

Saving Australia's threatened wildlife





Welcome to the Spring 2013 edition of Wildlife Matters.

In August 2013, a Federal Senate Committee handed down its report on a major inquiry into the Effectiveness of threatened species and ecological communities' protection in Australia. The Committee comprised Senators from the Liberal and National parties, the Labor party and the Greens. The Committee report and many submissions to the Committee highlight the overall failure of Government programs and strategies over the last 20 years to reverse the tide of extinctions in Australia. As one submission from the Wentworth Group of Concerned Scientists states '[we] have had 20 or 30 years of strategy-writing and weasel words...To have 1,790 listed species in Australia in 2013, which is about the same number as we had 20 years ago, suggests it has been a complete failure'.

However, the Committee did find some cause for optimism, particularly in relation to the on-ground actions of private (non-profit) conservation and community groups. The Committee report states:

'One of the most heartening success stories received by the committee was from the Australian Wildlife Conservancy...'

'The committee particularly commends the work of the Australian Wildlife Conservancy and its impressive record of successful management of areas protecting a large number of threatened species, as well as its success in achieving substantial increases in the numbers of several nationally threatened species.'

This is important recognition from a cross-party Federal Senate Committee that AWC has, over the last decade, succeeded in developing an effective new model for conservation. Some of the key elements of our model are outlined on page 15 of this edition of Wildlife Matters. They include:

- Almost 80% of our staff are based in the field, delivering fire management, feral animal control and other practical, on-ground measures.
- In 2012/13, only 17% of our operating expenditure was incurred on fundraising and administration combined (this is less than half of the proportion spent on fundraising and administration by most comparable organisations in Australia).
- Our focus is on delivering measurable outcomes e.g. increases in the population of Bilbies, Banded Hare-wallabies and other priority species; improvements in sciencebased metrics related to fire management, feral animal control, etc.

As you will read in this edition of Wildlife Matters, we are demonstrating practical leadership in relation to feral animal control (establishing the three largest feral herbivorefree areas on the mainland – see pages 9-11); fire management (read about our regional fire management program in Queensland on page 12); and in the conservation of endangered species (see pages 6-7). I hope all of our supporters feel a sense of ownership of AWC's achievements and their recognition by the Senate Committee. However, there is still a great deal to be done if we are to reverse the decline in Australia's natural capital. Your continued support is important in helping AWC maintain and build on our record of delivering an exceptional ecological return across Australia.

Thank you for your support.

Atticus Fleming Chief Executive

The AWC mission

The mission of Australian Wildlife Conservancy (AWC) is the effective conservation of all Australian animal species and the habitats in which they live. To achieve this mission, our actions are focused on:

- Establishing a network of sanctuaries which protect threatened wildlife and ecosystems: AWC now manages 23 sanctuaries covering over 3 million hectares (7.4 million acres).
- Implementing practical, on-ground conservation programs to protect the wildlife at our sanctuaries: these programs include feral animal control, fire management and the translocation of endangered species.
- Conducting (either alone or in collaboration with other organisations) scientific research that will help address the key threats to our native wildlife.
- Hosting visitor programs at our sanctuaries for the purpose of education and promoting awareness of the plight of Australia's wildlife.

About AWC

- AWC is an independent, non-profit organisation based in Perth, Western Australia. Donations to AWC are tax deductible.
- Over the last ten years, around 88% of AWC's total expenditure was incurred on conservation programs, including land acquisition, while only 12% was allocated to development (fundraising) and administration.

Australian Wildlife Conservancy

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Cover image: Rough-scaled Python A. Hartshorne

Biological discoveries



Rough-scaled Python at Artesian Range A. Hartshorne

Cape York Free-tailed Bat at Piccaninny Plains T. Reardon

One of the distinguishing features of AWC's approach to conservation is the role of science: approximately 25% of our staff are field ecologists who, along with a team of interns and volunteers, undertake a remarkable 100,000 trap nights every year around Australia. This science program is carefully designed to measure the ecological health of our properties over time. It also incorporates an inventory component, which is generating exciting biological discoveries across the AWC estate.

Rough-scaled Pythons in the Artesian Range

The elusive Rough-scaled Python vies with species such as the Boelen's Python in Papua New Guinea for the title of the world's rarest python. First discovered in 1973, the Rough-scaled Python is so rarely seen in the wild that there are only ten records in the WA Museum database. It is confined to a remote and largely unexplored section of the north-west Kimberley.

Since AWC established the Artesian Range Wildlife Sanctuary, our scientists have spent many nights exploring its escarpments and rainforest gullies searching for this iconic snake. Growing up to two metres long and preying on mammals and birds, the Rough-scaled Python was finally discovered by chance in mid-2013 by a team radio-tracking Scaly-tailed Possums. This discovery extends the known range of the species by almost 100 kilometres and confirms the Artesian Range as a hotspot for Australia's reptiles, as well as small mammals.

