



Land for Wildlife

Conservation is in your hands



NEWSLETTER – May 2012

property. Compare the footpads depicted and see if you can tell the difference!

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On our cover this month... A Stripe-faced Dunnart (*Sminthopsis macroura*) smiles for the camera. A mouth full of sharp, pointed teeth reveals the true nature of this otherwise mouse-looking marsupial. Far from being a timid vegetarian with gnawing incisors like a rodent, Dunnarts are fierce predators of insects, spiders and small vertebrates. Read more about Dunnarts in this month's Articles section.

Articles

Red Centre Dunnarts – Confusing Carnivores in Miniature

Dunnarts (*Sminthopsis* species) are common marsupial predators that inhabit most central Australian habitats, from river side woodlands to desolate gibber plains.

About the size of a mouse, the various species can be hard to distinguish from one another. Colours and markings can be highly variable, even within a species and even body size and shape can sometimes be misleading – a Fat-tailed Dunnart may not have a fat tail for example.

One sure way to distinguish between species of these voracious carnivores is by looking closely at the footpads on the underside of the hind feet. Their shape, pattern and hairiness is akin to a species finger print, with a different pattern of pads unique to each species.

Below are pictures of three common dunnart species you might encounter around Alice Springs and on your



Lesser Hairy-footed Dunnart (*S. youngsoni*) – Pads are joined but not fused (You can clearly see three pads under the toes. Tiny hairs are present on the pads and soles of the feet.



Stripe-faced Dunnart (*S. macroura*) – As Lesser Hairy-footed, but pads and soles of feet are hairless. This dunnart sometimes has a fat tail.

of a migratory bird to indicate what country the bird was

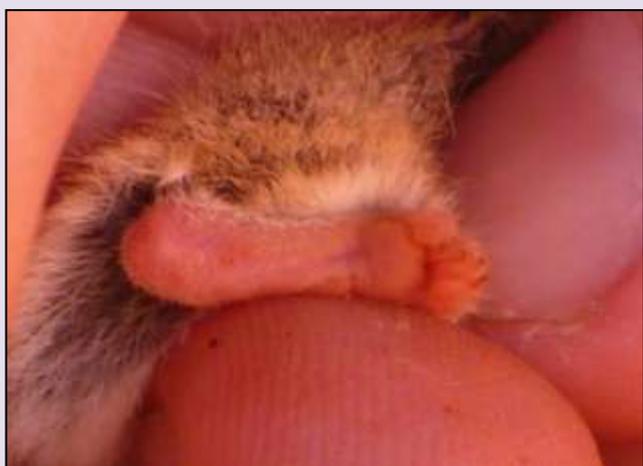


caught in and to help collect data about the species such as migration patterns, and breeding and feeding behaviour. Some birds may have more than one flag if re-caught in another country. Colour bands are put around birds legs to help identify individuals in a flock, and a metal tag contains the individual's number as recognised in international databases. It generally means someone wants to know about this bird, so if you ever notice a bird with a flag, report it! I contacted Holly Sitters and her partner Peter Collins for some more info on where to report re-sightings in the Americas (you may remember Holly, one of the Lowecol team now studying her PhD in Victoria, and Pete Collins of the Desert Park who gave many bird tours and seminars around Alice). Holly's Dad, Dr. Humphrey Sitters, renowned ornithologist and editor of the Wader Study Group Bulletin (<http://www.waderstudygroup.org/pubs/wsgbull/index.php>), helped us out:

"Contact the Pan American Shorebird Program coordinator. She should know who was responsible for banding the bird. The bird is a Canadian bird because it has a white flag for Canada. My guess is that it was banded on the breeding grounds in the Canadian Arctic; if so the resighting on Providence Island will be a really valuable piece of information."

So I report;

I have resighted a Grey Plover on Providence Island, South-west Bay, on 16/02/2012 around 1pm (Colombian time) with leg bands: m/FwG:RG/-. The bird was feeding along the shore with another Grey Plover, untagged.



Fat-tailed Dunnart (*S. crassicaudata*) – Pads are fused, making it hard to distinguish where one begins and another ends. Like the Stripe-faced, pads and soles of the feet are hairless. Despite its common name, the Fat-tailed Dunnart doesn't always have a fat tail!

