AUSTRALIAN Wildlife

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Celebrating a new century of wildlife preservation in Australia

Journal of the Wildlife Preservation Society of Australia Limited

(Founded 1909)

Australia's Winged Wonders Photography by Trevor Andersen

Rainbow lorikeet (*Trichoglossus haematodus*) flying into camera. They are extremely fast in flight. I prefer to photograph this bird with shutter speeds of 1/2500 or greater

Full Story on page 8

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Galahs (*Cacatua roseicapilla*) feeding on maxamillet round bales in the Kerry Valley, Queensland

WILDLIFE PRESERVATION SOCIETY AUSTRALIA

Celebrating a new century of wildlife preservation in Australia

Australian Wildlife

is the official journal of the 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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President

Suzanne Medway

Tel: (02) 9556 1537

Fax: (02) 9599 0000

Contact

National Office
Wildlife Preservation Society of Australia Limited

PO Box 42
BRIGHTON LE SANDS NSW 2216

Tel: (02) 9556 1537

Fax: (02) 9599 0000

Email: info@wpsa.org.au

Website: wpsa.org.au

Correspondence to:

Hon Secretary:
Wildlife Preservation Society of Australia Limited

PO Box 42
BRIGHTON LE SANDS NSW 2216

Directors 2010

Notice to our members

The 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 Wildlife Preservation Society 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

I recently had the opportunity to travel from one end of our continent to the other; starting in Darwin, which is the lush tropical capital of the Northern Territory, and home to some of the natural world's most unique and exciting wildlife.

The landscape around Darwin in autumn was lush and green. Wildlife appeared to be abundant, and the only concern of local conservationists seemed to be the terrible cane toad. Cane toads (*Bufomarinus*) entered the Northern Territory in 1980 from Queensland. The Mayor of Darwin, Graeme Sawyer, has set up a local ToadBusters to remove the cane toads that have invaded Darwin.

Flying south from Darwin, the landscape changed from the lush tropical north to the central desert area but then, to my surprise, the South Australian landscape was just as brown and sparse as the desert.

South Australia is experiencing drought conditions and it wasn't till I travelled to the Murraylands that I learnt just how devastating the drought has been to the landscape and the wildlife trying to survive in these conditions.

A species on the edge

My main reason for the South Australian visit was to learn first-hand just what is happening to the southern hairy-nosed wombat, and everything I was expecting was even worse. This species is in serious trouble. The drought has had a devastating effect and I now believe that if something is not done to help this species, it could go the way of the northern hairy-nosed wombat and move quickly towards near extinction.

I also had the opportunity to visit and experience three different methods of conservation by different organisations and then to meet with government officials to learn what the government's position is on wombat conservation.

The first conservation group I caught up with is a well-established and historical organisation that is dedicated to the conservation of native habitat. Their mission is to purchase and hold land for native habitat. This organisation has a policy of non-interference with the natural cycle of life. The land is weeded and rehabilitated back close to its original state by weeding and feral control of rabbits and foxes. The resident wildlife is left to fend for itself and the group does not rescue, rehabilitate or supplementary feed the native wildlife.

The second group is relatively new and at the forefront of raising awareness and defending the rights of the southern hairy-nosed wombats. Their mission is to rescue, rehabilitate and relieve suffering of the faunal emblem of South Australia – the southern hairy-nosed wombat. Their concern is with the species as a whole and also the suffering of individual animals.

The third is the scientists. They have been researching for over 20 years, euthanizing wombats to try and discover what is happening to the species. But what is the result of all this research? Has the millions of dollars spent on research come up with any answers?

In this mix are the farmers. Some co-exist with wombats and set aside conservation areas on their land for local wildlife. But there are farmers out there who want to eradicate wombats from their land. The honest ones apply to the government for culling permits. Others collapse the burrows to bury the wombats alive or shoot them on site.

And where does the government sit on wombat conservation? After a two hour meeting, I don't think I can answer that question. I was reassured that millions of dollars is being spent on wombat conservation and research, and there are dedicated people out in the field researching and doing - I don't know what!! I was also reassured that there are thousands of wombats out there and they are not in trouble. I was even told that one farmer alone had over 2,000 wombats on his land. I had visions of a paddock swarming with thousands of wombats. What was not divulged was that this farmer has over 60,000 acres and in reality one wombat per 30 acres is not a lot of wombats. Even if he could prove that there are actually over 2,000 wombats out there. I was assured that all permits to cull wombats are investigated and only given as a last resort, but the word of the farmers as to the number of wombats on their land is accepted, as too is the number of wombats they want to destroy.

Mange has always been a problem with wombats. But the South Australian wombats appear to be suffering something even worse. They have horrible rashes, are starving and then die of some sort of liver failure. At first we were told the cause was the starving wombats were eating some sort of toxic weed. Another theory was that the wombats were consuming some sort of fungi in the soil. The latest theory seems to be that the affected wombats are starving and the other symptoms are a result of starvation. Whatever the cause, the reality is that there are thousands of wombats out there starving and suffering lingering, horrible deaths. And hardly anyone seems to be doing anything about it.

And where does our Society sit on wombat conservation? I suppose the answer is in between the three different groups. We support land conservation with cash donations and also the wombat conservation groups with cash donations. We lobby the government for changes in legislation and try to keep them honest with their destruction permits.

And where do I personally sit on wombat conservation? To tell you the truth, after visiting the Murray Riverlands and speaking with the conservation organisations, the scientists, and the local government, I am overwhelmed by the problems out there. The wombats are dying in South Australia; there is a real problem of starvation of the species, which is also being affected by disease. I don't know if I could sit by and conserve the land and then watch a wombat die of starvation or disease. I would have to do something to try and help relieve its excruciating suffering.

And where do you personally sit on wombat conservation? Are you worried that Australia could be on the brink of another extinction of a species?

Society President honoured

Patronage is the support, encouragement, privilege, or financial aid that an organisation or individual bestows to another.

The Wildlife Preservation Society of Australia's President, Suzanne Medway, was recently invited to become the Patron of The David G. Stead Memorial Wild Life Research Foundation of Australia. Charitable and other non-profit making organisations often seek an influential figurehead to act as patron, and Suzanne was delighted to accept this honour.

The Stead Foundation and the Wildlife Preservation Society of Australia have a long-standing historical connection and it is appropriate that this has now been formalised with the President of our Society becoming the Foundation's Patron.

At an informal ceremony, which took place at Wirrimbirra Sanctuary, Suzanne met the Board of the Stead Foundation and accepted the role of Patron.

Suzanne's career with the Wildlife Preservation Society in many ways mirrors that of Thistle Harris Stead. Suzanne has held many positions in the Society, as President, Honorary Secretary and Editor of the Society's quarterly magazine *Australian Wildlife*.

L to R: Rae Dutton, Coral Sancetta, Margaret Kitson, Suzanne Medway, David Murray, Dennis Dutton and Tony Bastow

Thistle Harris and David Stead

Two people dominated the activities of the Wildlife Preservation Society for its first sixty years – David Stead and his third wife, Thistle Harris.

David George Stead, who was to become the husband of Thistle Harris in 1951, was one of Australia's most talented pioneer naturalists and conservationists, a self-educated marine biologist and naturalist who, it is claimed by some, was largely responsible for the ideals and philosophy behind our environment movement today.

Stead was one of the first to identify conservation as a political issue. He understood, back in the early part of the 1900s, that the only way in which you could ensure the management of wildlife conservation, or nature conservation, was to ensure that you had legislation in place that provided for the correct administration of wildlife conservation. And he began to fight for this soon after the Wild Life Preservation Society was established in 1909.

David George Stead, from 1909 until his death in 1957, variously held positions of Vice-President, President, Secretary, and Editor of *Australian Wild Life*.

Thistle Harris Stead was a forthright, courageous and charismatic woman. Throughout her life, at least up until 1976, Thistle held many official positions in the Wild Life Preservation Society, as President, Vice-President, Honorary Secretary and Editor. In those years as an office-bearer for the Society she wrote, spoke and acted as an advocate on many issues touching wildlife and its habitats. Her life was controlled by two passions – her love for the Australian environment and her love for David George Stead.

When David Stead died in 1957 it was the end of an era. The Society was his dream and his achievement.

In 1958 Thistle established The David G. Stead Memorial Fund with a view to commemorate David Stead's work for future generations.

In 1962 land was acquired at Bargo, New South Wales, on which a memorial wildlife sanctuary for David Stead was established, Wirrimbirra Sanctuary. In September 1971 a Field Studies Centre to cater for visiting schoolchildren was opened at Wirrimbirra.

Suzanne Medway in the plant nursery at Wirrimbirra

In later years, financial matters were a concern for Thistle and in the early seventies she sold the block of land adjoining her house at Watson's Bay. The property left to Thistle by David Stead consisted of two blocks of land, each with its own title. One of the blocks of land was sold, with payments being made over a period of time to enable Thistle to make regular donations to the operation of the Wirrimbirra Sanctuary

Thistle Stead passed away on 5 July 1990 from a heart attack, aged 87. All her assets and the Wirrimbirra Sanctuary were left to the National Trust of Australia so that David Stead's memorial could be looked after in perpetuity. A succinct summary of Thistle's relationship to Wirrimbirra was published:

> **'The Stead Foundation and Wirrimbirra Sanctuary will not only perpetuate the memory of David Stead but will be a continuing memorial to Thistle Stead because it exists today not only as a result of her original initiative but through her continuing drive and generous financial support over many years.'**

Wirrimbirra continues today, under the Chair of Dr David Murray, as an important environmental education and field studies centre.

