bush thick knee. It has a short dark bill, large yellow nocturnal eye, and has mottled brown, white and grey plumage. Curlews can fly quite well, but usually prefer to spend most of their time as a ground dwelling bird, often lying or standing motionless, hiding amongst woodlands during the day, only moving out of their day roost at night to forage for

insects, small amphibians, fruiting berries and seeds. Their presence is most often indicated by a distinctive whistling and wailing 'weer-lo' call that is usually heard after dark.

Bush stone-curlews scratch out a very simple nest on the ground, usually laying two well camouflaged eggs. Both the male and female will participate in the incubation of their eggs, which take 26 to 28 days to hatch. The parent birds are very protective of their young; however they never directly feed them, but will call and demonstrate the whereabouts of food to their chicks. The juvenile curlews will become fully

independent of their parents and able to fly around 60 days of age.

There are several factors that have been involved in the massive decline of the bush stone-curlew population throughout south eastern Australia, but principally the lack of recruitment of any young curlew chicks, due to their vulnerability to predation, particularly by foxes and feral cats, and the demise of their grassy box woodland habitat are recognised as being the major issues.

The bush stone-curlews' decline has been to such an extent that they are now listed as endangered under the *NSW Threatened Species Conservation Act 1995* and are classified as threatened within Victoria. In 2006 the Department of Environment and Conservation in NSW, in recognition of the plight of the curlew, put in place their *NSW Recovery Plan for the Bush Stone-curlew (*Burhinus grallarius*)*.

A group of keen landholders called the Nature Conservation Working Group (NCWG), with the help of funding from the NSW Environmental Trust and the Murray Catchment Management Authority, are undertaking an extensive conservation program to help the endangered bush stone-curlew. This program has involved encouraging other fellow farmers to undertake work such as fencing out, preserving, restoring and protecting their remnant areas of grassy box woodland, which is the preferred habitat of the bush stone-curlew. These protected areas provide the bush stone-curlew with valuable camouflaged day roosts, nesting sites, and are an important harbour for insects, their favourite food source.

In addition to encouraging the on ground conservation works, NCWG has developed predator proof fencing and initiated an extensive community based fox control program. They have also undertaken a widespread publicity and education campaign about the bush stone-curlew, holding field days, producing educational displays, brochures, and stickers, and undertaking several speaking engagements to interested groups to help raise the general public's awareness and understanding about the plight of these rare birds.

Not only are the NCWG encouraging the conservation efforts of other

farmers, they have also undertaken the challenging task of supporting a licensed captive breeding program for the endangered bush stone-curlew. The aim of this breeding program is to assist the long-term viability of the few remaining wild bush stone-curlews within the region by supplementing their numbers with young captive bred birds.

The bush stone-curlew captive breeding and release program was originally the idea of Neville Lubke, a farmer within the Murray Catchment of New South Wales, who realised that these unique birds had almost disappeared from the local landscape and decided he wanted to do something to avert their decline. So in 2002, with the assistance of the NCWG, Neville and myself (his wife) began to develop the curlew breeding program on our property at Jindera.

We were soon joined by another keen landholder, Peter Redfearn from Moulamein, and together we have been able to develop two captive breeding facilities. Both these facilities are now well established, with each one housing five breeding pairs of bush stone-curlews, and between them produce around 10 to 15 birds for release each year. The original parent birds for the breeding program were sourced from zoos, sanctuaries and fauna parks located in New South Wales, Victoria and South Australia.

There has been considerable protocol that NCWG has had to observe in regard to releasing the captive bred bush stone-curlews back into the wild. An area of over 17,000 hectares surrounding the release site at Moulamein has to be extensively baited twice a year to eradicate the threat of fox predation and each bird has to be individually health tested, leg banded and fitted with a tail transmitter for monitoring purposes. These transmitters cause minimal disturbance to the bird and detach during the bird's next moult. The transmitters provide valuable feedback on the success of the release program, enabling the bird to be tracked after release to observe and ensure its adaptation to its new life in the wild.

The long awaited first release of 15 captive bred bush stone-curlews finally occurred at Moulamein in



Pair of curlew chicks



Half grown curlew chick

New South Wales during October 2008. The release birds were radio tracked and their locations are mapped with a GPS. In addition to radio tracking ongoing visual observations and call playback surveys have been undertaken and recorded. Local landholders have also been encouraged to report any sightings they make of bush stone-curlews on surrounding properties in the area.

Since that first release NCWG has now undertaken four more successful releases of captive bred bush stone-curlews at the Moulamein release site, bringing the number of bush stone-curlews released into the wild at this site to a total of 55 birds.

The monitoring results have shown that the majority of these released

birds have survived and adapted well to their new environment.

The bush stone-curlew captive breeding and release program's base is continuing to grow and expand, with several zoos and fauna parks now also contributing young curlews, which have been bred within their own facilities, to the release program. The NCWG is very appreciative of these organisations joining forces with them to help protect and conserve these endangered birds.

This year the NCWG are excited to be developing a second bush stone-curlew release site at Lowesdale, in the Murray catchment of New South Wales. Their aim is to develop another sustainable flock of these threatened birds, similar to the one they have established at Moulamein, in this



Camouflaged bush stone-curlews



Dougald Frederick & Elisa Tack - call playback monitoring



BSC road warning Moulamein

area. The infrastructure development required to house the curlews during their pre-release adaptation period is now well underway and the NCWG are currently planning for their next bush stone-curlew release, which should see 10 young captive bred birds released into the wild at this new site during September 2013.

This unique captive breeding and release program is the result of an important collaboration between the NCWG, local landholders, and a variety of both private and public organisations. By working together they have been able to achieve an encouraging New South Wales first, the successful release of captive bred bush stone-curlews back into their wild habitat, however if future generations are to continue hearing the curlews haunting eerie night time call, much more ongoing work is still needed in order to protect and ensure the survival of these iconic birds.



Applying leg bands



Nev and Jan Lubke with one of their breeding curlews



Donkeys

A FERAL PEST

PETER HARDIMAN

Donkeys (*Equus asinus*) were first imported in substantial numbers into Australia in 1866 by Sir Thomas Elder. Until the 1930s, when their use declined due to the advent of improved motor transport, they were used as pack and draught animals in outlying areas in various states of the Commonwealth.

The first record of feral donkeys in Western Australia is from the Kimberley in the early 1930s, but it is possible that some were feral much earlier.

There were an estimated five million feral donkeys in Australia in 2005.

Feral donkeys are now widespread in the pastoral areas of Western Australia. The largest population occurs in the Kimberley. In the early 1980s, when the population of donkeys was high, the density in the southern part of the East Kimberley as estimated from an aerial survey was 1 km². One donkey was counted for every three cattle seen in the survey.

In the dry season in the Kimberley feral donkeys concentrate on the flats on the major rivers and creek systems. Fewer are seen on the lower slopes, foothills, and along the minor creeks, while a few occur in hilly country. Their

distribution is closely similar to that of cattle in the same areas at the same time of the year.

Feral donkeys are versatile foragers. They eat a wide variety of grasses, herbs and bushes.

Donkeys, like camels, can reduce their evaporative water loss when they become dehydrated. They are able to reduce the water content of their faeces, and can continue to eat when deprived of water. They can tolerate extreme loss of body water. These abilities have led to their success as a feral animal in Australia.

Feral donkeys live in social groups which may contain one of both sexes. The composition of such groups is unstable, some individuals moving between groups.

In the Kimberley feral donkeys produce foals between July and March, but most are born just before or during the time that green feed is available. Both females (called Jennies) and males (called Jacks) become sexually mature at about two years of age.