Grey Plover in the Caribbean: A Land for Wildlife Special Report by foreign correspondent Ilse Pickerd

Hi LfWs,

It's not all rest and play out here in the Caribbean, I promise! In February I was... well... relaxing on a beach on a little Caribbean island that belongs to Colombia when two shorebirds flew by and landed to forage along the shore.

They were Grey Plovers, *Pluvialis squatarola*. I did not have my binoculars with me, but as I watched the birds I noticed one had a flag on its leg. I grabbed my camera just in time to get some shots before some children came splashing down the beach and the bird was gone. I checked the photos and noticed the bird also had colour bands and a metal band. This is important. A leg flag is a coloured plastic tag that researchers attach around the leg



m/FwG:RG/- is a clear way to record the leg tags the bird has and means: **metal** band on the left tibia; **flag - white over green** on the left tarsus; **red over green** band on the right tibia; and **nothing** on the right tarsus. The picture left demonstrates the leg bands.

My email was forwarded on and I receive a reply from

Jean-François Lamarre, from the University of Québec à Rimouski, a graduate student working on shorebird ecology in Bylot Island, Nunavut. He replied on the behalf of Dr. Joël Bêty, his supervisor;

"This is a GREAT sighting!

This is indeed one of the birds we banded on Bylot Island, Nunavut. I banded this bird on July 18th 2010 with a metal band only (2003-46802). Exactly one year later (18th July 2011) as we were back on Bylot island, we decided to put color bands on the bird and, as the colors on the band were red and green, we decided to name the plover Jean-Noël (this would translate from French to English to John-Christmas). Jean-Noël had a successful clutch in 2011 and most likely in 2010 too. According to plumage and behavior, this bird is a male. THANKS so much for the sighting and thanks for reporting it. This is exciting to know where the birds are spending time when not on the breeding ground. Keep your eyes wide open and please report any banded bird that you have the chance to see. This is so neat as a researcher to hear from the birds we love and work with during the summer. I dearly hope I could make it to Providence Island someday to have chance to see some of the wintering/migrating sites of my birds!"



A special little bird that one! How fantastic to sit on a beach in the Caribbean and be lucky enough to find out all about the life of a bird that has travelled so far to feed near my beach towel. So Holly's Dad was right, Jean-Noël was banded at his breeding ground in Nunavut (see pictures above and note the difference to the wintering grounds on Providence Island!). For those that are unaware, Nunavut is a territory in Northern Canada that includes most of the Canadian Arctic Archipelago. Brrr! Breeding grounds for the Grey Plover include arctic islands in north-west Alaska, Arctic Canada and Russia. They nest in tundra, on the ground and lay approximately 4 eggs per clutch. Chicks are able to feed themselves within a day!

The Grey Plover is known as the 'Black-bellied Plover' in North America, or 'Chorlito Gris' in Spanish. It is a large shorebird and a long-distance migrant with a nearly worldwide distribution when not breeding.



It feeds on an abundant supply of insects at the breeding grounds, and on wintering grounds it forages along shorelines or tidal flats for invertebrates, polychaeta worms, molluscs and crustaceans, relying on its eyesight and pecking in the sand.

Adults migrate every year from their Arctic breeding grounds to winter in warmer climates with better food supplies in the south. Young birds don't breed until 2 years old so they usually remain on the wintering grounds after migrating in their first year. This is the reason chicks start feeding themselves so quickly – both they and their parents need to build up their fat stores quickly to be ready for the journey south as the weather turns cold and the insect supply runs low.

Migration is from April to May and July to October. Grey Plovers in the Americas spend the winter (our summer) on beaches, estuaries, or occasionally flooded agricultural

Barking Spiders

land anywhere from British Columbia and Massachusetts south to Argentina and Chile. Jean-Noël decided to make a pit-stop in the Caribbean and feed along the white sand shores of Providence Island. This is the time when they are



easiest to see but hardest to identify because they do not have their striking breeding plumage; black plumage from belly to face. Birds in non-breeding plumage can be mistaken for Pacific Golden Plovers, one of which turned up at the Alice Springs Poo Ponds last September. See the photos of Jean-Noël above for an example of breeding plumage (above – taken on the breeding grounds in Nunavut) and non-breeding plumage (right – as seen on Providence Island).