Superb parrot (*Polytelis swainsonii*)

Banksia attenuata, commonly known as the candlestick banksia or slender banksia, grows in the grounds at Wirrimbirra

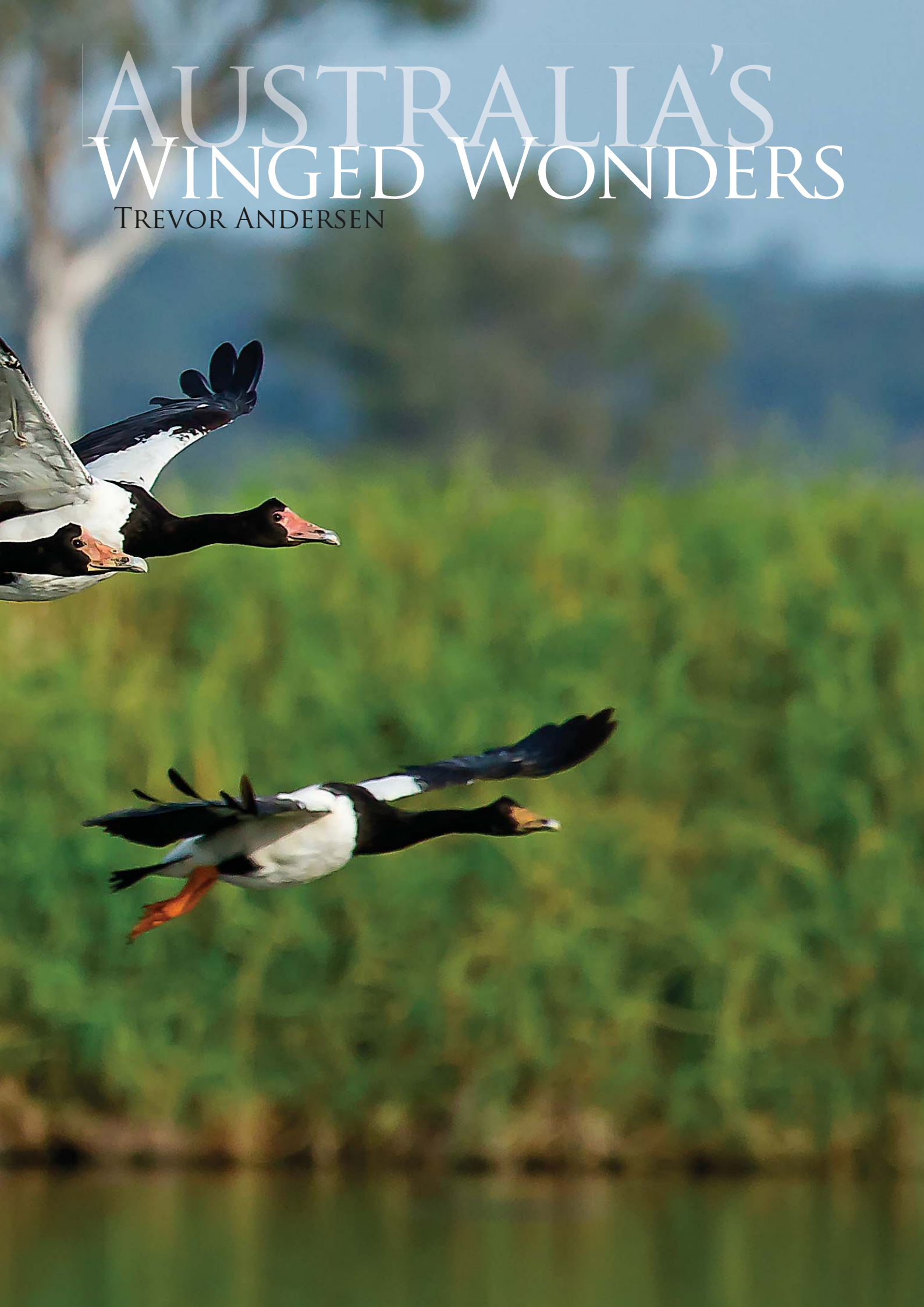
Swamp wallaby (*Wallabia bicolour*) (two-coloured wallaby) in the Wirrimbirra Nature Walk

Picnic grounds at Wirrimbirra

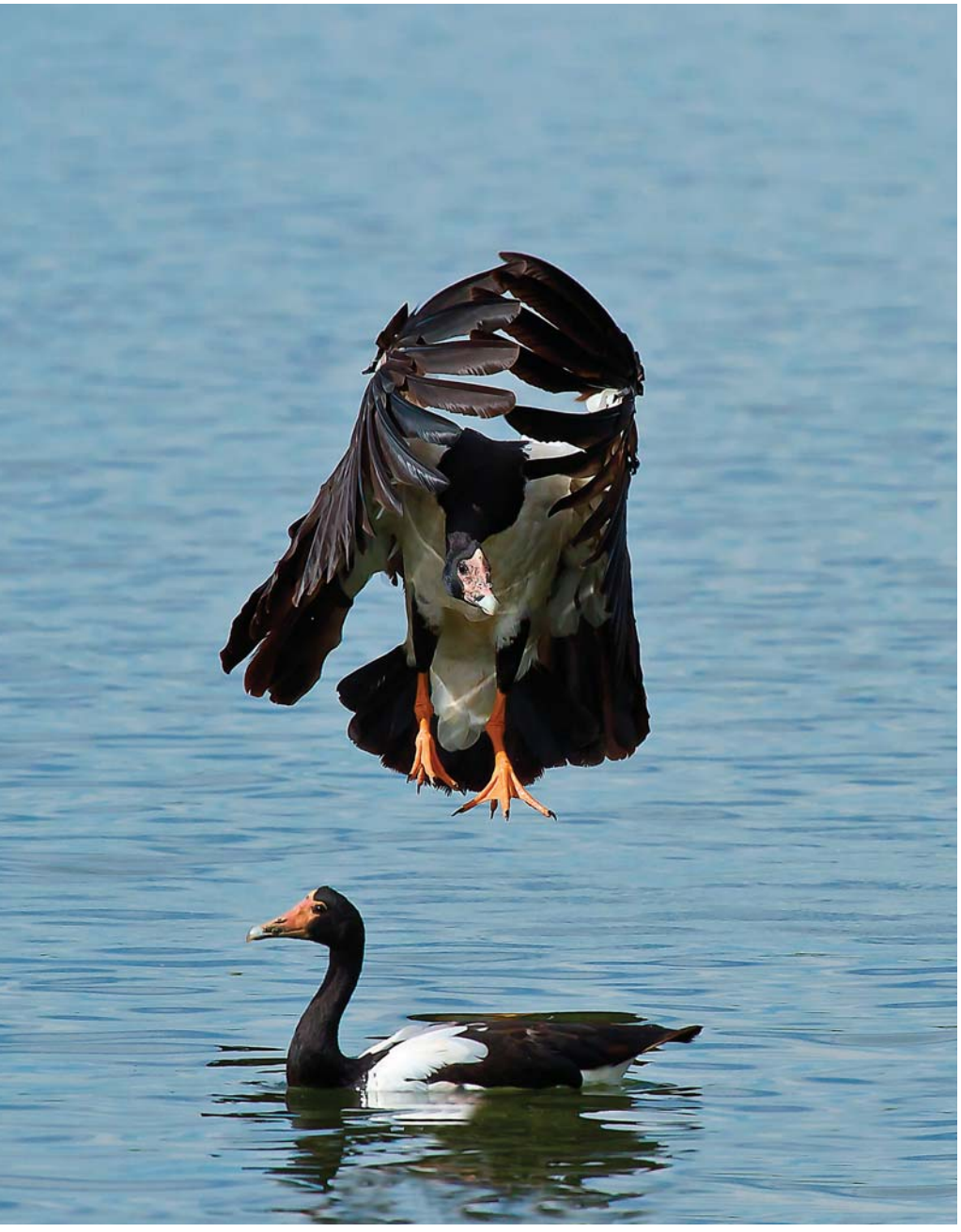
Magpie geese (*Anseranas semipalmata*)

Australia's Winged Wonders

Trevor Andersen



Osprey male (*Pandion haliaetus*) flying up from the rear of his nest – ospreys will often perform various courtship displays in flight prior to their nesting season. Unfortunately their aerial acrobatic manoeuvres are difficult to capture due to my limitations at 400mm in focal length. This photo was taken at high speed continuous to capture various stages upon approach to their nest



Magpie geese (*Anseranas semipalmata*) – this photo was taken during my visit to Gatton in Queensland. Large flocks would fly in formation each morning after grazing on agriculture land in the Lockyer Valley

Australia is very fortunate to have a diverse range of birdlife. Each bird is unique in its own way. Australia's Winged Wonders was formed in 2012 with bird-in-flight photography being my main objective.

Professional wildlife photographer, David Hemmings, is one of the world's most well-known flight photographers. David's pictures have been an inspiration for me personally with his dynamic bird-in-flight images featured in *National Geographic, Canadian Geographic, On Feathered Wings* and numerous nature photography publications.