Feral donkeys compete for food with domestic stock, particularly where food is scarce. In other parts of the world they have been shown to alter

the composition of desert vegetation by overgrazing. The pads or trails contribute to soil erosion, especially where they move regularly to and from water. They frequently foul water holes and thus prevent other animals from drinking.

To some extent the feral donkey has become a commercial commodity and is being sold as pet meat, but commercial use is limited because of distance and the rough terrain. Trapping at water resources has variable results, and cannot be used in some areas of the Kimberley because there are too many places. Donkeys are a difficult animal to muster because of their habit of breaking away when being driven and shooting from the ground is difficult because of the rough terrain.

Two solutions have been found to be effective in controlling or culling feral donkeys: the introduction of the 'Judas Technique', used in conjunction with shooting them through a controlled program by licensed shooters from helicopters.

The 'Judas Technique' for feral donkey control utilises radio tracking equipment and donkeys to seek out and cull feral donkeys for eradication. A 'Judas' animal is fitted with a collar to which a radio transmitter is attached and is then released in the areas where the donkeys are to be controlled. The 'Judas' animal soon joins a feral group, which is then located by radio tracking. The uncollared animals are then destroyed.

This technique was first employed on a trial basis in the Kimberley in 1944 and since 1995 it has become the primary means of control. Since this time 25,000 feral donkeys have been culled. This figure needs updating for comparison purposes.

It is interesting to note that shooting from helicopters has made a valuable contribution to effective 'Control Programs' for feral donkeys in the Kimberley: between 1980 and 1988 the population of the feral donkey had been reduced by 87 percent by using this method. An update should be sought as to more current figures and the cost involved.

In Western Australia the 'Control' and 'Culling' of the feral donkey has been declared a Feral Animal under the provisions of the *Agriculture and Related Resources Protection Act 1976*.



A wide-angle landscape photograph of the Stirling Range in Western Australia. The foreground is a vibrant field of yellow wildflowers, likely canola, stretching across the frame. In the middle ground, several rounded, green hills of the Stirling Range rise against a blue sky with scattered white clouds. The mountains have a distinctively rounded shape. A single tree stands on the left edge of the flower field. The overall scene is a classic example of the beauty of the Australian outback.

The alluring Stirling Range

Story by Chrissy Banks

Located in southern Western Australia, the Stirling Range National Park is a veritable wonderland of flora and fauna. Towering over it all are the peaks of the Stirling Range, rugged enough to test the mettle of even the keenest hikers.

And my mettle is definitely being tested! No stranger to the Stirling Range this is, however, the first opportunity I've had to hike her toughest summit: Toolbrunup. It isn't the most famous of the peaks – that honour goes to Bluff Knoll – nor is it the highest, coming in at 1,052 metres to Bluff Knoll's 1,095 metres. What it can boast is being the most tenacious. This peak comes with a host of warnings. It is not recommended to attempt her summit in cloudy conditions, wet conditions or in high wind conditions, if you have heart conditions, high blood pressure, are pregnant, or suffer trouble with back, knees, hips...

No leisurely climb, this is a steep, rugged, unforgiving peak. A third of the way up her side, my heart is pounding and my legs are jelly. I've hiked some pretty rugged and wild places in my time, yet I'm giving Toolbrunup a whole lot of respect. There is no easy route to the summit. She tests you every step of the way. It's either vague, narrow paths fortified by thick scrub, or scree fields ranging from small, shifting shale, to massive rocks each of which need testing before climbing. It's hard work both mentally and physically.



Atop Toolbrunup the view is a 360-degree wonder



Bluff Knoll shows the towering beauty that makes it so popular with visitors. At 1,095 metres the chill of winter often brings fleeting snow to the peak. In spring it is dressed with stunning wildflowers

All of which seems a piece of cake compared to the final route to the summit. An almost vertical climb, it requires full hands and feet action. Confidence and stubbornness will get you there, but you'll need a dose of courage too. My six and nine year-olds are geckoed to the rock face above me. I'm torn between feeling afraid for them and being super proud. They're little troopers, these two, and beat me to the summit. From this vantage point I gaze out over a stunning view. I see peak, after peak, after peak... and it takes my breath away.

This is the Stirling Range National Park. One of my all time favourite places to visit, it stretches out over an impressive 1,159 square kilometres. Amid this biodiversity rich wilderness is the Stirling Range itself. Located 40 kilometres inland from the Southern Ocean, the range is a great upthrust

of jagged peaks laid out east to west over 65 kilometres. Surrounded by lowlands, agricultural fields and salt plains, it is in its own way as startling a sight as Uluru. The first thought that comes to mind is: how on earth did it get here?

The answer lies in a far distant past. Once connected to the Southern Ocean, the range began humbly as sand and silt of an ancient dried-up river. The growing weight of those sediments, combined with fault line activity between Australia and Antarctica, formed shales, metamorphic sandstones and quartzites that continually folded and layered over thousands of years. The eventual dramatic separation of the two continents resulted in a range of mountains erupting into the middle of lowlands. Weathering from wind and rain over the ages has re-formed the



Scree fields make hiking Toolbrunup a tough and tricky climb

Stirling Range as it appears today. And this is still a wild and untamed place, craggy and fiercely beautiful.

Yet in spring this jagged wilderness is softened by delicate beauty. Seemingly overnight the national park bursts into a wildflower display unmatched anywhere else on earth. Over 1,500 species blossom here, many of which are unique to the area: mountain bells, 123 different native orchids and the Stirling Range pixie mop to name a few, all crammed in together creating a kaleidoscope of colour.

Yet the charm of this place isn't in the flowers alone. Wildlife here is as rich and diverse as the flora. Over 140 species of birds visit this park, 90 of which call it home. Nineteen species of mammal live here, including the burrowing bettong, western ringtail possum and the bilby, each listed as vulnerable on the conservation status. Quietly being reintroduced under strict predator control is the endangered numbat. Once widespread across the country this stunning little marsupial (with the help of dedicated workers) is ever so slowly on the comeback. It's a triumph that it can once again call the national park its home. Alongside a wealth of mammals and marsupials live approximately 30 reptile species, plus many more invertebrates than can be counted.

This place is a paradise for wildlife enthusiasts. Red-breasted robins posed daintily on our tent lines, sunning bobtails lined the road to camp, and parrots hung from trees. Snakes were scarce (a little early in the season perhaps), but one reptile out and about was the racehorse goanna. These big old sand monitors are fearless and own a lazy swagger that exudes lordship. They don't seem to mind the camera either, though I used caution. I'd heard tell that a startled goanna will run up your body, but the one I surprised (actually he surprised me and I involuntarily hugged a tree) simply played dead. Even so he was a big boy and I kept a respectful distance. A mating pair wandered into camp everyday. It's one of the things I love about where we stay; you share your space with the wildlife.

Home for the week is Mt Trio Bush Camp, located at the back of a working agricultural farm owned by



The forest red-tailed black cockatoo of the south-west nest in hollows of marri, wandoo, karri, bullich and jarrah trees and live between 25 and 30 years. Listed as vulnerable due to massive losses of habitat from bush fires and development over the last number of years, it is imperative this stunning bird is protected



The robin red-breast (also known as scarlet robin) builds intricate cup-nests made of bark, twigs and grass, bound by spider silk. Fastidiously camouflaged with lichen, the nests are built in forks of trees



Bobtails are herbivores, although an insect is their chocolate. Low on the food chain these gentle lizards have a big hiss and a wide gape to ward off threats. This one tells my camera to go away immediately!

John and Margot Byrnes. Pressed up against national park, it is flanked on three sides by the majestic peaks of Mt Trio, Mt Hassel and Toolbrunup. It's an incredible place to have a campsite.