Other populations of Grey Plover winter from Britain and south-west Norway throughout coastal Africa to South Africa; or from southern Japan throughout coastal Asia and Australia with a few reaching New Zealand. Grey Plovers regularly make huge trans-continental flights across Asia, Europe, and North America, only landing occasionally if forced down by severe weather, or to feed on the coast-like shores of very large lakes. It is uncommon to see them inland.

They are a cautious bird, quick to give alarm calls, and therefore act as a sentinel for mixed flocks of shorebirds feeding along the shore.

The Grey Plover has an IUCN status of 'Least Concern' and populations appear stable. Their breeding habitat is in little danger of human occupation or development. The Grey Plover is one of the species to which the *Agreement on the Conservation of African-Eurasian Migratory Waterbirds* (AEWA) applies.



This impressive looking beast was sent to us this month by Sue Ripley out at Ilparpa. This is the Barking Spider *Selenocosmia stirlingi*. It is occasionally confused with the Whistling Spider (sometimes also called Barking Spider) *Selenocosmia crassipes* of north Queensland, but that spider gets slightly larger than the more widespread *stirlingi* species. They live in silk lined burrows (see picture below) and are generally nocturnal.



Above: Barking Spider burrow

The spider gets its name comes from the ability to create a hissing or barking noise through an action known as *stridulation*. This is much the same as when grasshoppers call by rubbing together the comb-like structures on their hind limbs. The main difference is that the Barking Spider uses specially evolved hair structures (setae) on its mouth parts (pedipalps). Another photograph (below), sent in by Land for Wildlife member Roberta Ferrari, shows one the many colour varieties that the spider may be seen in.



Processionary Caterpillars



Many Centralians will tell you that once Processionary Caterpillars *Ochrogaster lunifer*, are on the move – the cold weather is on the way. You may have noticed a few lines of these hairy grubs making their way across a road or track as you've been driving about.

The huge procession above was cruising around the Land for Wildlife offices the other day, and eventually ended up forming a few balls under a Witchetty Bush *Acacia kempeana*. This is by no means a record-breaking procession – they are sometimes counted with more than three hundred individuals in a chain, but we thought it warranted a closer look.



Also known as the Bag-shelter Moth, *O. lunifer* is widespread across Australia. Once the taxonomists catch up with them, we will probably discover that this species actually consists of a few different species. Regardless of their taxonomic affinities, these caterpillars do have one remarkable, and slightly unsettling, reputation.



It has long been reputed, and this is now backed up by good science, that the caterpillars have the capacity to induce abortion in pregnant mares. If ingested, the hairs of the caterpillars may pierce the intestinal walls, leaving the horse exposed to infection by pathogenic bacteria. This of course requires the horse to unwittingly ingest the grubs, perhaps while grazing among leaf litter as a procession passes through. It has therefore, never been a common

occurrence but there have been several well-documented instances.



Once the grubs make their way to a suitable tree they continue the procession up into the branches where they build the obvious silken bag-nest that is the prompting for so many questions to tour guides from visitors to Central Australia. These nests, sometimes as large as 450mm in diameter, will contain the ball of grubs in their pupal stage until they exit the bag as the metamorphosed moths.

Peter Latz's book *Bushfires and Bushtucker*, provides some details regarding Central Australian indigenous use of these nests in treating burns. The abandoned nest will still contain a multitude of the itchy hairs left behind by the caterpillars. Before the silk could be used, these hairs would have to be washed out. Then the silk could be laid on burnt skin to act as a protective dressing.

Publishing Opportunity – Call for contributions to the Northern Territory Naturalist

A request has come down from the Top End for a greater contribution of natural history literature from Central Australia. While Alice Springs probably punches well above its weight in publication in a variety of journals, apparently we are not well represented in *Northern Territory Naturalist*.

The following email, received from Chief Editor Dr. Michael Braby, provides the details;

The *Northern Territory Naturalist* is a registered, peer-reviewed journal (ISSN 0155-4093) for original research and publishes works concerning any aspect of the natural history and ecology of the Northern Territory or adjacent areas of northern Australia (e.g. Kimberley, western Queensland, Timor). Authors may submit material in the form of Reviews,

Research Articles, Short Notes, Species Profiles or Book Reviews.