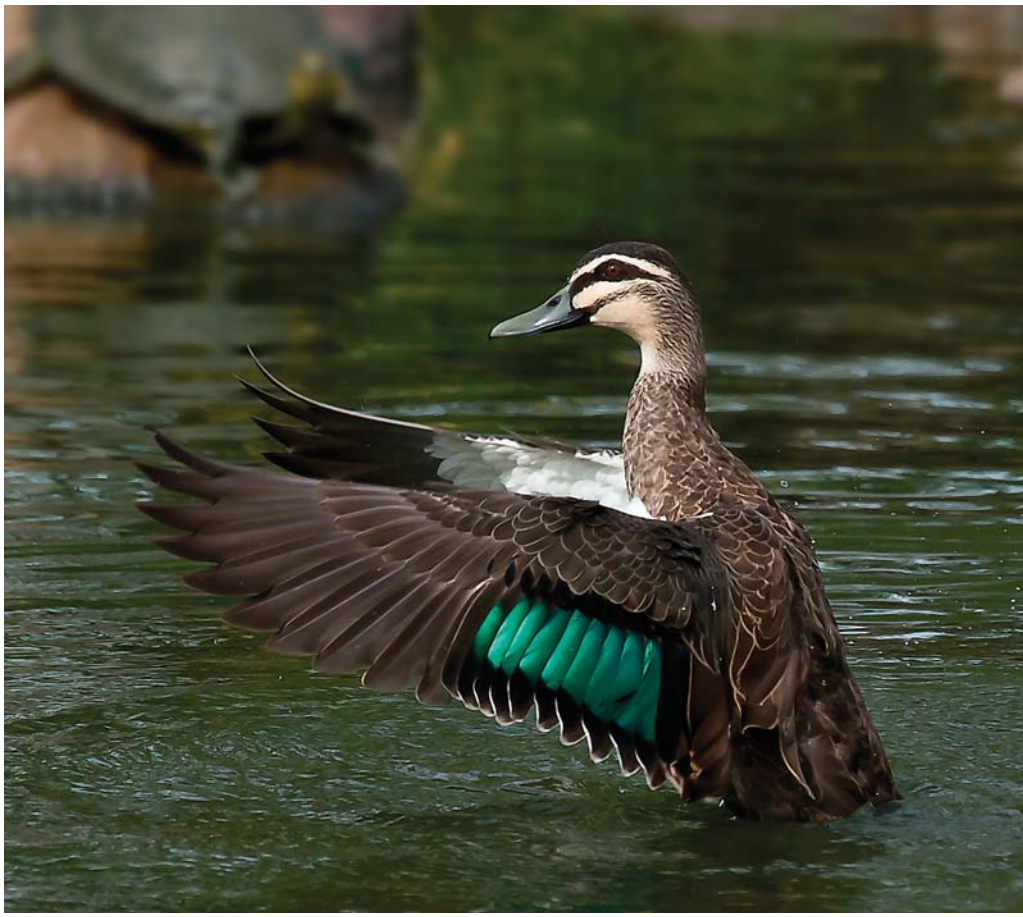
I made my decision in late 2011 to specialise in high-speed photography. Finding locations with great photo opportunities would be one of the most difficult obstacles in nature photography. Patience is one of the most important considerations while trying to capture birds in the field. I prefer to photograph in the early morning or late afternoon while the sun is low in the sky. Good lighting is an absolute must for high-speed continuous shooting. Wind and sun direction is another consideration when you are trying to capture birds in flight.

Birds flying in with a strong tail wind will often turn or bank onto their perch before landing. Photographers need to anticipate their movements around various sites when conditions provide ideal opportunities. Another problem faced by photographers is range. I use my Canon 400mm prime lens for the majority of my flight photos. Waiting for birds to fly within range

Straw-necked ibis (*Threskiornis spinicollis*) are quite common in the rural agriculture areas surrounding Brisbane. This bird from the Threskiornithidae family is commonly known as the 'Farmer's Friend' in our district

is one of the most frustrating aspects of flight photography. I prefer to wait until the bird fills a significant portion of the frame, since heavily cropped photos may produce sub-standard results during photo processing. The angle of light towards your subject is very important. Good morning or afternoon light provides a low angle of light trajectory onto your subject. Poor lighting with fast shutter speeds on your subject will increase the risk of image noise to your photo. I try to keep my ISO at around 500 or lower to prevent too much noise.

I try to shoot with the wind and sun directly behind my camera in the field. Birds are reliant on wind direction in the same manner as jet liners upon landing at airports. Nesting raptors will approach their nest site from any direction if light and variable winds prevail. Stronger wind gusts will provide the photographer with a more predictable flight pattern around various nest sites. I tend to wait for optimal weather conditions due to my past failures in the field. Spending countless hours behind the lens will provide you with excellent opportunities at some point in time.



Pacific black duck (*Anas superciliosa*) – I spent a considerable amount of time trying to capture the Pacific black duck's iridescent green speculum. In addition to ducks, some parrot species and other birds also have a distinct speculum, though less often iridescent

Regent bowerbird (*Sericulus chyrsocephalus*) standing over the satin bowerbirds collection of blue memorabilia

Birds, like many others, are creatures of habit. Watching their day-to-day behaviour will give you a better understanding of their habitat, feeding patterns and increase your chances of capturing that special moment in time. Photographing birds in their natural settings requires a great deal of devotion. I will continue to take my photography to the next level in 2012 and beyond.

I would like to take this opportunity to thank the Wildlife Preservation Society of Australia for their commitment to preserve and protect Australia's wildlife.

Editor's note:

Trevor mentions renowned flight photographer David Hemmings as being an inspiration. David is a world-renowned bird photographer who is known throughout the nature photography world for creating some of the most dynamic and impressive bird-in-flight images anywhere today. If you would like to view some of David's famous photographs of birds in flight, visit his website at: http://www.wildlifephotographynews.net/en/photographer-spotlight/376-introducing-david-hemmings.html

Plumed whistling duck (*Dendrocygna eytoni*) – this photo was taken during sunset on the outskirts of Brisbane. Plumed whistling ducks or grass whistling ducks will often gather in large numbers around the Lockyer Valley's agricultural precinct. Large flocks tend to squabble among themselves during the day with more activity occurring by late afternoon. Birds can be seen flocking during the night as they fly off to their grazing destinations. Large groups will often display dead silence if raptors approach from above

Galah (*Eolophus roseicapilla*) – large flocks of galahs descend onto maxamillet rounds bails in the Kerry valley, Queensland

Plumed whistling duck (*Dendrocygna eytoni*) tend to become very active by late afternoon. Large groups gathered on the lake each afternoon for their daily bathing routine. Whistling ducks are extremely alert to anything that may look out of the ordinary. The majority of my photos have been taken from a hide with camouflage drape

Hooded plovers

attract friends on the Yorke Peninsula

Pair of hooded plovers. All photos by Glenn Ehmke

In spring and summer the beaches of the Yorke Peninsula become the nesting grounds for beach nesting birds. One species of concern is the hooded plover. This small animated bird is classified as Vulnerable across South Australia with less than 200 recorded on the Yorke Peninsula.

These shorebirds are easily distinguished by their black 'hood', broad white 'collar' across the back of neck and their black tipped red beak. Hooded plover numbers have been declining across southern Australia and the species is already extinct in Queensland and northern NSW.

One of the reasons for the bird's decline in numbers is their habit of nesting directly on the sand, just above the high tide mark or in the fore dunes. Their eggs are speckled and blend in with their nest made of sand. This gives the eggs protection from predators, but also makes them hard to see for approaching walkers and people enjoying other beach activities.

The breeding season is from August to March. The local beaches get very busy over the summer months, making it hard for these timid birds to find an undisturbed space to make a nest.

Beach nesting birds are very sensitive to changes in the environment. With over 80 percent of Australians living within 50 kilometres of the coast, it is hard for these birds that require undisturbed beaches for successful breeding. Hooded plovers have one of the lowest chick survival rates in the world.

Vehicles have the ability to reach remote areas that were once hard to access. Vehicles driving on the beach or in the dunes can crush the eggs and birds, or scare birds from the nest, leaving eggs exposed and vulnerable.

Nesting on a busy beach may seem like a strange thing to do, but when the tiny chicks hatch they need to be close to their food as they are unable to move far on their tiny legs. Hooded plovers get their food from seaweed on the beach, at the water's edge.

Since 1980, nation-wide hooded plover surveys have taken place every two years. The survey is coordinated by BirdLife Australia and includes the entire coast from Jervis bay in New South Wales to the Eyre Peninsula in South Australia.

The biennial survey provides important information that helps to determine if the number of hooded plovers is changing in any way.

Deborah Furbank, the Community Liaison Officer for the Department of Environment and Natural Resources, has been working with the local community and BirdLife Australia to raise awareness

Hooded plovers at nest

of the challenges hooded plovers face on the Yorke Peninsula

'BirdLife Australia has held free workshops on the Yorke Peninsula for the past two years. The enthusiasm of local participants has made the Yorke Peninsula home to the 10th Friends of Hooded Plover group', Deborah Furbank said. 'Community members can adopt a pair on their local beach during the breeding season and monitor the progress of nesting attempts. It provides a wonderful opportunity to get to know the local birds and if you are really lucky the chance to catch a glimpse of a rare chick.'

'Members of the Friends of Hooded Plovers, Yorke Peninsula, will assist with the management of nests to improve breeding success. Activities include monitoring nests, temporarily fencing and signing nest sites, educating beach users and controlling introduced coastal weeds. It is not often that you can play such a direct role in bringing a species back from the brink of extinction.'

'This approach has been very successful in Victoria and on the Fleurieu Peninsula South Australia. The number of fledged chicks increased considerably last year with the help of local volunteers.'

The management strategies that result from hooded plover monitoring on the Yorke Peninsula will also benefit other beach nesting birds such as the pied and sooty oyster-catchers and the red-capped plover.