At night with the stars brilliant overhead we roast marshmallows over the campfire, watching an occasional owl glide by, and the fluttering shape of a small bat or two. In the creek nearby a cacophony of local frogs provide the evening music. We're told we're hearing motorbike frogs, western spotted frogs, western banjo frogs, turtle frogs, and spotted-thighed frogs. That's a fabulous line-up of species for one property making night walks lots of fun.

Visitors are encouraged to explore the 40 acres of bush land home to emus, grey kangaroos, red-capped parrots, ring-neck parrots, wrens, robins, raptors, ants (mind the meat ants), skinks of all sizes and racehorse goannas. And those are just the obvious ones.

Mt Trio Bush Camp is beautifully simplistic: a few powered sites for vans, oodles of shade for tents, an amenities block, a small rec room, a basic laundry and a camper's kitchen. There's nothing to want for. Every part of the camping facilities has come from, or are pre-loved recycled materials hailing from old railways stations, local farms or salvage yards. The result is charmingly rustic. Visitors and campers are encouraged to come in and learn about the ranges and the indigenous significance of this land, which is why on this trip we're sharing camp with Joe, a Noongar elder and custodian of the Range. He brings with him a range of activities my two can get involved in. Spears are made, clapping sticks whittled into shape and bush tucker found within metres of camp. In a quiet moment Joe shows me how to make authentic bush damper. Root-tail stew boils in a big pot beside us as we chat. It is a genuine Noongar meal that will precede a smoking ceremony to cleanse the area and ward off bad spirits. Beside me, my son looks dubiously into the pot. Soft-hearted for any animal, he pulls me aside to ask, 'How will the kangaroo hop without his tail?' Er – I look into his big blues and give it to him straight, 'He uses crutches, honey.' My less



Belonging to the Australian ringneck family, the Port Lincoln parrot inhabits most of the south-west up to the Pilbara region of Western Australia. Enjoying a diet of nectar, fruit, seeds and crops these are social and noisy birds



Motorbike frogs range in size from five centimetres to 14 centimetres. A male breeding call sounds remarkably like a small trail bike accelerating through gears. They are carnivorous and cannibalistic and rely heavily on sunbathing to help with growth

gullible daughter gives me a telling look. 'They shoot the roo, Mum,' she tells me point blank. Just in case I didn't know.

The following morning we hike the ever-popular Bluff Knoll. Known to the Noongar people as Bular Mial – the place of many eyes, it is the resting place of their ancestors. Joe tells me that the mist so often draping the peak is the visible form of Noyt (spirits). It is considered a fearful and dangerous place to them. On the day we hike, however, the skies remain blue, the atmosphere crisp and clean. Bluff Knoll comes with the same warnings as Toolbrunup, but has a set path to follow that sees a regular stream of hikers puffing their way to the summit. Despite the human traffic, wildlife is in abundance if you take the time to look: basking crevice lizards, tiny black and red spiders, lady bugs, chattering fan-tails, wrens

and frogs that fall silent the moment you approach, all over-sung by the Jurassic cry of the red-tailed black cockatoo. And if you're very lucky, a wedge-tail eagle soars by.

Our last night in camp rolls around too quickly. I find myself gazing toward Toolbrunup. In four days we've hiked three peaks, but this is the one that touched my heart the most. Seeing her silhouetted against the sky, huge and imposing, the memory of our time on her summit is very fresh. We'd felt content up there, enjoying the view and the privilege of being the only ones on the mountain. But on a summit known for her bad temper, complacency is a dangerous thing.

Things went bad quickly. A stiff wind blew up out of nowhere, sweeping mist and rain toward us. Scrambling to pack our kit we knew we had to get off the summit before it hit. Wet rocks are

slippery rocks and a fall here would be fatal. But for all the urgency, there was no rushing this descent. The vertical climb we'd hoisted ourselves up was now a sheer climb down. We managed it safely, but not without a few heart-stopping moments. As we hit the first of the scree fields we looked back up and saw one of the wonders of the Range.

The summit was completely shrouded in, buffeted by wind and sweeping rain. Not fifteen metres below we stood in weak sunlight, perfectly dry. The sight was surreal. But with more weather coming in we couldn't hang around to marvel. If going up was hard work, going down was worse. Descending scree fields is notoriously tough on ankles and knees. We all fell at least once, though not seriously, and made it back to the car. Scratched, bruised and exhausted we may have

been, but there was quiet elation in what we had just achieved. We were ridiculously proud of ourselves and already talking about which summit we'd try next.

But that's the Stirling Range for you. Wild and captivating, serene one moment, violent the next, it is utterly addictive. One of the most fascinating places I have ever been, each visit proves uniquely different from the one before. It isn't the flora or the fauna that gives that sense of newness, for they are steadfastly present. It is the range itself, the imposing peaks that appear and disappear in the shifting veils of mist and fog. Sheathed in moody mystery they are compelling and get under your skin. And once you love them the voice of Koi Kyeunu-ruff calls you back time and again.



This red-legged ctenotus enjoys a bit of sun and owned a cheeky nature, peeking from behind rocks, before darting out to pose for the camera



Locally known as the Bungurra, the racehorse goanna is a relentless predator, flicking its long tongue in and out to scent out prey. Unfussy eaters, they'll take anything from other reptiles to birds and small mammals. Eggs are a delicacy. Their own eggs are commonly laid in termite mounds to keep incubation temperature constant



This western brushtail possum overlooks a Noongar smoking ceremony at camp from the safety of the amenities block. Noongar elders believe it is a good sign if animals are in attendance



Everlasting daisies carpet bushland in delicate beauty



THE DECLINE OF QUOLLS IN TASMANIA

Spatial and temporal variation in declining eastern quoll (*Dasyurus viverrinus*) populations in Tasmania

The eastern quoll (*Dasyurus viverrinus*) was once an integral part of faunal communities throughout south-eastern Australia. Their numbers dwindled rapidly in the early 1900s, and they are now considered extinct on the mainland. While the species has persisted in Tasmania, their numbers are declining rapidly, with statewide spotlighting surveys recording declines of more than 50 percent over the past 10 years. Live trapping at a number of sites in 2010 supported this finding, indicating local declines of 60-100 percent over the past 20-30 years. The cause of this recent decline is not known.

While Australian fauna has endured numerous extinctions and declines in recent history, Tasmania remains a stronghold for marsupial diversity. The eastern quoll is one of five species that were once widespread on the mainland that now survive only in Tasmania. However, marsupial dynamics in Tasmania are changing rapidly and new threats are emerging. The Tasmanian devil is in steep decline due to the spread of the fatal devil facial tumour disease, and the red fox was recently introduced to the state. Devil declines may be allowing increases in feral cat abundance, which could threaten quolls and other species.

Bronwyn Fancourt - School of Zoology, University of Tasmania

Given this background of instability, it is imperative that we identify the cause of the eastern quoll's decline, and understand how it relates to factors involved in changes to other species.

Diagnosing the cause of a threatened species' decline is an essential first step in management for recovery. But diagnosis can be very difficult when several different factors act together. Furthermore, many species that are now endangered and in need of recovery declined to their present state of rarity many years ago, so that it is no longer possible to directly study the factors that were responsible for

decline and measure their impacts on populations.

My PhD research aims to understand eastern quoll demography, population viability and ecological sensitivity in the current environment of rapidly changing predator dynamics (with declining devils and introduction of a novel predator, the red fox), anthropogenic disturbance (habitat modification and fox baiting programs) and changing climate (recent drought and long-term climate change). Eastern quoll populations will be regularly monitored at four sites (two with declining populations, two with relatively stable populations) over the next 2½ years. The comparison of a range of demographic, health and environmental variables in declining populations with stable populations as a reference will enable identification of specific factors associated with the decline. Field work commenced in May 2012 and will continue every second month in the pursuit of critical leads and much needed data to help answer these questions.