Undescribed bat species at Piccaninny Plains

Cape York is a particularly exciting place for any scientist who is passionate about bats... and that includes many AWC field ecologists! Our recent biological surveys at Piccaninny Plains, located in the heart of northern Cape York, have revealed several exciting discoveries:

- Individuals of an undescribed bat species the Cape York Free-tailed Bat – have been captured at a large lagoon on the Archer River floodplain. Previously known from only 11 records, this species is so new to science that it is still in the process of being formally described by one of Australia's leading bat experts, Dr Terry Reardon (South Australian Museum).
- Gould's Wattled Bats have been recorded on several occasions from near the homestead. These records are significant because they represent the most northerly records in Australia for this species.
- There have been several records of the Papuan Sheath-tailed Bat, which is very rarely recorded in Australia.

A new gecko species at Wongalara?

In August 2013, during our annual biological survey at Wongalara (on the edge of Arnhem Land), AWC ecologists discovered a gecko that does not match any known species, with different patterning and other qualitative differences such as the number of toe pads. DNA samples were sent to the Australian National University. While it is genetically different to any known species, further analysis is required before determining whether it is a new species or a different form of an existing species. Whatever the outcome of this analysis, the new gecko is an exciting addition to the Wongalara inventory.



Gecko at Wongalara I. Bleach

Unlocking the secrets of the Artesian Range and its endangered wildlife



A radio-collared Golden-backed Tree-rat A. Hartshorne

Located in the far north-west of the continent, adjacent to the Kimberly coast, the Artesian Range is a 'lost world' of rugged sandstone ranges dissected by deep rainforest-filled gorges. Bounded to the north by the Charnley River, the Artesian Range features tall escarpments, tropical woodlands, palm forests and a network of spectacular waterfalls and rocky pools. Largely inaccessible and extremely rugged, the Artesian Range is the only part of Australia's tropical savannas that has suffered no extinctions since European settlement. It now provides a last refuge for many of Australia's rarest mammals including the Golden-backed Tree-rat, which has disappeared from over 90% of its original range including Kakadu National Park.



Rosie (far right) with assistants (Alex, Hannah) in the Artesian Range Wildlife Sanctuary

Scaly-tailed Possum A. Hartshorne

Why have the endangered mammals of northern Australia survived in the Artesian Range even when they have disappeared elsewhere? This vitally important question is being addressed by Rosie Hohnen, as part of her PhD research in the Artesian Range. A year after commencing her work, Rosie provides an insight into a typical day in one of Australia's most remote and challenging environments.

We've just finished setting the last traps of the day and dusk has fallen. It's been raining for about three days now, sometimes steady, sometimes light, but a constant patter that's causing little rivulets of water to flow along the rock and into our precious dry space. We cook up some dinner and turn the stove off to hear the sound of the river roaring. It's risen over a metre and a half since we got back to camp and deep standing waves have formed in its centre, washing up drifts of thick debris onto the banks.

We're almost a week into our second two month field trip out in this remote pocket of the north-west Kimberley, trapping and tracking two poorly understood and declining species: the Scaly-tailed Possum and Golden-backed Tree-rat. We aim to understand why they persist here, when they've declined so extensively elsewhere.

During this field trip we're deploying transmitting collars on possums and tree-rats to examine how individuals use the diverse habitats of the range, including rainforest refuges and areas of the savanna burnt by recent late dry season fires. Particular habitat types and vegetation ages may be important resources for these species, and by identifying and conserving these resources we can support their survival here and perhaps their recovery elsewhere.



Rosie's research is the first detailed study of the Scaly-tailed Possum A. Hartshorne

But to learn anything about these animals we've got to catch a few, so before the birds awake, we get up and stumble off by the light of our head torches, through the rainforest and back up onto the escarpment, checking traps as we go. Below an old gnarled fig a female tree-rat peers out of a trap. We work quickly to get her into a bag and the transmitting collar on before we let her go, and watch her long tail disappear into the night. She's one of five tree-rats and five possums we've collared on this trip, whose lives we'll follow over the next two weeks.

As dawn approaches, we finish up and make our way back to camp. The water of the swollen river has turned the colour of coffee and though it's still roaring, the lines on the sand show that slowly the water level is starting to drop. It's a relief to know we won't have to move to higher ground, at least not today. After some breakfast and a strong cup of tea we gather up our tracking gear and set off to find where our tree-rats and possums have decided to den after a busy night's foraging.

Our lady rat we met this morning is in the hollow of an old, tall rainforest tree. The use of hollows in big, old trees by treerats gives us clues as to another potential cause of this species' demise, as both rainforest patches and hollow bearing trees are declining in parts of northern Australia. As the day moves on and the heat makes the rocks steam, we find all our collared animals before some lunch and a kip in the afternoon shade.