Adult hooded plover on its nest in the middle of the roped off area at Hardwicke, while people are feeding pelicans nearby on a very hot day

Red-capped plover - taken at Innes National Park

Hooded plover at Pondalowie Bay

Hooded plover chick

Young hooded plover at Bluff Beach

Convolvulus hawk moth (*Agrius convolvuli*)

Magnificent hawk moths

Darryl Stewart

For many moth and butterfly enthusiasts, myself included, the hawk moths, family Sphingidae, rank among the most fascinating of all the Lepidoptera. Those of us that share this view are in very good company. Whenever the late great naturalist Sir Peter Scott conversed with naturalists from countries he had not visited, his first question would invariably be 'What hawk moths do you have?'

Of the world total of 1,200 hawk moths, Australia's contribution comprises 75 described species. In common with other life forms, the greatest diversity in Australian hawk moths occur in the wet tropics of Far North Queensland and on Cape York, but a number of large and amazingly spectacular looking species can also be found along the more southerly eastern coastal areas. Some of the more familiar native species include: the impatiens hawk moth (*Theretra oldenlandiae*), coprosma hawk moth (*Hippotion scrofa*), vine hawk moth (*H. celerio*), Australian privet hawk moth (*Psilogramma casuarinae*), and the convolvulus hawk moth (*Agrius convolvuli*).

Australia's largest hawk moth, the doubled-headed hawk moth (*Coequosa triangularis*), is a most handsome species that ranks as one of the largest in the world. It inhabits the eastern coastal rainforest areas from southern Queensland south to the New South Wales central coast, and is occasionally seen in the Melbourne area. This species is unusual in that the larva lacks the typical anal horn; instead the claspers are greatly enlarged and resemble another head – hence the name double-headed hawk moth.

It shares the largest hawk moth in the world category with the giant sphinx moth (*Cocytius anteus*) of tropical South and Central America; both species can attain wingspans of 21.5 cm.

Hawk moths are generally medium to large in size with wingspans ranging from 40 mm to 190 mm; most are attractively patterned in a variety of colours. They are characterised by robust fusiform or cigar-shaped bodies with distinct heads and large eyes. The forewings are long and narrow and much larger than the hind wings. Many species are endowed with a long proboscis (which is coiled up when not in use) from which they are able to imbibe nectar from flowers; the moths hovers in front of flowers, most frequently at dusk, and insert their proboscis deep into the plants to reach the nectarines. Hawk moth eggs are laid singly on the underside of the leaves of the larval food plant.

The female will lay up to 100 or more eggs in a season. The early instar caterpillars (the larval stages between two molts) are also found on the underside surfaces of leaves where they are generally well camouflaged. The mature caterpillars are generally large and colourful, usually with a horn-like projection near the rear end of the body; in some species this projection is replaced by a tubercle. The larvae come in a variety of colours, although green and brown appear to be the most favoured ones. Many also have lateral stripes and/or large eye spots on the side of the thoracic section. The disruptive colouration created by these stripes makes the caterpillars often difficult to locate among the foliage on which they are feeding or resting.

When threatened or alarmed the caterpillar raises the frontal part of its body, taking on the general appearance of the Egyptian sphinx – hence the family name of Sphingidae. This performance is believed to deter would be predators; this especially applies

Striped hawk moth (*Hyles livornicoies*) (green form)

to caterpillars with eye-spots, where a predator may believe that it is looking at the head of a snake or other fearsome creature.

When the mature caterpillar is ready to pupate it descends down the stem or trunk of the food plant and forms a flimsy cocoon among leaf litter on the surface, or a loose pupa in an underground chamber. The pupal stage may take from 10 to 20 days, depending on the species and the vagaries of the weather. The adult moth may live for a similar length of time, and during that period must imbibe nectar at regular intervals, mate, and lay eggs for the next generation.

Sightings of hummingbirds are frequently reported from countries where these birds are not known to occur; this situation is especially prevalent in the British Isles and in tropical Australia. Hummingbirds may not occur in these regions but hummingbird hawk moths (*Macroglossum spp.*) do, and they look remarkably like hummingbirds in every respect when on the wing. Only one hummingbird hawk moth occurs in Britain as a migrant, where it is encountered in large numbers in the south of England in some years. Tropical Australia, however, is home to 13 species in this genus, although many of them appear to be uncommon. These moths can easily confuse the uninitiated into believing they have discovered a hitherto unknown Australian bird. Hummingbirds occur naturally only in the Americas.

There are also small hawk moths that have taken on the appearance of bumblebees, and unlike most hawk moths are day-flying species. When these distinctive green, yellow and black-striped bee hawk moths (*Cephonodes spp.*) first emerge from their cocoons their wings are covered with a myriad of tiny coloured scales, but these moths lose most of their scales with their first wing flutters, and then look somewhat similar to large bumblebees. This is emphasised when the moths hover in front of flowers while imbibing nectar.

Because hawk moths are largely nocturnal or crepuscular, their habits remain a mystery to most people; to the lay person moths are simply small, dingy creatures that eat your clothes. While most moths are indeed small and generally coloured in drab shades of brown and grey, many species, especially the hawk moths, the emperor moths family Saturniidae, and the tropical diurnal moths Uranidae of

Impatiens hawk moth (*Theretra oldenlandiae*)

Convolvulus hawk moth (*Agrius convolvuli*) (green form)

Double-headed hawk moth (*Coequosa triangularis*)

Coffee hawk moth (*Cephonodes hylas*)

Panacra splendens

Acosmeryx anceus

Hippotion brennus

South America and the Malagasy Republic, can rival, and even excel the most spectacular butterflies in size and colouration. For example, a female specimen of the Hercules moth (*Coscinocera hercules*), a saturnid moth taken in 1948 at Innisfail in Far North Queensland, and alleged to have measured 35 cm (14 in) across its wings, would rank as the largest lepidopteran in the world. Likewise, the sunset moth (*Ripheus (Chrysaridia) madagascariensis*), a day-flying species of the Malagasy Republic, can readily be mistaken for a resplendent swallowtail butterfly, and is popularly regarded as 'the most beautiful creature on earth'.

Some hawk moths are a much specialised group of pollinators by virtue of the long, probing proboscis possessed by many of them. One Malagasy Republic hawk moth may possess the longest proboscis of any moth, and herein lies a most intriguing story. A great many nectaries of certain orchids may be located at the bottom of a long chamber that only a moth with an unusually long proboscis would probably be able to reach.

During the latter half of the nineteenth century a certain orchid species (*Angraecum sesquipedale*) was noted in Madagascar that had its nectaries at a depth of 25 to 35 cm (10 to 14 in), but no hawk moth from that region was known to have a correspondingly long proboscis. On the basis of this it was predicted that an unknown hawk moth with a sufficiently long proboscis would one day be found. Then in 1905, such a hawk moth was discovered in Madagascar with a 27.5 cm (11 ins) proboscis and named *Macrosilia morgani predicta* – the predicted one. However a shadow is cast over this almost perfect scenario. It is now generally considered that this orchid does not flower during the moths' flight period, and that it is too rare to successfully pollinate the plant. Also, the orchid's subspecific status has been rescinded owing to its close affinity to the mainland species.

The convolvulus hawk moth (*Agrius convolvuli*) is just one of two species that share its genus; *A.convulvuli* is a widely distributed cosmopolitan Old World species, while the other, *A. godarti,* is strictly an Australian endemic. The former species is a large grey-coloured moth with a distinctive pink ringed abdomen that occurs throughout mainland Australia. Its larvae may be encountered feeding on various forms of Convulvulaceae, and they sometimes damage sweet potato (*Ipomoea batatus*).

The pupa is readily identified by the proboscis, which is enclosed in a separate looped tube outside the body instead of being fused together inside its casing. The larvae may also come in two colour forms, green or black.

The Australian privet hawk moth (*Psilogramma casuarinae*) ranges from the Northern Territory, Queensland, and New South Wales as far as Sydney, as well as being found in India, Sri Lanka, and through eastern and south-east Asia. The larvae are most commonly found on privet (*Ligustrum spp.*), and jasmine (*Jasminium officinale*); native food plants include *Pandorea jasminoides, P. pandorana* and *Dolichandrone heterophylla.* The larva, which can also be an agricultural pest on olive trees (*Olea europaea*), is strikingly coloured in bright green with pronounced diagonal white stripes along its sides but, because of disruptive colouration, becomes very hard to distinguish when feeding on privet where it blends perfectly with the foliage. Closely related to the Australian privet moth are *Psilogramma severina* and *P. edwardsii.*

The impatiens hawk moth (*Theretra oldenlandiae*) is a familiar species that occurs in northwestern Australia, the Northern Territory, eastern Queensland and coastal New South Wales, including Sydney; it also ranges from India and Sri Lanka, through east and south-east Asia. The larva is a strikingly coloured creature being essentially black with a series of orange-centered eye-spots on the first eight abdominal segments, with a straight, slender dorsal horn, which is waved about as it moves. The larva feed on a wide variety of food plants, such as all species of the Vitaceae, Rubiaceae, Barringtoniaceae, Dilleniaceae and Araceae, but is perhaps most commonly found on balsam *Impatiens balsamina* and on cultivated grapevine (*Vitis vinifera*).

The yam hawk moth (*Theretra nessus*) is found in eastern Queensland and north and eastern New South Wales, and also ranges from India through southeastern Asia to Papua New Guinea. The larva feeds on yam (*Dioscorea discolor*) and cunjevoi (*Alocasia macrorrhizos*).