The Wildlife Preservation Society of Australia generously contributed to my honours research in 2010 which provided strong supporting evidence that eastern quolls are indeed in marked decline. This research has formed the basis of a nomination for listing the species as endangered under the Tasmanian *Threatened Species Protection Act 1995*, and has provided me with a solid foundation to continue this research to the next crucial step of identifying the cause of the decline of the eastern quoll. I am extremely grateful to the Wildlife Preservation Society of Australia for continuing their support of this research into 2011.

For all my volunteers, supporters and other interested parties, this is the final update on the eastern quoll research for 2012. I can't believe it has been almost two years since I had this crazy idea that I could sift through such an ecological quagmire to try to find the culprit(s) responsible for the rapid decline of our little eastern quolls. But my calendar assures me it is 2013 and we are about to round the final bend towards the home straight.

But sadly, after 248 days in the field, 8,460 camera trap nights, over



Feral cat going into trap at Judbury, removed from site that morning



Eastern quolls can have up to eight pouched young (they have eight teats), here you can see six newly born babies



Eastern quoll young grow in the pouch, they do not stop sucking the teat until they are ready to leave their mother's pouch, here they have just started getting their spots



Volunteer Halley Durrant releasing "Lucy", one of our first mothers of the study at Cradle Mountain



The same feral cat caught in trap at Judbury and removed

300,000 camera images, hundreds of blood and scat samples (and still counting), there is still no obvious smoking gun in the case of the declining quoll. But the list of potential suspects is slowly but surely narrowing down. Feral cats started off fairly low on the suspect list, mainly because they have been in Tasmania for over 100 years without causing any negative impacts on quoll populations thus far (well, none that we are aware of), so why would they wait until the last 10 years to make their move? Well, a few events have materialised over the past year that have catapulted cats to the top of the hit list.

First, the Judbury site has demonstrated just how quickly a handful of feral cats can devastate the native wildlife when they first move into an area. I have mentioned previously that after 12 months of good quoll numbers at this "stable" site, numbers started to plummet around March-April 2012 – just as a group of feral cats moved into the site. This led to an almost instantaneous drop in the number of quolls we were trapping, with both May and July 2012 yielding only 25 percent of the numbers we were trapping at the same time in 2011. This was further confirmed with the detection of feral cats in our spotlighting surveys in May 2012, together with three cats trapped in May and one cat trapped in July. And the final evidence came in the form of camera surveys. I have now performed three camera surveys at this site during 2012 – the first in February (before cats arrived), a second in June (soon after cats arrived) and a third in October. While I haven't had a chance to work out the exact number of individual quolls detected in each survey (this involves many, many, many hours of sitting at a computer trying to match up individual quoll spot patterns until you literally see nothing but spots), the number of quoll detections has rapidly declined across the year, from 71 in February, to 40 in June, down to only nine in October. All three surveys were performed with cameras in exactly the same locations (attached to the same trees) and all left running for three weeks straight. Unfortunately we are still detecting cats on camera (even though we have removed the four cats we trapped

in May and July) so the damage is undoubtedly continuing as I type. I am heading back out soon to deploy the cameras for one last three-week survey, hopefully to find the cats have moved on and the place is now alive with juvenile quolls all running around chasing their tails. Well, a girl can dream.

Second, the camera surveys I have undertaken across the state over the past few months have also yielded some interesting results. To date, I have only found one site out of 16 where we didn't detect any feral cats on camera. Not surprisingly, this site had a high number of quolls compared to sites where cats were present, but it is not quite so black and white (but wildlife ecology never is). Generally speaking, the more cats that were detected at a site, the fewer quolls were detected there, but there were a few exceptions. I still have a few surveys to finish sifting through before I can try to tease this all apart, but it has provided us with an amazing broad-scale picture of what is happening with quolls and cats across the majority of the state, and a bucket-load of data to help understand how quolls, cats and devils modify their behaviour and activity in the presence or absence of the other carnivore species.

Finally, we have had two juvenile eastern quolls confirmed as being killed by injuries inflicted by cats. One was found by a Tasmanian veterinary pathologist sitting in the road in the middle of the day (the quoll, not the pathologist) – he was alive, but very sick. He died overnight, and the post-mortem report concluded that he had been crushed by a cat (as evidenced by the two pairs of canine tooth punctures either side of the rib cage, penetrating through to vital organs and resulting in what would have been a slow but painful death). A second juvenile was picked up from a local tip site where he was found in a very poor state. He also died at the vet overnight, and when I performed a post-mortem of him the next day, he had similar pairs of canine puncture wounds, subcutaneous bleeding either side of the ribs and other related injuries (similar to the other quoll a few days earlier). Both quolls weighed only around



Eastern quolls



Eastern quoll babies in hand



Feral cat rolling in scent lure used for cameras on Bruny Island



Black eastern quoll at Bruny Island site



Feral cats

360 grams, so likely to be hanging off Mum's back with the rest of the litter when Mum emerged to feed at night. At this stage they are very vulnerable (akin to sitting ducks, or sitting quolls as the case may be) for a predator to pounce and grab the slowest one to move. While neither attack resulted in immediate death, both quolls died of the injuries they had sustained. While this was a very sad event for the quolls, it has finally provided us with proof that cats do kill quolls. It might seem like a no-brainer, but without the evidence to back it up, it remained nothing more than a hypothesis. Now it is fact, albeit a very, very sad one.

While the case is stacking up against the feral cats (we now have motive, opportunity and means), it still doesn't explain why they have only just made their move in the past 10-12 years. Well, it seems like all the planets have aligned in recent years to cause some ecological upheaval in Tasmania. With the millennium drought persisting for much of the past 12 years combined with the rapid decline in Tasmanian devils due to DFTD and a massive shift in land-use across the state (as well as a few hundred other small things), it looks like the quolls may have been hovering on the threshold of some of their ecological tolerances, and

these recent events have worked in concert to push them over the edge and bring about their decline. But the investigation is far from over.

One final update – a few of us went over to Bruny Island to collect some blood samples in November, and were pleasantly surprised to see lots of juveniles running around at night, and quite a few in the traps the next morning. We counted 75 quolls spotlighting (we were spotlighting, not the quolls) in around an hour. We set 60 traps over two nights and caught 42 quolls (32 individuals). Juveniles only comprised 31 percent of the animals we trapped, compared to 53 percent for the same time last year. While the total number of quoll captures was almost identical to last year, it was just the mix of adults to juveniles that differed. This isn't completely unexpected, as we had already noticed the higher number of quolls surviving through to maturity this year compared to last year, but it does raise many more questions and possibly some answers as to why numbers naturally fluctuate between years. I suspect that densities are pretty much at full carrying capacity on Bruny, so when there are lots of adults around, they have fewer offspring to minimise competition, which in turn leads to fewer adults the following year. With fewer quolls, they can support a higher number of offspring – and so the cycle continues.

I'm sure I've bored you all enough with the details by now. I'd just like to take this opportunity to thank the amazing volunteers who have given so freely of their time (and sanity) to assist with the research over the past two years. Similarly, my deepest gratitude goes to the various funding bodies that have provided the necessary funds to enable this research to be conducted. None of this work would have been possible without your support. In the end, we hope that it will be the quolls that will ultimately benefit from your support.

On behalf of myself and the quolls, I'd like to wish you all a safe and happy 2013.