After dinner we head out again to see which habitats the possums and tree-rats are using during the night. It's pitch dark and the rain has encouraged swarms of insects to hatch, which fly into our eyes and ears, attracted to the strong light of the head torches. We walk quickly towards the mouth of the gully

and start tuning into the frequencies of the transmitting collars to see if our animals are in the area. Nearby on the beach we find our lady tree-rat foraging in huge piles of debris thick with seeds and nuts washed in from upstream. The proximity of her den site to the river means she's been able to begin taking advantage of this food resource in less than a day.

Increasingly it is apparent that the complexity and proximity of different habitat types in the Artesian Range allows individuals to access sudden bursts in resources that are sometimes found in only one habitat type. High habitat complexity may also encourage the persistence of these species in an area after some resources have been removed, such as after late dry season fires. Our lady rat isn't giving too much away tonight and, after a brief sniff in our direction, she takes off into the scree; but the data we collect from her and our other collared animals will provide vital information about why the Artesian Range is such an important refuge for our endangered wildlife.



The Golden-backed Tree-rat is a nationally threatened species A. Hartshorne

Saving the Banded Hare-wallaby



30 Banded Hare-wallabies were released on Faure Island W. Lawler

As dusk settled over AWC's world heritage listed Faure Island on a calm evening in late September, a team of field ecologists carefully transported 30 Banded Hare-wallabies to release sites in dense shrubby vegetation on the feral predator-free island. This carefully planned operation represents another step in saving one of Australia's most endangered mammals from extinction.

The Banded Hare-wallaby has been extinct on mainland Australia for almost a century. The story of its catastrophic demise is typical of many Australian mammals. Once widespread through the WA wheatbelt and into the Nullabor, it was driven to extinction on the mainland as a result of predation by foxes and feral cats, combined with competition from feral herbivores and habitat loss. It is now confined to populations on three feral predator-free islands in Shark Bay: Bernier and Dorre Islands, managed by the WA Department of Parks and Wildlife (DPaW), and AWC's Faure Island.

For its continued survival, the Banded Hare-wallaby will rely on the maintenance of fox and cat-free areas. This includes the three islands in Shark Bay and, in future, large fenced areas on the mainland (such as our proposed feral-free area at Mt Gibson). Our September translocation of an additional 30 animals is a significant boost to the Faure Island population, which currently stands at less than one hundred animals.

The translocation and release was a tightly choreographed operation. The Banded Hare-wallabies were airlifted to Faure from DPaW's Peron captive breeding centre on the mainland, subjected to a final health check and then released within 24 hours in three groups of ten animals at designated locations on the island. Many of the animals were feeding within minutes of being released – a good indication that the animals were relaxed and will adapt quickly to their new home.

In addition to increasing the size of the Faure Island population, the translocation has been structured to provide valuable information

- 25 of the wallabies have been fitted with radio-collars, including five with GPS collars. Collared animals are being radio-tracked intensively in the first two weeks after release: multiple location records will be obtained for each animal each night and animals will be tracked to daytime shelters.
- GPS tracking will enable detailed monitoring of activity patterns of five Hare-wallabies for up to 12 months.
- 36 camera traps have been set out in grids to monitor the released animals.

This detailed monitoring will provide valuable new information about the ecology and behaviour of the Banded Hare-wallaby, which will guide management of the species and its habitat and help shape the design of future translocations to places like Mt Gibson



A Banded Hare-wallaby on Faure Island W. Lawler



Fitting a radio-collar to a Banded Hare-wallaby prior to release W. Lawler



Radio-tracking the Banded Hare-wallabies on Faure Island W. Lawler



AWC acknowledges the support of our partner, the WA Department of Parks and Wildlife.

Historic return of the Water Rat



A Water Rat being released at Karakamia Perth Zoo

AWC has joined forces with Perth Zoo, the WA Department of Parks and Wildlife and Whiteman Park to conduct Australia's first reintroduction of the native Water Rat. Three Water Rats have been released at Karakamia Wildlife Sanctuary, with a further two animals scheduled for release in the next few months.

The Water Rat is Australian's largest rodent, weighing around 1-1.3 kilograms. Like otters found elsewhere around the world, the Water Rat is well adapted to a semi-aquatic lifestyle, with broad, partly-webbed hind feet, a flattened head, small eyes and ears, long whiskers and thick, waterproof fur.

Although still widespread in eastern Australia, the Water Rat is now extinct in the wheatbelt of WA. Loss of its freshwater habitat through clearing, diversion of water and pollution combined with the impact of feral predators – are key factors in the demise of the Water Rat in the southwest. The reintroduction of the species to Karakamia, only 50 kilometres from Perth, is the first step in a plan to reverse this decline by re-establishing secure populations on the Swan Coastal Plain and adjacent Darling Scarp.