The compromsma hawk moth (*Hippotion scrofa*) is a common species over much of mainland Australia and Tasmania; it also occurs in New Caledonia and the New Hebrides and occasionally in Norfolk Island. The larva feeds on the Vitaceae, Rubiaceae, Onagoaceae, and the sweet potato (*Ipomoea batatus*) and balsam (*Impatiens balsamina*).

Theretra silhetensis

Vine hawk moth (*Hippotion celerio*)

Vine hawk moth (*Hippotion celerio*) (red form)

Psilogramma severina

Psilogramma severina

Daphnis placida

Hippotion velox is found in the Northern Territory, Thursday Island, Queensland and north eastern New South Wales; it is also distributed from India through south-eastern Asia. In Queensland the larva feeds on Nyctaginaceae, including the vine (*Pisonia aculeate*) and the bird-lime tree (*P. umbellifera*). The larva has the unusual feature of spinning two or three green leaves together in preparation for pupation, instead of the usual method of descending to the soil or the leaf litter.

I particularly love to observe and photograph the various life stages of these moths, beginning with the ova and larvae that I obtain by searching the respective food plants. I heartily recommend this activity to those interested in furthering the knowledge of the lepidoptera, since the early stages of many native hawk moths are little known.

Many of my moth photographs were taken by this method, and the adult moths finally returned to the original location.

When I first visited the wet tropics of Far North Queensland in 1988, I encountered hawk moths swarming to the lights in a large numbers, but sadly on each occasion that I return there is less to be seen. This applies not only to the hawk moths but to larger moth species in general. Other witnesses have echoed my comments on this matter, and this appears to apply not only to the tropics but also to other regions. Whether this apparent decline in the larger moth numbers can be attributed to climate change, pollutants, habitat destruction or other anthropogenic causes is impossible to say with any degree of certainty.

The backyard gardener can make a real contribution to hawk moth conservation by adding some larval food plants to their garden in an effort to compensate for the moths' decline owing to destruction of their natural habitats. Some of the most popular host plants (both native and introduced) include native grape (*Cissus spp.*), cultivated grape (*Vitis vinifera*), balsam (*Impatiens balsamina*), sweet Suzy (*Canthium odoratum*), snow cloud (*Pavetta australiensis*) (for hummingbird and bee hawk moths), white mulberry (*Pipturus argenteus*), native cunjevoi (*Alocasia macrorrhiza*), Virginia creeper (*Parthenocissus spp.*), sweet potato (*Ipomoea battatus*) and other species of Covuluvulacae. And, of course, rich nectar producing plants should also be in close proximity to induce the adult moths to remain in the area.

Project wombat

Saving South Australia's southern hairy-nosed wombat

Suzanne Medway

I recently had the rare opportunity to visit one of South Australia's premier wombat reserves - Moorunde Wildlife Reserve - with the president of the Natural History Society of South Australia, Dr Peter Clements.

The Natural History Society of South Australia won the Wildlife Preservation Society of Australia's Community Conservation Award in 2007 for their dedication to the preservation of Australia's native flora and fauna. The Society is comprised of a small band of enthusiastic members who dedicate their time and resources to actively promote, by example, the preservation of the native flora and fauna of Australia in their native habitat.

Their main reserve is Moorunde Wildlife Reserve, which was established in 1968 from money donated by public appeal. This reserve of typical mallee country near Blanchetown South Australia was created for and is maintained for the preservation of the South Australian fauna emblem, the southern hairy-nosed wombat (*Lasiorhinus latifrons*).

After a long drive around the outer perimeter of this nearly 7,000 hectare reserve, we alighted to see at first hand some of the exceptionally dry wombat habitat of this area.

Let me say from the outset that we did not see a wombat all day! We did see lots of warrens, burrows and areas of disturbed earth where local wombats had been digging around looking for tubers from a range of native plants because the whole area is in the grip of a local drought. While wombats are primarily nocturnal feeders, many do come out of their burrows late in the day to sun themselves and to sit and ponder the big questions of life. We suspect this is also the case when the wombats are in poor condition during prolonged droughts when they do not carry much body fat and are feeling the cold from long periods under ground in their burrows.

Under Peter's expert guidance we followed all the main trails and checked out a number of special features of the Moorunde Reserve - the water tanks and rain catchment roofing layouts, the historic charcoal collectors restored hut, which is partially constructed underground to provide a cooler environment for the workers, the series of charcoal burning kilns with bricked up sides where the cut timber was actually burned to provided the charcoal for industry. We noted the large amount of regrowth of local vegetation since the charcoal burners have stopped cutting back the local mallee trees for charcoal.

On a sadder note we saw the infestation of the Reserve by onion weed and wild sage weed, which is hard to totally eradicate from this area of the Riverland's habitat. With the removal of sheep from the area many years ago, much of the active vegetation returned to provide food for the local wombats during good years but, unfortunately, the Reserve is very dry and has no feed for the local wombats.

With the maturing of the mallee trees and their regular annual flowering, many honeyeaters and other small bird populations have increased across the Reserve, making it a wonderful place for bird watchers. From a breeding pair of magnificent wedge-tailed eagles to mulga parrots and blue wrens feeding around the water hole area, the Society has recorded over 125 different bird species. We were delighted to see a stone curlew, or thick knee, feeding along the western fence line late in the day. It is believed they may have been introduced back into the Reserve some years ago after being wiped out by fox predation. The Reserve is now managed tightly and regularly baited for foxes as well as rabbits to reduce the grazing pressures and to give the wombats a winning chance.

During our visit we were distressed to learn that there is now a further

Above: 'Gelly' a very lucky rescued wombat finds comfort with the Wombat Awareness Organisation

'June' sun baking. Within just four days of being rescued the typical silver hair of a southern hairy-nosed wombat begins to appear (photo courtesy of WAO)

threat to wombats in South Australia. A mysterious skin disease, different from mange, has been affecting local wombats. Researchers from Adelaide are investigating the illness which has been killing high numbers of wombats throughout the Riverland area.

Brigitte Stevens from the Wombat Awareness Organisation has documented finding thousands of sick wombats in the region. The symptoms are distressing and the animals found have been emaciated and suffering from alopecia (balding). The University is working with the Wombat Awareness Organisation to undertake investigations on rescued wombats to help determine the cause of disease. Few have been caught because they scurry into their burrows. But despite that challenge, Dr Wayne Boardman and Dr Lucy Woolford of Adelaide University have done post-mortem examinations on six wombats. They believe that it is not just a skin disease, but actually a liver disease. Some researchers have concluded native grasses have disappeared under grazing pressure leaving a range of potentially-toxic plants, such as onion weed. The autopsied wombats have had severely scarred liver as a consequence of eating these toxic plants. But Brigitte believes that the wombats are just starving and forced to eat whatever foods they find, many of which are toxic. They are fastidious eaters and she has never seen one even look at onion or potato weed, nor has she ever seen these plants disturbed. There are animals showing symptoms and animals that aren't. They are all co-existing; the only difference is which burrows they inhabit. Brigitte has seen wombats die with the disease, while healthy neighbouring wombats move into their burrows and within four weeks start to show symptoms and subsequently die too.

'May' has the typical appearance of a wombat affected by this disease; brown/blonde hair, emaciation and alopecia. Rescued wombats do not even recognise grass as a food source as it has been so long since they have seen it! (photo courtesy of WAO)

Our next visit was to Brigitte Stevens who runs the Wombat Awareness Organisation. I had been looking forward to meeting Brigitte. Although we had talked on the phone numerous times over the years, I had never met her in person.

The Wombat Awareness Organisation (WAO), led by Brigitte Stevens, won the Wildlife Preservation Society of Australia's Community Environment Award in 2010. The organisation for many years has been fighting to educate the community of South Australia that current management practices risk the eventual extinction of the southern hair-nosed wombat.

WAO has spent many hours of its members' time and considerable money on rescuing sick and injured animals as well as negotiating with pastoralists over ways to live harmoniously with wombats.

WAO has also conducted considerable research into Sarcoptic mange, a deadly disease which threatens to ravage populations of the animal.

Our whole visit with Brigitte enabled me to experience first-hand her professional expertise, her dedication and love of wombats. She lives and breathes wombats and nurses the seriously ill or injured animals back to health in her large farm house at Rockleigh.

Our visit was one of the most unique times I have ever experienced. Brigitte put on a delicious afternoon tea and we sat at the kitchen table talking over the crash in wombat numbers and the devastating disease that has struck the local population in the Murraylands. As the day drew to a close I started hearing 'thump' and a wombat would wander into the kitchen. Brigitte then gave each wombat its 'dinner', which was a different mixture for each wombat of oats, corn and vegetables. We were soon surrounded by wombats – scratching and eating. I got the rare experience of touching a southern hairy-nosed wombat and when a bare-nosed wombat wandered in, I was able to photograph the two side by side and compare the two species. They are very different in appearance and have very different fur. The southern is very soft to touch, while the bare-nosed has very coarse hair.

The condition of the animals and Brigitte's dedication to their rehabilitation is commendable. She faces many difficulties – funding, opposition to her methods and obstruction and threats from farmers.

Brigitte and her team have been trying to provide emergency supplementary feeding for the Murraylands wombats as she believes that the wombats are sick and dying through starvation.

It was interesting to learn of the different methods of conservation of the wombats, Brigitte rescues, supplementary feeds, rehabilitates and releases individual animals. By doing food drops her group also alleviates the suffering of the local population of native animals in the Murraylands. Her philosophy is that every wombat matters and should be considered in the overall survival of the species.