Malleefowl

and in decline across southern Australia. This is mainly due to loss of suitable bushland.

This year all known mounds on the grid were visited. This included 24 extinct mounds which have no obvious signs of malleefowl visitation and are only checked once every five years. Six volunteers worked with DEWNR staff, splitting into three groups to visit 47 malleefowl mounds.

No fox or rabbit scats were recorded at any of the mounds. Intensive fox baiting has been occurring at Innes National Park as part of the tammar wallaby reintroduction since October 2003. This may be why there has been little evidence of foxes around the mounds in recent years.

In addition to this, the Northern and Yorke Natural Resource Management Board have been running a community fox baiting program since 2008. The Fox Baiting for Biodiversity Program covers around 50,000 hectares on the Southern Yorke Peninsula, further protecting wildlife both in and out of the national park. Participation in this program has continued to increase each season as landholders and farmers see the visible rewards from a reduction in fox numbers.

Nine mounds were found to be active this season, including one mound that had no previous recorded activity, highlighting the importance of revisiting the 'extinct' mounds every five years.

Table 1: Number of active mounds over the years that the Innes grid has been monitored.

1992	1996	1998	1999	2002	2005	2006	2007	2008	2009	2010	2011	2012
8	5	5	7	6	6	11	9	9	10	10	11	9

Since 2006 between nine and eleven active mounds have been recorded. The results of this season's monitoring show that malleefowl breeding activity remains consistently high on the Innes grid in 2012.



Kite rescue

Simon Cherriman

Ticks crawled up the inside of my trousers as I waded through scratching vegetation, and the air was thick with humidity. Strong wind gusts tore through the scrub, but I still managed to hear my mobile phone ringing. I answered it.

"Is that Simon? Hi, it's Marra here, how are you?"

"G'day Marra! I'm great thanks, what's happening?"

"I've got a baby square-tailed kite that was found near Forrestfield yesterday. It's very near fledging but can't fly. Just wondering if you're available to go and search for a nest? Would probably involve some tree-climbing!"

Not many things are more exciting to me than climbing a tree to rescue one of our most unique and beautiful birds of prey (raptors). I accepted the offer at once and agreed to call Marra Apgar, one of Perth's most dedicated wildlife rehabilitators and manager of the education business Raptor Presentations, for more information when I returned home the next day. The field trip I was on was nearly over, but already I had something else to look forward to. A mission away from

the ticks and humidity, but one that would prove just as challenging.

Marra informed me that the orphaned bird had been found by some ladies walking their dogs in a regional park in the Perth foothills. I arranged to meet them on one of their routine mornings so they could show me where it had been found, and hopefully allow me to find a nest. According to Marra's assessment, the kite was well developed but incapable of flying, so must have accidentally parachuted off its nest. Probably an easy mistake in the recent strong winds.

It was a grey morning when I met Caroline and Chris the next day, and we headed up a bush track through fields of low heath adorning the foothills, with Chris's two dogs panting and showing us the way. The vegetation was mostly too low for raptor nests, but I noticed the occasional small red-gum growing by the track became taller and more frequent as we headed higher up the hill. This is looking more like kite-nesting country, I thought.

The ladies reached the spot where they remembered finding the young bird,

who I'd heard so much about but not yet had the privilege of meeting. We stopped at a dip in the trail where a well-wooded gully sliced its way into the underlying bedrock, another highly suitable place for a nest site. Despite searching for about 20 minutes, and inspecting with my binoculars the crown of all the nearby large trees, there was no nest to be seen.

After some discussion and a quick phone call to Marra to confirm that the bird was indeed a square-tailed kite (I had seen a possible tree hollow suitable for kestrels), we carried on up the path. Another few hundred metres on and one of the ladies stopped.

"Hang on. Maybe this is where we found the chick!?"

With that I glanced skyward and an adult square-tailed kite flew right overhead, skimming the tree line in graceful fashion.

"There!" I yelled. "There's an adult kite. We must be close to a nest now!"

Above: The adult female kite, one of our most brilliantly marked and placid birds of prey

Looking in the direction the kite had appeared from, I instantly noticed a large stick nest built in some leafy foliage of a tall red-gum.

"There's the nest! Fantastic!" We all hopped around like excited children waiting for an ice-cream.

I rushed round one side of the tree and checked the nest repeatedly with my binoculars. The wind roared over my eardrums and sent the nest tree's canopy rippling with air currents like a ship's mast in a gale. The nest was very high, but I could just make out the shape of another bird, flattening itself onto the platform to bunker down from each strong gust. It looked like a second fully-feathered kite chick and gave me hope I had a good chance of returning 'our' chick successfully.

The incredibly windy conditions prevented me from even considering tree climbing today, so Caroline, Chris, Marra and I arranged to meet on Sunday when the weather forecast looked more favourable. In the meantime 'our' chick, which had now been dubbed 'Squirt' (short for 'SQUaRe-tailed kite'), would stay in Marra's safe keeping. Although young birds of prey are known to imprint on humans when brought into captivity (ie by relying on a human to feed and nurture them, they grow up thinking they are human, becoming destined to a life in an aviary), larger nestlings which have passed the imprinting period can remain in human care for several days and still be returned to the wild with little impact on their psyche.

Sunday arrived quickly and, with Mum and Gill in tow, I arrived at Marra's place early to finally meet Squirt in the flesh. She (we were uncertain whether she really was a she or not!) sat quietly in her aviary with her head cocked to one side as Marra and I talked quietly, then opened the cage for me to get some footage of her up close. I was amazed at the calm nature of the bird and instantly took a liking to her. I couldn't wait to get her back to her nest.

We drove up to the foothills and eagerly piled out of the car with cameras, backpacks full of climbing gear, the pet-pack containing Squirt and a whole bunch of enthusiasm, and set off along the walking trail. It



While walking their dogs, two ladies found the kite chick on the ground in open wandoo woodland



We were quite surprised to find a little eagle chick, only days old, in the nest which we initially thought belonged to square-tailed kites



Photographing the kite family up close!



Marra places Squrt into a green bag, ready for her release



The kite nest is just visible at the top centre of this photograph, with me ascending from the bottom

wasn't long before we arrived at the 'nest tree' and were greeted by Chris. As Marra shared information about Squrt and gave the others updates on her condition, I wasted no time in unpacking my tree-scaling equipment and setting up ropes to the nest.

Just before I was ready to ascend the tree, some movement caught my eye and I noticed a little eagle tucking its wings up, having just landed on a main branch above the kite nest. I alerted the others and we all watched it preen briefly then look down to the nest, then back at us. It was very suspicious that one species of raptor would land so close to the active nest of another, unless of course it was hungry. From

my position near the base of the tree, the nest appeared empty. No sign of the kite chick I'd seen a few days before. My mind raced. What was going on here?

I knew the only way to find out was to get up to the nest, so I quickly grabbed a camera and began scaling the rope. As I got higher, the little eagle promptly launched from its perch and glided away across the valley. Soon I was just below the nest platform. A gentle breeze ruffled the leaves around me. I secured a safety line around a thick limb, then pulled myself right up to the nest. There before me was an amazing sight. An incredible spectacle of nature ...

The little eagle chick was only days old. It was tiny, not much bigger than the palm of my hand, and covered in a fine, smoky-grey natal down. Tiny whispers filled my ears as it called softly next to my head, probably thinking I was a parent bird. The small cup in the centre of the nest, lined sparsely with eucalypt leaves, was only just big enough to cradle this little being's body. What a sight! I pulled away from the nest and lowered myself into a sitting position in my harness.

"There's a little eagle chick up here. The nest isn't a kite's after all. This one belongs to little eagles. We're back to square one again!"