Karakamia (275 hectares) contains a mosaic of habitats dominated by Jarrah forest and Marri and Wandoo woodland. It was identified as an ideal reintroduction site because:

- It contains good riparian habitat with a variety of freshwater species (good prey species for Water Rat).
- It is fox and cat-free, being surrounded by a feral-proof
- Historic records show the Water Rat once inhabited Karakamia.

The Water Rat is the sixth species to be reintroduced to Karakamia. It is an important reintroduction because it is a top order predator: it will therefore play a key role in maintaining the health of freshwater ecosystems within Karakamia.

A camera trap image of a Water Rat using an artificial burrow

The release itself went smoothly. All three Water Rats (two females and a male) were released at dusk and immediately made use of the artificial burrows prepared for them. Since the release, the camera traps we are using to monitor their activity suggest the Water Rats are active most of the night and have found natural shelter to supplement or replace the artificial burrows. Significantly, the camera traps have also revealed we may soon be hearing the pitter patter of tiny Water Rat feet, with several mating attempts captured on film – a promising sign for the long term future of the Water Rat at Karakamia and the region.

Mt Gibson update

As this edition of Wildlife Matters goes to press, AWC has commenced work establishing the largest fox and cat-free area on mainland Western Australia. Over 43 kilometres of special purpose feral-proof fencing is being constructed at Mt Gibson. The feral-free area will be more than 7,500 hectares. Nine nationally threatened mammals will be reintroduced including Bilbies, Numbats, Woylies and Banded Hare-wallabies. For more information, visit http://www.australianwildlife.org/AWC-Sanctuaries/Mt-Gibson-Sanctuary.



Woylie W. Lawler

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Establishing Australia's three largest feral herbivore-free areas



AWC's Chris Whatley, Wongalara Sanctuary Manager, with the feral herbivore fence which extends for over 130kms W. Lawler

As regular readers of Wildlife Matters will know, there has been a catastrophic recent decline in small mammal populations across northern Australia, including in large national parks such as Kakadu National Park. This wave of regional extinctions is being driven by a combination of factors including predation by feral cats, the impact of feral herbivores and altered fire regimes. AWC is leading the way in delivering practical, on-ground action to address each of these threats. In this article, we provide an update on our efforts to create the three largest feral herbivore-free areas on mainland Australia.

AWC scientists are at the forefront of efforts to identify the precise role of cats, feral herbivores and altered fire regimes – and the way in which these processes interact – to drive mammal declines. While there are still significant gaps in our knowledge, it is clear that reducing the density of feral herbivores will be a key element in any strategy to halt and reverse the decline of small mammals.

The impact of feral herbivores

Large introduced herbivores (feral cattle, horses, donkeys, buffalo) are ubiquitous across northern Australia, even in conservation areas. For example, there are an estimated five million feral donkeys in Australia. Trampling and grazing by feral herbivores can change the floristic and structural characteristics of the ground, shrub and tree layer in ways that reduce cover and food resources for native mammals. These impacts are particularly concentrated in key habitats like creekside vegetation, soaks and wetlands, which are also important habitats for small mammals. Feral herbivores also make it easier for feral cats to hunt by reducing groundcover and exacerbate the impact of fires by grazing preferentially on post-fire vegetation.

Removing feral herbivores across northern Australia

AWC is implementing a dedicated program of feral herbivore control across northern Australia which involves establishing massive feral herbivore-free areas in three key regions: the Kimberley, the Top End and the Gulf. At each site, the large-scale removal of feral herbivores is being combined with an integrated research program which examines the effects of destocking on small mammals and other fauna, taking into account different fire histories.

At **Mornington** in the central Kimberley, AWC has established a feral herbivore-free area of nearly 50,000 hectares. The area has been effectively feral-free for nearly eight years. Within this area, the abundance and diversity of small mammals



Pungalina-Seven Emu is a stronghold for the endangered Carpentarian Pseudantechinus W. Lawler

AWC's Chris Whatley removing buffalo at Wongalara H. Whatley

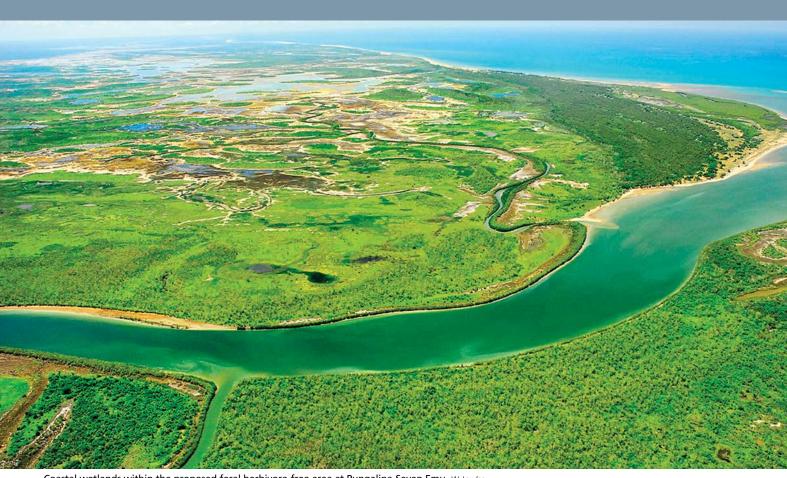
doubled after destocking. The population of species like the Pale Field Rat – which has declined across most of its northern Australian range – increased significantly. Over time, we have been able to also tease apart the interaction between feral animal control and fire management. Our results show that reducing the frequency of wildfires will support small mammal recovery only if accompanied by feral herbivore control. This has enormous implications for land management: investment in fire management will not deliver a positive return (in terms of small mammal populations) unless there is also sufficient investment in the removal of feral cattle, horses, donkeys and buffalo.