Unfortunately just after our visit WAO's vehicle finally 'died' while Brigitte was rescuing a wombat with a broken shoulder. This has dire results for WAO's ability to rescue injured wombats and supplementary feed the starving wombats. An emergency donation campaign is being organised to raise funds to purchase a replacement vehicle.

The Natural History Society of South Australia has a policy of non-intervention. They provide the land and maintain it for the wombats. But

This little male (Sketti) had a tummy full of dirt as that was all he had to eat. Nowadays he is well on his way to recovery (photo courtesy of WAO)

with the wombat numbers crashing they have decided to try revegetation of grasses in selected areas, fence off an area and reseed with native grasses and allow it to recover free of grazing pressures. Of course this won't be in time for the immediate starving wombats so in the interim they plan to do a hay bale drop. They are conscious of not wanting to make the wombats dependent on the additional supplementary feed.

The Department of Environment and Natural Resources (DENR) apparently does not concern itself with individual animals. They look at the bigger picture. DENR do not advocate or recommend food drops for any native species. They recommend working with the landholders to address the issue, which seems to be land degradation. They believe the wombat conservation groups and local farmers need to focus their efforts on weed control, rabbit control (using a suitable method that doesn't harm wombats), over grazing and perhaps restoring the land through direct seeding or revegetating with native local grasses and species.

DENR do not believe in saving or alleviating the suffering of the local population of starving wombats, but recommend that conservationists and farmers need to work on the long term solutions rather than band aid ones. They have advised that they have staff that can assist with this type of work.

Severe emaciation claimed the life of this very poor female wombat (photo courtesy of WAO)

There is a bush management advisor in the region and they have staff that look at properties and provide advice on how to better manage properties to halt the land degradation.

I find it hard to understand that a government department responsible for the welfare of this animal recommend long term solutions and are not concerned with the possible crash of an entire population that are dying off in excruciating pain.

The scientists also look at the big picture and are apparently not concerned with the suffering or welfare of individual animals. I had a chance to talk to Dr Eliza Sparrow, who is a Research Scientist with Conservation Ark that is part of the South Australian Zoo. Eliza's opinion on the crisis being experienced by the southern hairy-nosed wombat is that it should be addressed across many levels:

1. Long term research: the species has been studied over a 20 year period and data has been collected from the Murraylands examining factors such as ecology, seasonality of breeding, home range, diet and longevity. This enables her team to examine the influence of rainfall patterns and climate change on the species.
2. Community outreach – the team has been working with landholders and running Wombat Workshops state-wide, as well as conducting surveys, farm visits and research in all wombat inhabited regions. Because the wombats are found predominantly on private land, it is vital to the long term survival of the species to work with landholders and promote co-existence between wombats and agriculture.
3. Population estimate: the last time any population count of the southern hairy-nosed wombat was conducted was in 1989, there have been a lot of changes in agriculture and seasonal extremes during this time which would impact numbers. The team are currently using a mixture of satellite imagery and ground research to estimate population numbers in the Murraylands, with the aim to extend this technique state-wide in the future.
4. Non-lethal management: the majority of landholders believe co-existence is possible and do not want to see the species go extinct, however they believe much better management is required. The team is trialling different non-lethal techniques to determine effectiveness, with an aim to eventually provide a tool-kit of methods to landholders to assist in the management of the species on their property.

After considerable agitation by our Society in the local media, the conservation stakeholders decided to hold an emergency forum to discuss the plight of the wombat in South Australia.

Dr Peter Clements of the Natural History Society of South Australia hosted the Wombat Disease Forum in The Waite Institute, Urrbrae.

The forum was well attended with 43 people meeting to address the problems facing the southern hairy-nosed wombat and all were given a good airing. The first decision made to tackle the problem was to try some oaten hay bale drops to start trying to give the starving wombats some food. Other measures will be longer term but the evidence is that wombat conservationists have to act immediately or risk losing the Murraylands population. We suggested that an alliance be formed and this was well received and a straw vote was taken to put an alliance in place to help save the wombats.

The forum decided that an action plan was needed with a draft research plan and management strategies put in place. A working group called Wombat Alliance was formed, consisting of Brigitte Stevens (Wombat Awareness Organisation), Lucy Woolford and Wayne Boardman (University of Adelaide) a representative from Natural History Society of South Australia and representatives from DENR and Natural Resource Management.

It was decided that the Wombat Alliance should produce an action plan and a draft research plan with management strategies for all to use.

These initiatives would then be presented to the rest of the interested parties at a follow-up meeting that will be called in the near future.

Mange Management Group

John Merrick

Early in 2011, Jenny Mattingley accompanied by Una Merrick attended the wombat conference in Albury where all things wombat were discussed in great length over a three-day time frame. It was at this time they became aware of the success the Wombat Protection Society was having in treating free-living mangy wombats using a burrow flap method.

Mange in wombats causes an extremely slow and agonizing death. Mange is not a disease but an infestation of the mange mite. Wombats, along with most other animals and humans, have no immunity to the mite and it is very contagious to other animals if they come in contact with it. Mange is caused by the mites burrowing under the skin causing intense itching and in humans it is called scabies. It is unknown where mange came from, maybe it was introduced by the dingo thousands of years ago or perhaps it came here via the early settlers as scabies, but generally it is thought to be spread by foxes or feral dogs who sometimes share or use wombat burrows.

Jenny and Una run wildlife shelters in their respective areas and between them have more than 50 years experience of looking after and raising wombats. Mange has been a concern for many years with really no way of treating it. Now at long last using the 'burrow flap method' wombats can be treated without taking them from their natural habitat. Wildlife shelters receive many phone calls from land owners and the general public indicating sightings of wombats appearing to show various stages of mange and wanting advice. At long last we have something positive to offer.

It was at this time that Jenny decided to contact a local Landcare group, initially to try to determine the extent of the problem. She gave some talks to various interested groups at local halls, and from these beginnings Jenny and her husband Reg decided to form the **Manage Management Group.** They were given help from the Wombat Protection Society, attended ethics committees and were eventually given the go-ahead by the various government and semi-government bodies. This is the first mange treatment program for wombats in Victoria.

In 2010 Una and I successfully treated a wombat for mange on an organic farm in Gippsland where the owners

Above: A badly affected wombat. Photo by Lorraine Pope

were more than happy to help in the cure process, which can take some months. A big female named 'Lexi' has now been mange-free for more than 18 months so we know a cure is achievable. We were also given help from the Wombat Protection Society using their ideas as they had been treating wombats for some years using the **burrow flap self-medicating device** and a product called Cydectin with positive results in effecting a cure.

What we know

1. Wombats infected with mange will die a very slow, agonizing death if left untreated.
2. We now know that wombats can be successfully cured by using the mitacide Cydectin and treatment can be carried out by people after attending a training workshop by the Mange Management Group. The treatment program can be done during daylight hours at weekly intervals in a time frame that is suitable for those carrying out the procedure.
3. The mange mite can survive for up to three weeks off the host so treatment needs to be carried out long enough to break the breeding cycle of the mite and to prevent reinfestation. The treatment period is around four months to achieve this.
4. The mange mite *Sarcoptes scabiei* is very contagious and care must be taken when dealing with an infested animal.
5. Not all animals can be cured as some are so badly infested and have secondary open wounds which would tell us that the kindest outcome would be to euthanize it.
6. A dead mange-infested wombat should be disposed of quickly to help prevent the spread of the mange by scavengers which will investigate or eat the body. Any animal that does this is very likely to become infested with the mite, thus re-starting or continuing the mange cycle.
7. Cydectin is safe for the animal and the environment.

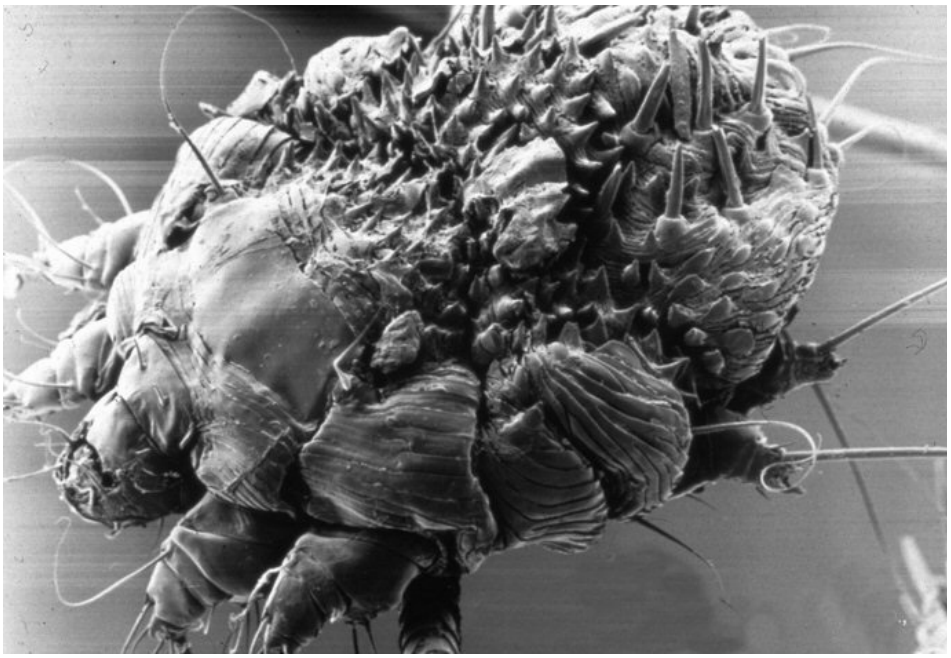
The **Maryknoll Wildlife Shelter** along with the **Mange Management Group** would like to hear from interested parties in Victoria who would like to learn more about how to help mangy wombats. If you would like someone to come and talk

Lexi at the start of treatment with onset of visible mange

to your group or maybe you would like to volunteer to help monitor a burrow by topping up the Cydectin once a week or do some mapping and collating information which will help develop programs and policies, this will involve some initial training sessions which will be supplied by the group.