The others muttered a few words in surprise from down below. I heard Chris asking Marra questions, and the explanation that followed. If we couldn't find a nest to return the kite to, it would have to remain in captivity. A life in prison. I dreaded the thought. Captive birds of prey play a huge role in education, and when an event like this occurs, an opportunity arises for one individual raptor to become an ambassador for its kind. To allow humans to experience at close quarters a bird that most people would never even see. And hopefully to capture children with that magic aura, the mystic glow that birds of prey seem to emit. But for me, seeing a species which is born to soar high on rising air currents restrained by domestication is still depressing. No cage is big enough to house the most powerful of our flying birds.

"What should we do now, hey? It's a bit of a mystery where this bird has come from." I stared at Squrt who sat on the soft blanket placed next to her pet pack. Her head tilted to one side as though she was waiting for an answer.

"I am still sure where we found her was back down the track. Where we first looked the other day," Chris said convincingly. Maybe I'd missed something. Gill, Chris and I headed back to the place I'd first looked for a nest, while Marra and Mum waited with Squrt.

Nearly an hour of thoroughly nest-searching the gully still brought us no luck. It was beginning to heat up and Marra was concerned to get Squrt back to her place for a feed. Chris had



Square-tailed kites have quite a small beak for their size, but it is especially suited to their main diet of nestling birds

had to leave. Mum waved her hands at the flies. I wiped sweat from my brow. After a morning which began with so much enthusiastic energy, we were now all feeling quite dejected. Marra placed Squrt into her pet-pack and began walking back to the car. A head start with the awkward cage would be useful. I still had quite a bit of climbing gear to pack up, so Gill took my camera backpack and tripod then went on ahead with Mum as I gathered the last of my ropes. I heaved the heavy pack onto my shoulders and plodded up the trail. A slight rise in the landscape took the track out of the thicker vegetation and into an open section of wandoo trees. It was dead still now and quite warm. Nearing the top of the hill, I glanced upward at the path ahead. A large wandoo overhanging the track stood out, reaching toward the light offered by a window in the canopy. And there, in a large fork on the lowest horizontal limb, sat an adult square-tailed kite with its large chick on a bulky mass of sticks. At last! A kite nest. The right nest!

I burst into action and raced toward the tree, calling to Mum and Gill

who had just disappeared around the corner. Some faint replies came and soon they were back again.

“MARRA! Where’s Marra? Tell her I’ve found the nest!” I dumped my bag and ran on ahead to catch up with Marra, who fortunately hadn’t yet made it back to the car. She was thrilled to hear the news and followed me excitedly as I pointed in the direction of the kites’ nest.

It wasn’t long before I had a rope set up just above the nest and began ascending the tree. The nest was quite a long way out on the limb, precariously balanced, not the easiest thing to access. Looking from below, the adult kite’s head was just visible through the sticks, and seeing as most raptors flush before you even reach the nest tree, I was surprised she was still there. I drew level and secured a second safety line, then glanced toward the nest, the female kite raising her wings slightly as I prepared to go out on a limb. The moment was here. It was finally time to send Squrt home.

My hand quivered as I reached into the Woolworth’s ‘green bag’ and

clasped my fingers around Squrt’s back. The young kite was quite large, but huddled up, its torso easily fitted into my palm. My other arm locked around a thin branch, helping my body balance on the horizontal limb. I ignored the 10-metre drop below me and focused on removing the bird from its cradle, slowly but surely. Its talons caught on the fine material of the bag’s rim and remained hooked for a few seconds, but I managed to free them and lift the kite into the open.

Just a metre away, perched at one edge of the large stick nest, sat another chick, virtually identical-looking to Squrt. And opposite it, the fine hooked bill, pale head and glorious red-brown markings of an adult square-tailed kite, curiously watching my every move.

I nervously leaned forward, still clutching the baby bird in one hand, clinging to the tree with the other, and after a long stretch, placed it back in the centre of the nest. Its sibling reacted by raising its crest feathers and gaping, the classic threat posture adopted by many birds of prey when



The reunited kite family was amazingly comfortable with me at their nest

humans are close to their nest. The adult watched its offspring flop clumsily forward into the nest cavity, then seconds later shuffled closer to it and looked down as if to say "Where the hell have you been!?" The whole world was quiet and all I could focus on was these incredible birds sitting before me, not just the chicks but their parent, who to my disbelief had remained on the nest this whole time. What a wonderful, placid bird. Minutes passed, I heard muffled voices below, but nothing could break the space I was in, captivated by natural history.

Leaving the tree was like trying to prize myself from some powerful magnetic force which kept me glued to the scene like an invisible magnet. But eventually my legs were numb and an aching back forced me to retract myself from the nest. It was time to get down.

Twenty-four hours later I returned to find both kite chicks still on their nest. The amazingly placid adult female also remained there, and once again she accepted me into her space. I nearly fell out of the tree when she walked slowly to the edge of the nest, reached out with her beak and touched my hand gently. I took more photos, then later that day broke the fantastic news to Marra, who informed me

that the chicks both had a bulging crop, a sure sign that they had been well fed since Squirt's reunion. All the signs were good for both chicks to fledge successfully. What an awesome outcome!

Being involved in this kite story was a simply amazing experience. The image of that beautiful female kite drifts into my mind often, an image I will remember forever.



Just as I was ready to climb, we were amazed to see this adult little eagle land at the first nest

CARING FOR WILDLIFE

Linda Dennis, Regional Advisor

Every two years the wildlife carers' community come together for the Wildlife Rehabilitation Conference. Delegates range from vets and vet nurses, zoo keepers, doctors, wildlife rehabilitators, national parks officers and more.

Every conference has a great range of speakers and topics. But, I must say that my very favourite conference so far – due to its well-organised structure, helpful volunteers, great food, fabulous company and networking, and not to mention, wildlife presentations – was the 2012 conference in Townsville, Queensland.

As in previous years, the Wildlife Preservation Society of Australia provided a grant for me to attend the conference, as I am a Regional Advisor and often help the Society with Australian native animal rehabilitation issues. Many thanks to the Directors of the Board for supporting me in my own wildlife work.

The 2012 Wildlife Rehabilitation Conference was held in sunny Townsville in July. Four days filled to the brim with all you need to know about wildlife rehabilitation. There were many great subjects, far too many to mention in this article, but I'll tell you about some of them that really stuck in my head.

Dr Chris Rafferty and Dr Carlo Pacioni spoke to us about the conservation of the endangered woylie, also known as the brush-tailed bettong (*Bettongia penicillata*). In early 2010 a handful of captive-raised woylies were released at the predator-proof, 50-hectare Woodland Reserve on the Swan Coastal Plain in Western Australia. Later, more woylies were added to the population and, after their first 15 months at the reserve, the project was rewarded with progressive success.

In conclusion, the study provided evidence that the captive woylie population can potentially have a conservation role for the species. The study also highlights the importance of appropriate and prompt actions when managing rare and endangered species. The doctors stressed that "quality (genetic viability) of



Tyto Wetlands at Ingham

individuals is just as important – if not more so – than quantity".

Jim Pollock (one of the main conference organisers along with his wife, Eleanor) shared his and Jenelle Gay's research on exudative dermatitis of the brush-tail possum.

Exudative dermatitis, or stress dermatitis, is a hideous disease – a "flesh-eating disease" usually caused by severe distress in the individual. Stress can be caused by a number of things: lack of food, overcrowding, male fighting due to territorial aggression, etc.

The study included 30 possums over an 18-month period. Swabs were taken of each patient and multiple organisms were found, including golden staph, candida and *Proteus mirabilis*, "a common inhabitant of animal faecal material found particularly in infections of the eye, skin, urinary and respiratory tract".