Our next major investment in feral herbivore removal was at **Wongalara**. During 2012, we completed a fence which, combined with some topographic features (escarpments), created a 100,000 hectare feral herbivore-free area. This is the largest feral herbivore-free area on mainland Australia. Over 1,000 donkeys, horses, cattle and buffalo were removed from within the Wongalara fenced area. Located adjacent to Arnhem Land and around 100 kilometres from Kakadu, Wongalara provides an opportunity for AWC to test whether we can replicate, in a different region and climate, the increase in small mammals which occurred at Mornington. Feral herbivores have occurred in higher densities and for longer in the Top End than in the Kimberley, which may mean any small mammal response to our exclusion of feral herbivores at Wongalara is more limited, or is slower, than the return we generated at Mornington.

Our next priority is to establish an 80,000 hectare feral herbivore-free area at **Pungalina-Seven Emu**. This area will incorporate approximately 50 kilometres of the Gulf of Carpentaria coastline. It will be the only stretch of coastline on the Gulf of Carpentaria that is free of feral horses, cattle and donkeys. As such, it is a project of national significance protecting a mosaic of critical habitats: patches of dry rainforest, a series of coastal wetlands, riparian habitats along the Calvert River and diverse tropical woodlands that link the vast coastal plain with the rugged sandstone escarpment of the interior. Within this area, a number of small mammals, such as Northern Brown Bandicoots and Pale Field Rats, have survived despite declining across most of their range in the Northern Territory. Of particular significance, Pungalina is one of only a very small number of mainland sites where the endangered Carpentarian Pseudantechinus has been recorded.

The establishment of the Pungalina-Seven Emu feral herbivorefree area, scheduled for the first half of 2014, will require the construction of over 40 kilometres of fencing along the Seven Emu coast and then up into the escarpment on Pungalina. Following completion of the fence, an intensive mustering and feral animal control program will be carried out.

Thank you to all of our supporters who contributed to the establishment of the Wongalara feral herbivore-free area. A special thank you is extended to **The Nature Conservancy** and the **Thomas Foundation**, who contributed to both the acquisition of Wongalara and our Northern Mammal Program, and to the **John T Reid Charitable Trusts**, the **Erica Foundation** and the **Federal Government's Biodiversity Fund**.



Coastal wetlands within the proposed feral herbivore-free area at Pungalina-Seven Emu W. Lawler



WE NEED YOUR HELP

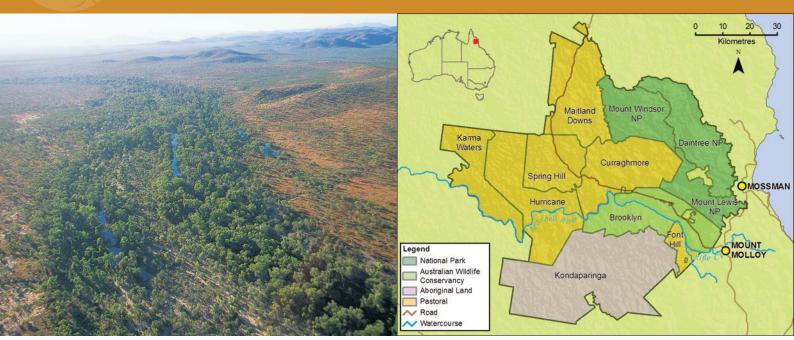
We need your help to build the Pungalina-Seven Emu fence and then remove feral cattle, horses, donkeys and pigs from within the fenced area.

The total cost to establish the feral herbivore-free area is estimated at \$400,000 or \$5 per hectare.

Every deductible gift of \$100 will therefore fund the removal of feral herbivores from 20 hectares along the Gulf of Carpentaria coast.

To make a donation, please see the enclosed form or the back cover of Wildlife Matters.

Brooklyn regional fire management



The Mitchell River on Brooklyn Wildlife Sanctuary R. Woldendorp

The development of an integrated, regional approach to fire management in the Upper Mitchell River catchment is a ground-breaking step towards improving biodiversity outcomes and pastoral productivity across an area of more than 600,000 hectares in far north Queensland.