The **Mange Management Group** have burrow flap kits available, which are free of charge. For further information on mange affecting wombats, or if you have questions on the program, please call:

Maryknoll Wildlife Shelter
(03) 5942 8518
Email: maryknoll@aapt.net.au
Website:
www.mangemanagement.org.au



The mange mite *Sarcoptes scabiei*

One of the many ways to locate a burrow flap

Roz and Kev and two of their wombat joeys

Cedar Creek Wombat Rescue

Robin Crisman

Roz and Kev Holme have been involved with wombats for about 30 years.

Roz was born and bred into wildlife rehabilitation, having been brought up around a variety of different animals that her parents rescued and raised. So she started rescuing, rehabilitating and raising native wildlife at an early age. As she got older, Roz realised how devastating sarcoptic mange was to wombats and decided to dedicate her life to helping these poor animals. She completed her Certificate IV in veterinary nursing to further her ability to help them.

They mainly deal with wombats that have been injured by car accidents and dog attacks or are very ill with mange. They have had great success rehabilitating and releasing many that would have been euthanized in the past. Roz has started putting together a fully equipped wombat hospital at Cedar Creek in order to provide the best treatment as quickly as possible. As the operation is continually growing and they are taking in more sick wombats that need intensive care, they are now looking for a site shed to house the large wombats better in a climate-controlled setting. When wombats are ill, it is very important to keep the temperature at an ideal level to allow them to get better faster.

Cedar Creek treats mange-affected bare-nosed wombats in the field over a very large area extending from the Central Coast through most of the Hunter Valley covering many square kilometres. This involves educating property owners about wombats and how to recognise when one is in trouble. It is very important for people to realise that a wombat is ill in the early stages of the disease so that it can be treated before it is too late. Roz and Kev teach them about normal wombat behaviour and let them know if they see a wombat during the day that it is likely to be sick and affected by mange. The wombats come out during daylight hours because they can't control their body temperature well and need the warmth of the sun. Wombats become very prone to predators and being


Roz putting up a motion activated infrared camera to monitor mange treatment with burrow flaps

struck by vehicles because their eyes and ears become crusted over with scabs. They become very ill from bacterial infections that enter through the cracks in the skin that the mange mites create.

They have been enlisted by NSW NPWS to treat the wombats in a large area of Yengo National Park in an attempt to preserve the population living there. They have installed burrow flaps that allow treatment of mange without having to catch the wombats, and have cameras monitoring the burrows to help assess the success of our treatment.

Roz and Kev have also been studying wombats with mange over many years using radio-tracking collars and found out a lot more about them this way. Wombats can travel over 50 kilometres at times and show behaviour patterns different from healthy ones.

Bare-nosed wombats tend to build burrows near waterways. This can be very disastrous, especially with all the rain that has occurred recently. Roz and Kev try to inspect burrows that may be flooded and excavate them if there are wombats trapped, and pump out water where possible. The mouth of the burrow can be lower than the tunnel, preventing escape when rains continue for days and water levels don't drop.

Roz using the radio tracking device to follow recovered wombats once released

Cedar Creek also educates farmers and other property owners about living in harmony with wombats, showing them how to install wombat gates and making areas around houses and buildings unattractive to wombats so they don't burrow under structures. Many people don't realise how intelligent and interesting wombats are so Roz and Kev try to teach them to appreciate what remarkable animals they are.

'Al' emaciated and suffering badly from mange and secondary skin infection getting much needed nutrition

'Marloo' another mange boy that was close to death, fully recovered and now released

'Al' after three weeks of treatment - on the road to recovery

Roz running anaesthesia on an injured wombat

A vulnerable animal

Suzanne Medway

At first the listing of the koala as vulnerable under the EPBC Act by the federal Minister for the Environment was welcomed by conservation groups, but on further reflection it is very disappointing that the koalas in Victoria have been left unprotected.

It is disheartening to discover that the minister accepted applications from farmers in Victoria on the grounds that koalas are 'eating them out of house and home'. There is scientific evidence collected by the Australian Koala Foundation that shows the koalas in Victoria have the same decline curve as koalas in other parts of the country.

The minister has said:

'My decision to list the koala under national environment law follows a rigorous scientific assessment by the Threatened Species Scientific Committee which gathered information from a variety of experts over the past three years. However, koala numbers vary significantly across the country, so while koala populations are clearly declining in some areas, there are large, stable or even increasing populations in other areas. In fact, in some areas in Victoria and South Australia, koalas are eating themselves out of suitable foraging habitat and their numbers need to be managed. But the Queensland, New South Wales and Australian Capital Territory koala populations are very clearly in trouble, so we must take action. That is why the scientific committee recommended to me to list the Queensland, New South Wales and Australian Capital Territory populations as threatened, rather than to list the koala as nationally threatened across its full range.'

Under the new listing of the koala as vulnerable, how will the conservation law be affected when the koala is still listed as common in Victoria? Will this be able to over-ride existing projects that are destined to diminish koala habitats? Will the Koala Coast population, which is now 'functionally extinct', have any chance with a listing like this? This is a battle that is still to be fought.

The minister's decision is based on the government's belief that there are 200,000 koalas in Australia – a figure nearly double what the Australian Koala Foundation estimates.

It has also been announced that the federal government has committed $300,000 of new funding under the National Environmental Research Program Emerging Priorities to find out more about koala habitat. 'This funding will be used to develop new survey methods that will improve knowledge of the quality of koala habitat using remote sensing, and help fill important data gaps to enhance understanding and ability to protect the species,' Mr Burke said. 'The new funding is in addition to more than $3 million we have invested since 2007 to ensure the resilience and sustainability of our koala population.'

When a species is listed as vulnerable, there has to be funds made available for a recovery plan. It is of concern that a recovery plan for the koala at the federal level has not been announced.

The Wildlife Preservation Society of Australia has been fighting to protect

the koala since they were being shot for their fur in the early 1900s. Since that time koala numbers have decreased dramatically across Australia. It is sad that those agencies charged with protecting our native wildlife are slow to act and must continue to be 'pushed' by groups such as the Wildlife Preservation Society of Australia and the Australian Koala Foundation.

The preservation of the koala and the re-establishment of the animal in at least some of its native haunts in the eastern states of Australia were among the major objectives of the society since its inception in 1909. The society was successful in obtaining official protection for the koala, first in 1911 and 1912, in New South Wales.

David Stead always insisted that 'koala' should be pronounced 'k'ola'; he also frequently referred to it as the 'native bear', which of course is a misnomer as the koala is not a bear.

Although the battle to save the koala began as early as 1909, action was still being taken in the 1920s and 1930s.

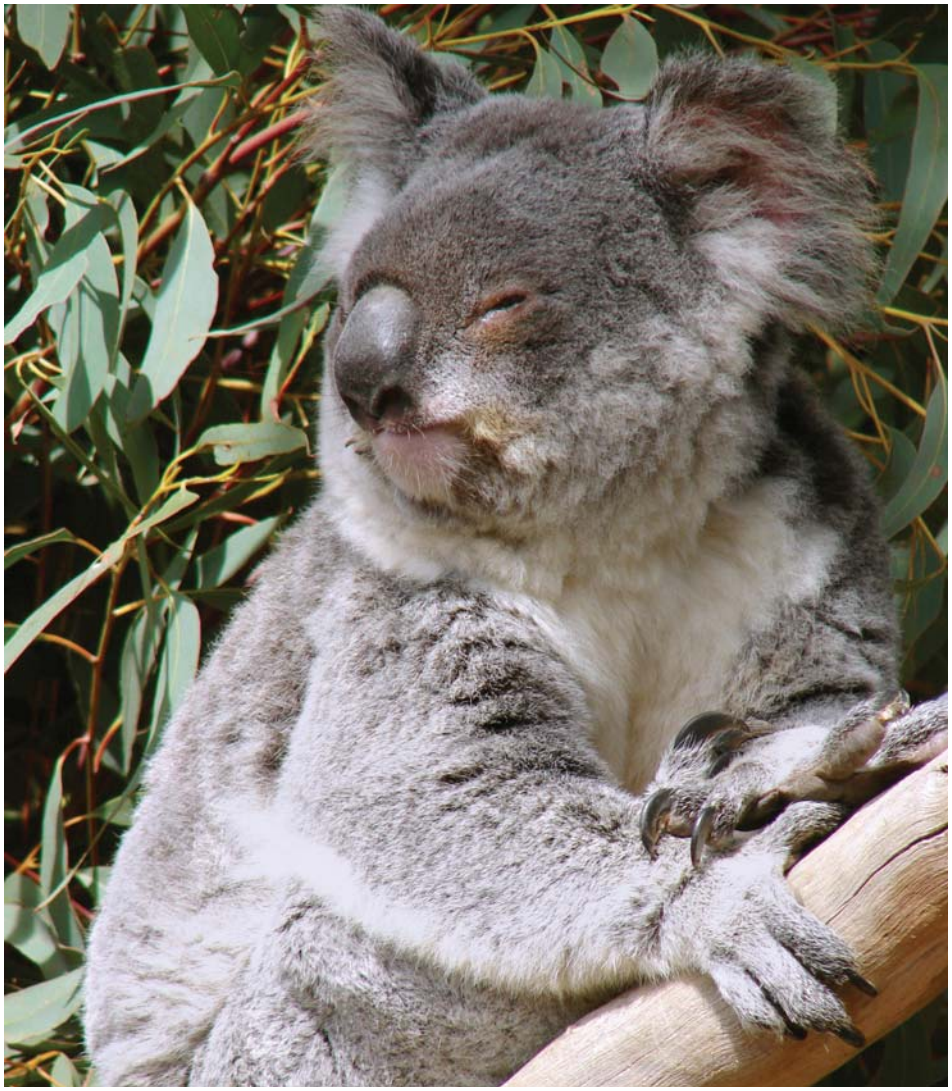
The Story of the Great Slaughter was the heading to an article by David Stead accompanying the Annual Report for the year 1927. In 1927 the Queensland Government declared an open season of one month during which the koala could be killed for its skin. No less than 584,738 koalas were actually recorded as being killed during that time, although many of the skins would have been collected earlier, in expectation of a new open season. Although the koala had been protected in Queensland by law from 1919, by 1927 there was an illicit accumulation of hundreds of thousands of koala skins. During that declared open season of one month, the dealers were able to openly sell and export their myriad bales of skins. Also, there was over the years a considerable export of 'wombat' skins from the port of Sydney. No woman would want to wear a coarse wombat skin and as suspected the so-called wombat skins were in fact koala skins. Probably about 2,500,000 skins had been sent out of Australia in this way.