When reviewing the results, it appeared that a staphylococcal infection was the underlying cause of exudative dermatitis – 78 percent of the 30 animals involved in the study had staphylococcal infection. It was thought that if a possum with exudative dermatitis is treated for staphylococcal infection, most will heal, depending of course of the severity of the case when received into care.

Never having cared for sea turtles before, I found the talk on providing

enrichment for them while in rehabilitation very interesting.

The study conducted by Janice Lloyd, Ellen Ariel, Dayna Adams and Leigh Owens details "the psychological and physiological benefits gained from enriching captive animal environments".

Simple devices, such as hide platforms, brushes and food-dispensing toys – that were rotated regularly to prevent boredom – resulted in more relaxed turtles and reduced "pattern swimming", which indicates a distressed turtle.

It is interesting to note that the hard shell of a turtle is indeed touch sensitive and sea turtles love to have a good scratch on a broom head that is secured to the water tank.

I also did a presentation this year, a great feat considering my extreme nervousness! My talk, on behalf of Fourth Crossing Wildlife and the Wildlife Preservation Society of Australia, was "Wombats – the big picture". In it I highlighted the perils that each of the wombat species face and the work that individuals and organisations are doing to save wombats from further decline.

But there was so much more....

Simon Watharow amused us all in his witty presentation on "Understanding the Reptile". Jo Neyens and Sarah Hirst shared their survival data of released

northern brush-tailed possums. Derek Spielman, Mark Krockenberger and Sue Hemsley's paper on "Necrotising Syndromes in Possums" including "necrotic paw syndrome" was extremely interesting. Jacqueline Marlow and Eira Battaglia presented "Preventing Roadkill", a subject very close to our Society's heart. And Di Hunter told us about the oblong turtle and how it is being "clobbered by climate change".

All these papers and more – including those from previous years – can be found at www.awrc.org.au.

Another of the conference events that I especially liked was the Wednesday afternoon field trips and workshops. There were several to choose from,



The common brush-tail possum (*Trichosurus vulpecular*) is a nocturnal, semi-arboreal marsupial of the family Phalangeridae



The woylie is a small macropod, 30–35cm high, with a tail around 36.89 centimetres long. The fur is yellowish-brown in colour with a patch of paler fur on its belly, while the end of its furry tail is dark coloured. It has little or no hair on the muzzle and tail

but I chose the field trip to the Tyto Wetlands at Ingham.

It was extremely hot and humid – for me anyway, having travelled from chilly Armidale in NSW – but we had a splendid walk around the sanctuary. Birds were in abundance and included cattle egrets, red-backed fairy-wrens, rainbow bee-eaters, spangled drongos and so many more. Other highlights included the agile wallabies that

peered out at us from grassy hides and a warning sign that crocodiles inhabit the area and that attacks may cause injury or death!

All in all it was a tremendous conference. Most enjoyable, indeed. The next conference, in 2014, is to be hosted in sunny Hobart, Tasmania in May. Going by conference chatter it is eagerly awaited by many and not to be missed!



Linda giving her address to the conference

THE GOOD, THE BAD AND THE TERRIFYING: TRAFFICKING IN WILDLIFE

CHRISTOPHER GERARD

According to many experts, trafficking in wildlife is a 20 billion dollars a year criminal enterprise, ranking only behind illegal drugs and weapon trafficking. To achieve such a figure almost one million live animals and birds have to be ripped away from their homes, often drugged for transport, and then, in the most disgusting, inhumane manner possible, smuggled from country to country to satisfy some human's desire to possess, or for personal vainglory.

Often wildlife trafficking is described as a "victimless" crime. Nothing could be further from the truth. Many of the trafficked items come from murdered animals; rhinoceros horn, ivory and tiger skins; and hundreds of thousands of birds and animals die in transit in the most horrible circumstances imaginable. Just because they cannot communicate with us does not mean they are not victims. They feel, fear and die, just like humans.

Humans involved in this trafficking have scant regard for the well being of the wildlife they are moving. It has been estimated that up to 70 percent of the live birds and animals trafficked

die before they get to their final destination, most commonly through suffocation, dehydration or starvation. The most vulnerable rare species are often the ones targeted by the criminals because they offer the greatest profit. Rhinoceros horn has a street value greater than gold or cocaine, a black palm cockatoo, a bird native to Australia, is worth up to \$30,000 and a live orangutan, up to \$50,000.

It is terrifying that wildlife trafficking is getting worse. Some observers have stated that the incidence of rare and endangered animals being trafficked is growing at an exponential rate because of the increased wealth in certain

countries and the involvement of very organised, sophisticated and dangerous gangs. The Convention on International Trade in Endangered Species (CITES) reported that in 2007, 13 rhinoceros were poached in South Africa. In 2012 the number increased to 668. If this trend continues, this magnificent animal will disappear from South Africa, very definitely in our life time. And then what will we tell our children?

There is increasing evidence that some of the most ruthless and sophisticated global criminal gangs are heavily involved in the trafficking of wildlife. They are attracted to the enormous profits, relatively low risk of detection and the even lower penalties if caught. Often these same gangs are involved in the illegal drug trade and human trafficking. They are totally amoral, ruthless and extraordinarily dangerous. Wildlife trafficking not only destroys the lives of countless animals and birds, but it is a very real threat to our own security and health. It can transmit dangerous diseases from one country to another. It helps fund criminals and



These are X-rays of wildlife (lizards) being smuggled in suitcases.

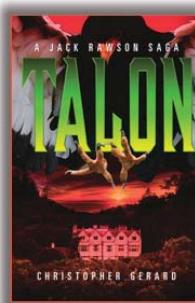
terrorists and it can destroy some of the most rare and extraordinary eco systems; eco systems that will be lost forever if we let them. But there is hope!

Many governments and organisations are increasingly recognising that wildlife trafficking is a very serious issue that requires their attention and commitment. The recent address by Hillary Clinton, the former Secretary of State for the USA, to the partnership meeting on wildlife trafficking is evidence of this. Laws concerning wildlife trafficking are getting more robust with harsher penalties, and there are millions of great people around the globe who are willing and determined to help stamp out this disgusting practice. They are people who are "conscious" tourists. They never buy any souvenirs which are made out of animal products and, where possible, they patronise tourist attractions that support the local communities and wildlife.

They passionately speak out against wildlife trafficking whenever and to whomever they can, including their local politicians, to ensure it is always thought about; and wherever they can they contribute to initiatives that are being made to help eradicate this disgusting behaviour. They put their name to petitions promoting actions which will help stop trafficking and many directly contribute to organisations involved in the fight against wildlife trafficking. These are the people who are making a difference.

I hope you are one of them.

Christopher Gerard is the author of *Talon* (Short Stop Press, \$24.95) now available at all good book stores or online



Editor's note

Illegal wildlife trade has a devastating impact on some of our most vulnerable flora and fauna species.

Affecting tens of thousands of animals a year and threatening Australia's own biosecurity, the growth in popularity of wildlife trafficking is becoming a huge concern.

The Coalition Against Wildlife Trafficking (CAWT) was established in 2005 by the U.S. State Department as a voluntary coalition of governments and organisations that aims to end the illegal trade of wildlife and wildlife products. CAWT currently includes six governments and 13 international NGOs. Their means of action include raising public awareness to curb demand, strengthening international cross-border law enforcements to limit supply, and endeavouring to mobilise political support from upper echelons.