Fire patterns across northern Australia have changed substantially over recent decades. Changes in land use mean that much of our tropical savannas are now dominated by extensive wildfires in the late dry season. Individual fires can burn over one million hectares. This increase in extensive, intense fires has had severe impacts on biodiversity and pastoral productivity. In terms of biodiversity, altered fire regimes are a key factor in the decline of seed-eating birds as well as small mammals which rely on ground cover for food and shelter. For pastoralists, extensive fires reduce the grass available for cattle, impair long-term pasture quality and damage infrastructure.

Given the scale of fires in northern Australia, a regional approach represents the most effective strategy for managing fire. For several years, AWC has pioneered such a regional approach by implementing the EcoFire project in the central Kimberley. This is the largest non-government fire management program in Australia. It involves AWC delivering prescribed burning across four million hectares (13 properties) in collaboration with pastoralists, indigenous communities and government agencies. The results have been exceptional: for example, we have halved the area burnt annually in wildfires and we have doubled the area of 'old growth' vegetation (i.e. patches that have not burnt for three years). EcoFire has won WA's top environmental award.

This year, AWC has initiated a similar regional approach around Brooklyn Wildlife Sanctuary in north Queensland. Covering 60,000 hectares, Brooklyn is probably the most biodiverse parcel of private land in Australia: it protects over 300 bird species, 85 mammal species and 1,300 plant species. It straddles an extraordinary gradient from high altitude, world heritage listed rainforest to the savanna woodlands of the Mitchell River valley.

From our base at Brooklyn, AWC is coordinating the Upper Mitchell River Catchment Regional Fire Group. Collaboration within this group has seen the development of a regional fire program covering over 600,000 hectares and involving:

- Six pastoral properties;
- One large indigenous-owned pastoral property;
- Three national parks; and
- Brooklyn Wildlife Sanctuary.

The Upper Mitchell regional fire program for 2013 included a combination of aerial-incendiary operations, graded fire-breaks and ground burning. On Brooklyn itself, aerial incendiary operations involved flying more than 300 kilometres and dropping more than 1,000 incendiaries.

As with EcoFire, we will use a range of ecologically-based fire pattern metrics to evaluate the success of the Upper Mitchell Catchment program. These will include measures of the area burnt in late season wildfires and measures of the 'patchiness' of fire patterns. The ultimate measures of success, however, will include increases in the populations of species that depend on a healthy grass layer - like button-quails, finches, pigeons, and native mammals – as well as an increase in pastoral productivity.

Bringing back the Bush Stone-curlew



Bush Stone-curlew W. Lawler

In late 2013, AWC will take a critical step towards providing a more secure future for the iconic Bush Stonecurlew with historic reintroductions at Scotia Wildlife Sanctuary (NSW) and Yookamurra (SA).

If you have camped in northern Australia, you are probably familiar with the banshee-like call of the Bush Stone-curlew. Sadly, however, that call is no longer heard in many areas of southern Australia. Most of the surviving population of the Bush Stone-curlew, estimated at 15,000 breeding pairs, occurs across our north. As few as 1,000 breeding pairs now occur in scattered locations across NSW, where it is listed as Endangered.

Bush Stone-curlew were once found in flocks of hundreds in the pastoral zones of southern Australia. However, the impact of foxes and cats, combined with loss of habitat, has driven the dramatic decline in populations in NSW, SA and Victoria. The nocturnal Curlew, which stands around 50 – 58 cm tall, is particularly vulnerable to foxes and cats because it spends so much time on the ground – foraging, nesting and roosting.

Scotia and Yookamurra have been chosen as sites for the reintroduction of the Bush Stone-curlew because they contain excellent habitat for the species and, most importantly, they contain large fox and cat-free areas. Scotia includes the largest (8,000 ha) fox and cat-free area on mainland Australia while Yookamurra includes a feral-free area of **1,100 ha**. As regular readers of *Wildlife Matters* will know, these

Bush Stone-curlew on Yookamurra N. Riessen

fenced feral predator-free areas protect some of the largest wild populations of several mammal species including Bilbies and Bridled Nailtail Wallabies. They are now set to play a key role in reversing the southern decline of the Bush Stone-curlew.

Twenty birds are proposed for release at Scotia, with 12 birds to be released at Yookamurra. At Scotia, 10 birds will be released within the feral predator-free area. Another 10 birds will be released outside this fenced area into habitat which is subject to intensive feral predator control. In each case, AWC field ecologists will undertake detailed post-release monitoring - this will allow us to compare the results in a feral predatorfree environment with the results in a feral predator-controlled (low density) environment. The reintroduction therefore has an important scientific research component, helping us identify and refine strategies that can be employed in reversing the decline of species like the Curlew across the broader landscape.