Contributors include a range of field naturalists and scientists who are not necessarily members of the NT Field Naturalist Club. There are no page charges, and inclusion of colour figures is also free of charge. This year we are moving towards making all articles accessible (open access) as PDF's on the Clubs web site.

The journal is sent to Thomson's Zoological Record for abstracting, and electronic versions are indexed and distributed through the Informit platform. The journal is also currently listed by the Australian Research Council as a Category C publication, and all papers will soon be included in **Scopus**, Elsevier's bibliographic database containing abstracts and cited references of over 19,000 scientific titles from more than 5,000 publishers. Hence, academics and other researchers receive official recognition for publishing with us.

The success of the journal in recent years is reflected by the number of high quality refereed papers published (46 in the past 5 years), which span a broad range of topics in natural history and ecology. Since 2007, the journal has been produced on an annual basis.

For more information regarding author instructions please see our home page:

<http://sites.google.com/site/ntfieldnaturalists/journal>

Beardy Rescue!

New Land for Wildlife members Roberta Ferrari and Hank Claessen, have had a great run of interesting wildlife encounters at their property in the Old Winery precinct. They've only been on the ground for 7 months but already Hank and Roberta are making a dent in the local Buffel Grass population.

One of the more interesting of these encounters is depicted in this short photo-essay put together by Roberta.

After returning home from work one afternoon, Roberta noticed a rather unhealthy looking Bearded Dragon on the bottom of the swimming pool.

Swinging into action, Roberta fished it out and placed it in the sun to try and warm it up. Hopes for revival were not high at this point and Roberta explained that the body was completely rigid, with no outward signs of life.



After a few minutes in this state, the lizard began to open its eyes and begin moving. The colour drained and the skin became much darker but it started to become much more active. The lizard was placed in a safe container and kept inside overnight to ensure it was fully recovered before release in the morning.



Early the next morning, the beardy was taken out to the yard where lizards had been seen basking in the past. Roberta had to coax him out of the box a little bit, but once he was out on the ground, the beardy fired up, put on some very convincing defensive postures and then shot off into the undergrowth at high speed.



After his little overnight stay, he was soon found to be back at his favourite basking position under an old upturned wheelbarrow.

We've heard a similar story from another Land for Wildlife member about lizards in the swimming pool. This member had a full grown Perentie at the bottom of the pool; a very different proposition to a small Bearded Dragon. This story had a similarly happy ending, with the Perentie being carried from the water to dry out by the pool, only to rapidly revive and shoot off into the scrub a few minutes later. I guess the moral of the story is to be very careful when removing drowned reptiles from your swimming pool. If they are merely in this stupefied state, they may awaken without warning and give you both the surprise of your life.

Have you got any 'drowned' lizard stories of your own?

Websites Worth a Look

AUSTRALIAN MOTHS ONLINE

<http://www1.ala.org.au/gallery2/main.php>

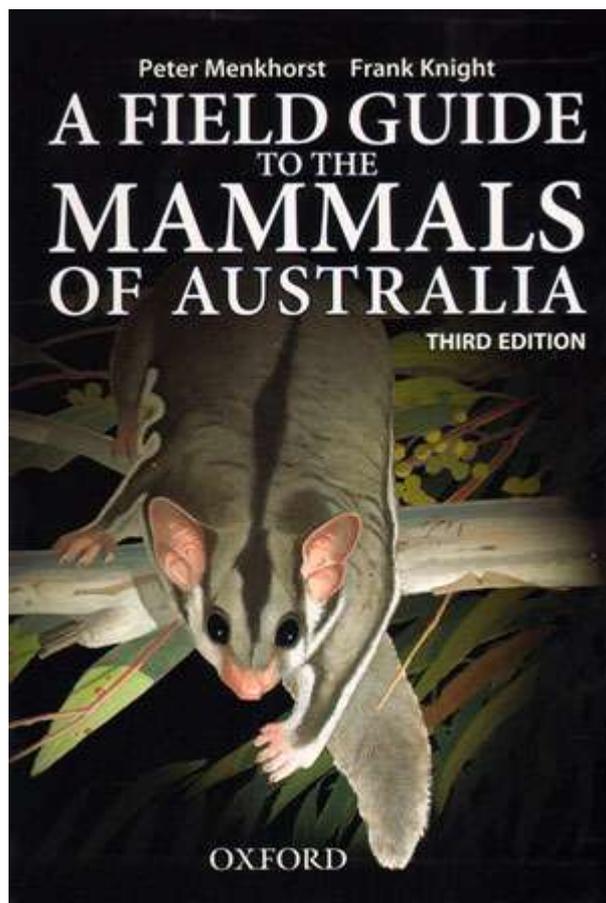
Central Australia has a diverse array of moths and they can be difficult to identify. Happily, the CSIRO has this useful website with images of most species. If you can locate which family your moth might belong in, you can peruse the archive and find images and information on the species you have found.