At a meeting of the executive of the Wild Life Preservation Society of Australia on 5 September 1927 it was decided to appeal to the Prime Minister to enforce the *Federal Proclamation of 1923*, which prohibited the exportation from the Commonwealth of the skins of native animals 'unless the consent, in writing, of the Minister of State for Trade and Customs has first been obtained'. The Society was not aware, however, that permission to export koala skins had been granted by the Minister (Hon. Herbert Pratten) as early as 13 August 1927, understandably the fact that this permission had been granted was not publicised. In the Wild Life Preservation Society of Australia's Annual Report for the year 1927-28, page 4, is an extract from a letter written by D. G. Stead to the Prime Minister of Australia, Hon. S. M. Bruce, dated 8 September 1927. 'In effect,' he contended, 'it was simply an invitation to the dealers to get their stock of skins out as quickly as possible and even to add to them in the meantime'.

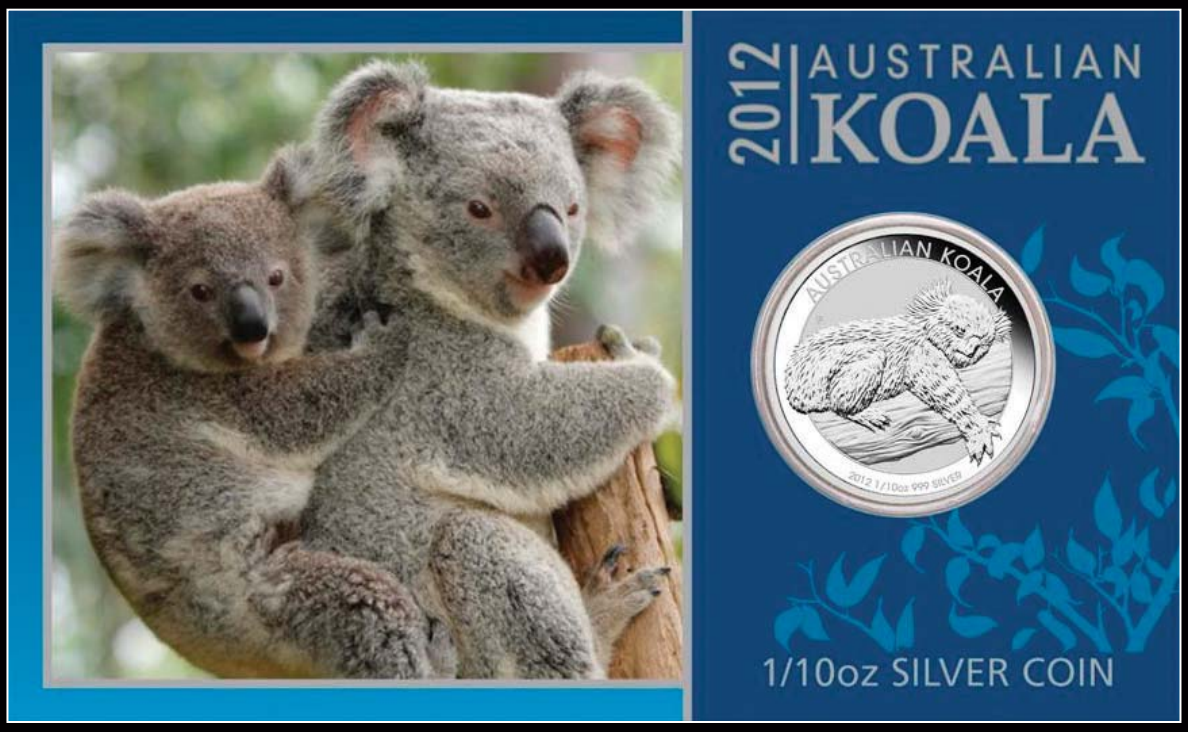
In 1930, the Wild Life Preservation Society of Australia, under David Stead's presidency, informed the United States President, Herbert C. Hoover, that koala skins, usually labelled 'wombat', were still being imported into North America and implored him to prohibit the importation of both koala and wombat skins into the United States. Hoover acceded to this request and, in doing so, effectively brought to an end the export of koala fur under the guise of other species. This action, perhaps more than any other, ensured that the koala was given some hope of survival. In 1933, Australia's federal government showed its support for state government initiatives in koala conservation by passing laws.

In his article, *The Story of the Great Slaughter,* David Stead claimed full credit for the Society in this matter of the koala:

'There appears to be no doubt now that had it not been for the ultimate action taken by this Society, the abominable traffic in koala skins might have gone on indefinitely - all skins exported being 'traced' to the one short open season of one month, and the experience of several years ago (in the case of the export of the alleged wombat skins) would have gone on and on till the last poor koala had made his final bow to the world.'



Australian koala silver bullion coin



The Perth Mint has released a new coin featuring one of Australia's favourite iconic native wildlife – the koala.

Struck from 1/10oz of 99.9% pure silver, the coin is issued as legal tender under the Australian Currency Act 1965, the undisputed guarantee of its weight and purity.

The 2012 silver koala is struck on a 'mint-to-order' basis only.

The reverse design depicts a charming image of a cuddly adult koala resting on the branch of a eucalyptus tree and incorporates The Perth Mint's 'P' mintmark, 2012 year-date and coin specifications. Delicate frosting graces the table of this coin.

The coin's obverse bears the Ian Rank-Broadley effigy of Her Majesty Queen Elizabeth II and the inscriptions 'AUSTRALIA' and '1 DOLLAR'.

For more details visit: http://www.perthmint.com.au/koalas

Members' competition

If you would like the chance to win one of five valuable koala coins, write a paragraph that we can send to the federal minister for the environment saying why the koala should be listed as vulnerable in Victoria.

Entries are available to financial members and can be emailed to: info@wpsa.org.au or posted to:

WPSA
PO Box 42
BRIGHTON LE SANDS NSW 2216

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.

WILDLIFE PRESERVATION SOCIETY AUSTRALIA

Celebrating a new century
Founded in 1909

Your Details

Name: Dr / Mr / Ms / Mrs / Miss

Address:

State: Postcode:

Phone: Home Work

Email:

☐ I want to join the Friend's 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/s Date

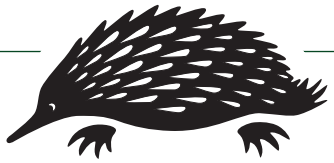
This authorisation is to remain in force until cancelled by the donor and in accordance with the terms described in the Agreement below.

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: $50
- ☐ Family: $65
- ☐ Concession (pensioner/student/child): $45
- ☐ E-mag (emailed as PDF, no hardcopy will be sent): $25
- ☐ Associate (library, school, conservation groups): $80
- ☐ Corporate: $120
- ☐ Life: $1,000

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

Three year membership (please tick)

- ☐ Individual: $135
- ☐ Family: $175
- ☐ Concession (pensioner/student/child): $120
- ☐ E-mag (emailed as PDF, no hardcopy will be sent): $68
- ☐ Associate (library, school, conservation groups): $215
- ☐ Corporate: $325

(Includes postage within Australia. Add $100 for overseas postage)

Payment details (please tick)

☐ Cheque ☐ Money Order ☐ Mastercard ☐ Visa Card Security Code (CSC) __ __ __ __

Card Number: |_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|_|

Name on Card: .....Expiry:.....

Signature:.....

Amount $.....

Donation $.....

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

Australia's Winged Wonders Photography by Trevor Andersen

Blue-billed duck (*Oxyura australis*)

Plumed whistling ducks (*Dendrocygna eytoni*) in flight

Pink-eared duck (*Malacorhynchus membranaceus*)

Osprey (*Pandion haliaetus*). Osprey male descending onto his partner for mating ritual

Australian pelican (*Pelecanus conspicillatus*)