The birds, which are now on-site adjusting to their new surroundings in purpose-built aviaries, have been sourced from a range of partners including Perth Zoo, Serendip Sanctuary and the Lubke Captive Breeding Centre. Our field ecologists have had to play match-maker, grouping birds in a way that maximises genetic diversity. The final release will occur in October or November. For our staff at Scotia and Yookamurra, the nighttime silence will once again be broken by the mournful wee-loo call of the Bush Stone-curlew.

Extending our partnership with Perth Zoo



Perth Zoo has a long and proud history of supporting conservation in the field. Through their Wildlife Conservation Action program, Perth Zoo has provided significant support to help AWC implement projects which:

- Enhance protection for Woylies at Karakamia;
- Increase the population of Greater Stick-nest Rats at Mt Gibson, some of which will be translocated to Faure Island:
- Establish the largest feral predator-free area on mainland WA at Mt Gibson.

Our partnership with Perth Zoo stretches back almost a decade, when Perth Zoo played a critical role in the establishment of a population of the threatened Shark Bay Mouse on Faure Island. The Zoo managed a captive breeding program that produced over 100 Shark Bay Mice for successful release on Faure Island. Numbats from Perth Zoo have also been released to supplement our Scotia population.

We are now entering a new phase of our partnership with Perth Zoo. The Mt Gibson Project provides a range of opportunities for AWC and Perth Zoo to extend our relationship which involves



Greater Stick-nest Rat at Mt Gibson W.Lawler

the Zoo directly assisting the conservation of endangered animals in the field. These opportunities include the long-term involvement of skilled and specialist staff from Perth Zoo in the release and monitoring of highly endangered species, as well as in key research projects, and the public presentation of the Mt Gibson Project via displays at Perth Zoo. All of which is great news for the Numbats, Woylies and other endangered mammals that AWC and Perth Zoo are determined to protect.

Kathmandu support for AWC's field staff



AWC relies primarily on tax deductible gifts from individual supporters across Australia. However, we also have a select group of important corporate partners who share AWC's commitment to delivering conservation where it really counts - in the field.

Kathmandu is one of Australia's leading providers of quality clothing and equipment for travel and adventure. Their philosophy – keeping people comfortable and safe while they explore what the world has to offer – represents a great fit with AWC's field operations. We are therefore proud to have entered a three year partnership with Kathmandu which is focused on boosting our frontline conservation activities.

In addition to an annual financial contribution, Kathmandu will also be helping to equip specific AWC field teams. With almost 80% of our staff based in the field – in remote and challenging locations such as the central Kimberley, northern Cape York and the edge of Lake Eyre - the deployment of Kathmandu gear and equipment will be a great boost to our on-ground operations.



AWC intern Emily Mowat with a Northern Brown Bandicoot A. Morton

It places Kathmandu at the frontline of conservation, directly helping to protect some of Australia's most important natural areas and their endangered wildlife.

Kathmandu's staff will also be taking up the cause by donating through a workplace giving program and will have the opportunity to volunteer in support of biodiversity surveys at AWC sanctuaries – a great opportunity for Kathmandu staff to road test their own gear and equipment in diverse environments including some of Australia's wettest country (Brooklyn) through to some of Australia's driest country (Kalamurina)!

AWC: a new model for conservation



'The committee particularly commends the work of the **Australian Wildlife Conservancy** and its impressive record of successful management of areas protecting a large number of threatened species, as well as its success in achieving substantial increases in the numbers of several nationally threatened species.

Report of the Senate Committee, Effectiveness of threatened species and ecological communities' protection in Australia

AWC protects 33% of the remaining Numbat population W.Lawler

AWC is the largest private owner of land for conservation in Australia, protecting endangered wildlife across more than three million hectares in iconic regions such as the Kimberley, Cape York, Lake Eyre and the Top End. Here is a snapshot of our overall progress to date, highlighting some of the key factors that distinguish the AWC business model.

AWC is a non-profit organisation with a mission to deliver 'effective conservation for all Australian animals and the habitats in which they live'. We were founded by Martin Copley AM, our Chairman, because Australia has the worst mammal extinction rate in the world and a very large number of species (1700+) are listed as threatened with extinction. Recognising that 'business as usual' for conservation in Australia will mean additional extinctions, AWC is developing and implementing a new model for conservation.

Area managed for conservation: AWC owns and manages 23 properties around Australia covering three million hectares (see map on back page). This makes AWC the largest private (non-profit) owner of land for conservation in Australia and one of the largest in the world.

Number of species protected: AWC protects a very high proportion of Australia's terrestrial biodiversity including 67% of all mammal species, 83% of all bird species and around 50% of all reptile and frog species. We protect more species – and more threatened species - than any other non-government conservation organisation.