WORLD WIDE WATTLE

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

Acacias being one of the better-represented plant groups in Central Australia, this is a great starting point for anyone interested in learning more about this large and diverse group of plants. This site has fact sheets on all of the Australian species of Acacias.

Recommended Books

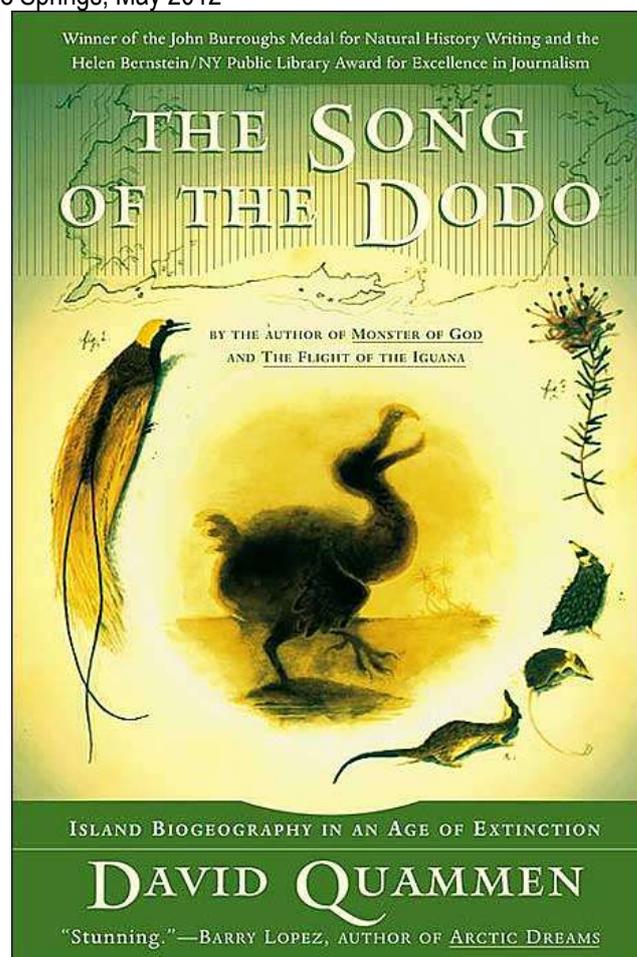


A FIELD GUIDE TO THE MAMMALS OF AUSTRALIA: Third Edition

Peter Menkhorst & Frank Knight

This timely update to a well-loved field guide has just arrived at the Land for Wildlife offices and has already been combed for changes. As will always be the case, any work that relies on taxonomy will be out of date almost immediately it goes to print, but the only shortcoming that I could find in this edition (so far) is the absence of the newly identified Buff-footed Antechinus. This was separated from the Yellow-footed Antechinus *Antechinus flavipes*, in the Samford Valley of SE Queensland in 2011. This book even has the newly discovered Burrunan Dolphin *Tursiops australis*, described from Port Phillip Bay, also in 2011.

The artwork of Frank Knight continues to set the standard for natural history artwork, and the text provided is more than enough for the field identification of most species. The cover is made of a stiff card, so this edition should stand up to many a field outing in the backpack or the glove box.