The Australian Government is taking a lead role in the global effort against illegal trade in wildlife, as the new Chair of the Coalition Against Wildlife Trafficking (CAWT)

Wildlife Preservation Society of Australia Wildlife Ecology Science Research Scholarship at University of Technology, Sydney

Our Society is delighted to announce that the Wildlife Ecology Science Research Scholarship launched by Her Excellency, Professor Marie Bashir AC CVO, Governor of New South Wales, at a Gala Dinner in May 2011 has now being implemented. A call for applications for the inaugural scholarship was advertised extensively through the UTS network via print and electronic media towards the end of the academic year in 2012.

Each year, the applications will be assessed during the first semester and judged by a panel consisting of representatives of UTS and the Australian Wildlife Society. The successful candidate will be notified by mail in May, and full results published in the Society's and UTS' magazine and on their respective websites. There will

be a formal presentation of the scholarship at a ceremony to be held at the annual Science Faculty Awards at UTS in mid year.

The aims of this new scholarship are to benefit the preservation of Australian wildlife by supporting applied scientific research with a wildlife conservation focus; to further the Society's commitment to environmental education by supporting science students with a research interest in conservation; and to increase awareness of, and attract new members to, the Australian Wildlife Society and its wildlife conservation work.

Under the proposed scholarship, the Society will provide an annual scholarship of \$5,000 to a post graduate Science student at the University of Technology Sydney

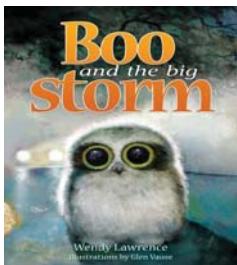
conducting research which will contribute to the conservation of Australian native wildlife.

Recipients will be encouraged to submit a written article on their project which will be suitable for publication in *Australian Wildlife*.

Fund raising appeal still open

Following the official launch, our Society embarked on a fund raising campaign to raise sufficient funds to invest the capital in a sustainable way to enable the interest earned to fund the annual scholarship. This appeal is still open and we invite our members to continue supporting this fund raising appeal to fund the Wildlife Preservation Society of Australia Wildlife Ecology Science Research Scholarship for the benefit of Australian native wildlife.

Book Reviews



Boo and The Big Storm by Lawrence Wendy

Boo and the Big Storm is a lovely book that young bird and nature lovers are sure to read again and again. Boo is a southern boobook owl with big eyes and curiosity to match. With her beautifully illustrated text, author Wendy Lawrence is bound to draw young readers into feeling what Boo is feeling: when she falls from the tree in a fierce storm.

RRP: \$24.95

Publisher: Wild Publishing



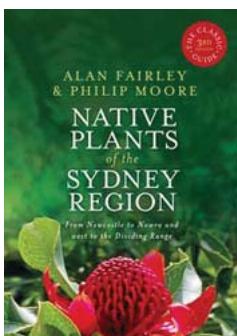
Correspondence
'POLITICAL ANIMAL' George Brandis, Chris Uhlmann,
Mark Latham, Judith Brett, Jack Waterford, David Mary
'GREAT EXPECTATIONS' Rachel Held

Quarterly Essay 48 After the future: Australia's New Extinction Crisis by Tim Flannery

In this passionate and illuminating essay, Flannery tells the story of the human impact on the continent. Australia is home to many animals and plants found nowhere else on earth, making Australians caretakers of a unique heritage in a land that tolerates few mistakes. Yet, in *After the Future*, Tim Flannery shows that this country is now on the brink of a new wave of extinctions, which threatens to leave our national parks as 'marsupial ghost towns'.

RRP: \$19.95

Publisher: Black Inc.

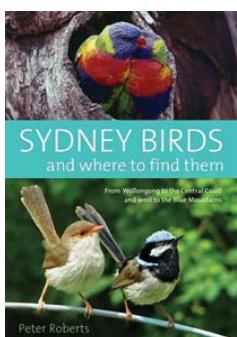


Native Plants of the Sydney Region 3rd Edition by Alan Fairley and Philip Moore

In a handy portable format, *Native Plants of the Sydney Region* is the ideal companion for anyone who wants to put names to the plants they see in the bush. Covering an area from Newcastle to Nowra, and westwards to the Great Dividing Range, *Native Plants of the Sydney Region* contains plant species from remote areas as well as those common in remnant suburban bushland. Many of the species described are also found along the whole of Australia's east coast and west to the slopes and plains.

RRP: \$59.99

Publisher: Allen & Unwin



Sydney Birds and Where to Find Them by Peter Roberts

Sydney Birds and Where to Find Them features the 30 top bird-watching localities in and around Sydney. These birding hot spots stretch from Tuggerah Lakes on the Central Coast to Lake Illawarra near Wollongong and from the Blue Mountains in the west to some surprisingly accessible sites tucked away in the heart of the city. Each locality entry lists the key species to look out for, including rare and seasonal visitors. It describes how to access the location, both by public transport and road, and what amenities to expect; maps are featured wherever necessary. The main section gives precise details about where to look for certain birds.

RRP: \$35.00

Publisher: Allen & Unwin



Extinct Birds Illustrated by Ralph Steadman and Ceri Levy

What a delightful, fun book. When the renowned cartoonist Ralph Steadman was asked to produce a piece for a recent exhibition of bird art, he got slightly carried away. He allowed his imagination to run wild and, an astonishing 100 paintings later, Ralph's *Extinct Birds* was born. The remarkable pieces of art in this book include Steadman's unique interpretations of well-known birds such as the great auk and dodo.

RRP: \$50

Publisher: Bloomsbury

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

The screenshot shows the homepage of the Australian Wildlife Society website. At the top, a large banner features a green echidna logo and the text "Australian Wildlife Society". Below the banner is a large image of a wallaby. The page is divided into several sections: a green sidebar on the left with a sea turtle image and text about the Native Title Act; a central dark blue box for a "Wildlife Ecology Science Research Scholarship" from the University of Technology Sydney; and a green sidebar on the right with the echidna logo and text encouraging people to join the society. At the bottom, there are links for "RETURN HOME" and "RETURN TO TOP", and a footer with a list of website links.

Photo courtesy of IT'S A WILDLIFE

Australian Wildlife Society

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

Australian Wildlife Society

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Be a part of the Wildlife Preservation Society of Australia's conservation future



To commit to being a part of our future, please complete this form. You may cancel your donation subscription at any time by notifying the national office.

Wildlife Preservation Society of Australia
PO Box 42
Brighton Le Sands NSW 2216
Tel: (02) 9556 1537
Fax: (02) 9599 0000
Email: info@wpsa.org.au

You may also commit by visiting www.wpsa.org.au and registering online

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



Australian Wildlife Society

Conserving Australia's Wildlife
since 1909

Your Details

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)

Credit Card Payments

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

Card No. _____ Expiry date ____ / ____

Name on card

Signature

I will give:

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

Signature

Date

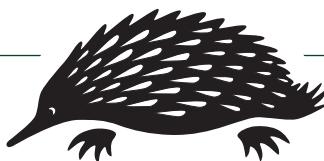
This authorisation is to remain in force until cancelled by the donor and in accordance with the terms described in the Agreement below.

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 WPSA 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: WPSA 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 of Australia 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)

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 of Australia Limited

PO Box 42, Brighton Le Sands NSW 2216.

Email: info@wpsa.org.au Website: www.wpsa.org.au

Consider - A Bequest

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

If you would like to make a bequest to the Wildlife Preservation Society of Australia Limited, add the following codicil to your Will:

I bequeath the sum of \$..... to the Wildlife Preservation Society of Australia Limited for its general purposes and declare that the receipt of the Treasurer for the time being of the Wildlife Preservation Society of Australia Limited 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.

SUZANNE L. MEDWAY
President

Bush stone-curlew