Measurable increases in populations: AWC is delivering measurable increases in the wild populations of a large number of species. For example, the population of Bilbies, Numbats, Woylies, Bridled Nailtail Wallabies and Purple-crowned Fairywrens on AWC properties have increased even though these species are declining elsewhere.

Efficiency (% of expenditure incurred on administration and fundraising): In our 2012/13 financial year, 83% of AWC's operating expenditure was incurred on conservation, with 17% on fundraising and administration combined (source: KPMG audited 2013 Annual Financial Report). Over the last decade, only 12% of our total expenditure (including capital) has been allocated to fundraising and administration combined. We are spending much less on fundraising and administration than other comparable organisations in our sector.

Staff based in the field: Almost 80% of AWC's staff are based in the field, delivering practical, on-ground land management to control feral animals, manage fire and eradicate weeds. The proportion of our staff based in the field is much higher than other comparable organisations.

Leadership on feral animal control and fire management:

The scale at which we undertake practical land management activities such as fire management and feral animal control is unique within Australia:

- AWC implements the largest non-government fire management program in Australia (EcoFire, in the Kimberley).
- AWC has established the two largest feral herbivore-free areas on mainland Australia (at Wongalara and Mornington).
- AWC manages more feral cat and fox-free land on mainland Australia than any other organisation, including the largest feral-free area on the mainland (Scotia).

Investment in science: AWC has over 20 field ecologists (around 25% of our staff), of which 12 have PhDs. In the last five years, the AWC science program has generated over 100 peer-reviewed publications.

AWC operations generally

Please direct my donation to AWC operations around Australia

Establishment of a feral herbivore-free area along the coast at Pungalina-Seven Emu

Please direct my donation to create a feral herbivore-free area of at least 80,000 hectares along the Gulf of Carpentaria coast







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MONTHLY PLEDGE I wish to become a regular supporter and give a tax deductible donation each month of: \$25 \$ \$50 \$ \$100 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	Direct Debit Request I / We request that you draw by way of the Direct Debit System, per month, for the payment of a monthly donation to Australian Wildlife Conservancy Fund. My/Our Account details are: Institution:
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- Our Commitment to You, Drawing Arrangements: We will advise you, in writing, the details of your monthly donation to Australian Wildlife Conservancy (amount, frequency, commencement date) at least 3 calendar days prior to the first drawing. Thereafter each drawing will be made on the 15th day of each month (or part thereof as specified).
- Where the due date falls on a non-business day, the drawing will be made on the next working day.
- We will not change the amount or frequency of drawings arrangements without your prior approval.
- We reserve the right to cancel your monthly donation to Australian Wildlife Conservancy if three or more drawings are returned unpaid by your nominate Financial Institution and to arrange with you an alternative payment method.
- We will keep all information pertaining to your nominated account at the Financial Institution, private and confidential.
- We will promptly respond to any concerns you may have about amounts debited
- We will send a receipt within 45 days of the conclusion of the financial year summarising your entire year's gifts for tax purposes.

Your Rights:

- You may terminate your monthly donation to Australian Wildlife Conservancy at any time by giving written notice directly to us (PO Box 8070 Subiaco East WA 6008), or through your nominated financial Institution. Notice given to us should be received by us at least 5 business days prior to the due date.
- You may stop payment of a monthly donation by giving written notice directly to us (PO Box 8070 Subiaco East WA 6008), or through your nominated Financial Institution. Notice given to us should be received by us at least 5 business days prior to the due date.
- You may request a change to the donation amount and/or frequency of the monthly donations by contacting us on (08) 9380 9633 and advising your requirements no less than 5 business days prior to the due date.
- 4. Where you consider that a drawing has been initiated incorrectly (outside the monthly donation to Australian Wildlife Conservancy arrangements) you may take the matter up directly with us on (08) 9380 9633, or lodge a Direct Debit Claim through your nominated Financial Institution.

Your commitment to us, Your responsibilities:

- It is your responsibility to ensure that sufficient funds are available in the nominated account to meet a drawing on its due date. (You may be charged a fee by your Financial Institution if the account details are incorrect or there are insufficient funds in the nominated account when we attempt to deduct donations.)
- It is your responsibility to ensure that the authorisation given to draw on the nominated account, is identical to the account signing instruction held by the Financial Institution where your account is based.

- Financial Institution where your account is based.

 It is your responsibility to advise us if the account nominated for transactions with the Australian Wildlife Conservancy Fund is transferred or closed.

 It is your responsibility to arrange a suitable alternative payment method with us if the Australian Wildlife Conservancy Fund drawing arrangements are cancelled either by yourselves or by your nominated Financial Institution.

 Please enquire with your Financial Institution if you are uncertain whether direct debit functions are available on your account. (You may be charged a fee by your Financial Institution if the direct debit facility is not a useful and useful in the direct debit facility is not available on your account.) wildlife conservancy ilable on your account.)