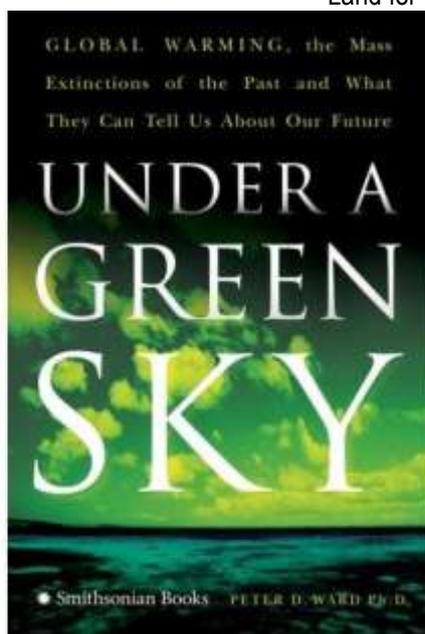


THE SONG OF THE DODO: Island Biogeography in an Age of Extinction

David Quammen

Island biogeography – it's not a subject you hear discussed every day, and on the surface it may not seem relevant to Central Australian natural history. But island biogeography is essentially the study of isolated populations. This usually conjures associations with the studies of Darwin in the Galapagos and Russell-Wallace in the isles of the Lesser Sundas, but it can apply equally to populations isolated, not just by water, but by the absence of water.

Central Australian land snails come instantly to mind; sedentary animals destined to see out their existence in the shade of a single stand of fig trees or a particular rocky outcrop. Though first published in 1997, this book is still perfectly relevant today, for anyone interested in the themes of evolutionary biology and conservation.



UNDER A GREEN SKY: Global Warming, the Mass Extinctions of the Past, and What They Can Tell Us About Our Future

Peter D. Ward

The K-T Boundary event of 65 million years ago was successful at drawing to a close the age of the dinosaurs (well... except for the ones that survived and became modern birds – but that's another story). A further 135 million years before this event though, something wiped out 97% of all living things on the planet. This is known as the Permian extinction.

Ward, a palaeontologist who was involved in proving that the K-T Boundary event *did* wipe out the dinosaurs*, later went on to research the Permian extinction and presents his findings in this book.

He finds that the near total annihilation of life on Earth 200 million years ago was caused, not by another meteorite collision, but an increase in atmospheric carbon dioxide resulting in global climate change – sound familiar? I won't spoil the book by going through the rest of Ward's thesis, but it makes interesting and thought-provoking reading.

* *except the bird ones.*

Calendar of Events



27 May - 2 June

Making Music Being Well Week

Organisation: Music Council of Australia

The Making Music Being Well Week is an initiative used to raise awareness of the recreational and therapeutic benefits of being musically active.

National/State: National

Contact

Phone: 02 4454 3887

Email: info@austmta.org.au

Website:

www.makingmusicbeingwell.org.au/

Address: MBE 148/45 Glenferrie Road
MALVERN VIC 3144



5 June

World Environment Day

Organisation: United Nations

World Environment Day aims to be the world's biggest and most widely celebrated environmental action event.

National/State: International

Contact

Website: www.unep.org/wed/



8 June

World Oceans Day

Organisation: The Ocean Project
World Oceans Day is a chance to celebrate what the ocean provides for every person.
National/State: International
Contact
Website: www.theoceanproject.org/wod/



11-17 June

International Men's Health Week

Organisation: Men's Health Information and Resource Centre

International Men's Health Week aims to increase awareness of the importance of good health in men, boys and their families.

National/State: International

Contact

Website: www.menshealthmonth.org/imhw/imhw.htm

17th of June

World Day to Combat Desertification and Drought

Keep the contributions coming for next month folks. The sharp-eyed will have noticed that we still haven't settled on a name for your newsletter, but we have whittled the candidates down to a shortlist and will get the graphics finished for the June Edition.

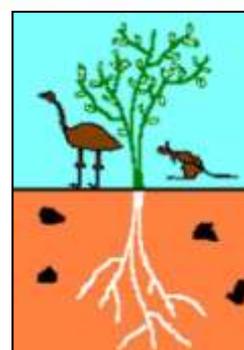
Take care,

Jesse, Chris & Bill
Land for Wildlife Coordinators



This newsletter has been produced by Jesse Carpenter, Chris Watson and Bill Low, *LfW* coordinators, W.A. Low Ecological Services, Contact Jesse or Chris on 89555222 or lfw@lowecol.com.au

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Low Ecological Services P/L