



NEWSLETTER

(Reading List)

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Dedicated to a better Brisbane

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FeralScan

(www.feralscan.org.au)
is a community website
and **Smartphone App**
that allows you to map
sightings of pest animals
and record the problems
they are causing in your
local area.

The app includes 13
specific feral animals,
which can be reported
immediately when
sighted in your area.

**Seasons
Greetings**



ENVIRONMENTAL READING LIST (Holiday Reading)

If you are interested in our environment (local, national, global) you may like to read some of the following articles during your summer break. Just click on "**Read more.....**" to access each article.

General

"Why a sense of kinship is key to caring about the living world. Leading thinkers in [environmental economics](#) and [conservation](#) are asking a pressing question. Why are we ignoring the destruction of the living world? Recently, the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) published a [global assessment of biodiversity](#) that set out alarming statistics: a million species at threat of extinction, 75% of terrestrial environments severely altered by human activity, and a 30% reduction in global habitat integrity. Despite all this, practical solutions to redress an ecological crisis — land use and economic reform, action on climate change and improvements to environmental governance — are not prioritised. One key reason for this is how we [frame our relationship to the living world.](#)" **Read more.....**

"Climate explained: how growth in population and consumption drives planetary change. *The growth of the human population over the last 70 years has exploded from 2 billion to nearly 8 billion, with a compounding net growth of over 30,000 per day. We all breathe out carbon dioxide with every breath. That equates to about 140 billion CO₂ breaths every minute. Isn't it logical that atmospheric carbon will continue to increase with the birth rate regardless of what we do about fossil fuel reduction?* This question touches on the core of our impact on planetary change. It highlights the exponential growth in the human population, but also homes in on the potential direct input of carbon dioxide from humans, through respiration. As I explain in more detail below, our breathing does not contribute to the net accumulation of carbon dioxide in the atmosphere. But population growth, combined with an increase in consumption, is now seen as the [main driver of change in the Earth system.](#)" **Read more.....**

"To feed the world in 2050 we need to build the plants that evolution didn't. We need to revolutionise agriculture in the next 30 years. In 2050 we may have [almost 10 billion people](#) to feed. Farmland is already degraded by existing agriculture, and climate change is putting new pressure on crops and livestock. With the tools we have now we can't create new breeds and cultivars fast enough to cope with the rapidly changing conditions. How will we get strong yields in uncertain environments and make more food without using more land? Part of the answer is synthetic biology: using cutting-edge genetic technology to build organisms that evolution never did. Synthetic biology has already had some successes, such as turning yeasts into tiny chemical factories and giving cotton the qualities of synthetic fibres. At CSIRO, we have already used synthetic biology to [produce energy-rich feed for livestock](#). Our scientists have "switched on" high oil production in the stems and leaves of plants, which could potentially triple the amount of oil they produce. But these examples are just the beginning."

Read more.....

Local (Queensland)

“Black Swan Lake saved in ‘inspiring’ victory convincing Gold Coast Council the worth of its conservation.

Conservationists are claiming a coup after convincing Gold Coast Council to save a freshwater lake from being turned into a carpark. The council has made a remarkable backflip, voting to preserve the remaining 20 per cent of Black Swan Lake at Bundall which had previously been approved to be infilled for development. It comes after five years of grassroots campaigning. "This is an inspiring result. It shows there is hope around the country," said Jess Abrahams from the Australian Conservation Foundation. "When communities do band together and fight for their local patch they do win." [Read more.....](#)

“One billion containers returned to the Qld container deposit scheme as it celebrates first birthday.

More than \$100 million has been paid out to schools, charities and households throughout Queensland as the container fund scheme celebrates its first birthday. One billion containers have been deposited since the container refund scheme began on November 1 last year, with more than 330 designated container refund points (CRP) rolled out throughout the state. Container Exchange (CoEx) manager Adam Nicholson said the scheme had been fully embraced by the public. "We knew it was going to be popular, but we didn't think it would be to this level to reach one billion is fantastic," he said. "In Brisbane alone, we just crept over the 400 million mark, so we're amazed with that figure." [Read more.....](#)

“Mary River repaired at Kenilworth, saving farmland and benefitting Great Barrier Reef.

One of the most eroded stretches of a Queensland river has been transformed in a bid to stop valuable farmland washing away and polluting water. The environmental stakes are high on the Mary River at Kenilworth, which is the fourth-highest source of sediment, out of 35 catchments, flowing onto the Great Barrier Reef. Tree clearing, sand and gravel mining, and the misguided farming practices of the past turned what was once a shady meandering river to a denuded waterway plagued by erosion. "We've certainly lost a lot of land, we're told something like 600,000 tonnes has disappeared, probably over the past 70 years, from floods and from erosion," Mount Ubi Station owner Stephen Carter said. "It was a straight drop of 10 metres [from the bank] right down to the river, and every time we got a rise in the river or a flood it would be cut from underneath. "The clearing means the water gets into the river quicker when we have a flood, and because there was a lot of vegetation taken away, the water comes in so much faster. "And then away it goes — straight down out to sea." [Read more.....](#)

“Endangered birds at threat at Turtle Cove. GREETINGS from Russia. My name is Numenius, otherwise known as eastern curlew, and I'm classed as an international migratory wader. I've just arrived back in Russia after a really long flight to visit a beautiful spot called Turtle Cove, on the edge of the Great Sandy Strait in Queensland. While I was at Turtle Cove, my mates

were talking about how difficult it's becoming to get a feed and find somewhere to rest when we return to Australia after our 20,000km breeding migrations. We also noticed a lot of human activity at a River Heads community meeting. Listening in to conversations at the meeting, we were amazed to discover some humans are planning to build a high-density development with shops, a hotel and up to 500 human dwellings right next to the Cove and right next to the clay pan that is so important for us as a feeding area and camp site." [Read more.....](#)

“Can you drink water from the Brisbane River and how does it get to your tap?

The Brisbane River winds its way through the Queensland capital and is home to mangroves, CityCats and rowers — but could you drink the water? From the hills of Mount Stanley to the west and out to Moreton Bay, the river is more than 340 kilometres long and plays a vital role in the city's water supply. Madonna Grehan grew up in Brisbane in the 1970s and '80s and returns often to visit family; when she's here, she takes a ferry to check the river's condition. She said she often wondered about its source and what role the river played in everyday life. "[My father] had a thing about our being able to swim, so wherever we lived we had a swim every weekend at a dam, creek or river," Dr Grehan said. "At Esk, we swam at Bryden bridge, which is now part of Wivenhoe Dam, and we also swam at Fernvale. "I think the quality of Brisbane's water is something everyone should put their minds to." [Read more.....](#)

“Green award recognises UQ’s sustainability leadership.

The University of Queensland has won a coveted Australasian Green Gown Award for its commitment to sustainability through the Warwick Solar Farm project in the inaugural 2030 Climate Action category. UQ is on track to become the first major university in the world to produce 100 per cent of its power needs from its own renewable energy asset next year." [Read more.....](#)

National (Australia)

“Protecting the places we love: here are 7 ways our nature laws must be fixed.

Environment Minister Sussan Ley [yesterday announced](#) a ten-yearly review of Australia's national environmental laws. It could not come at a more critical time, as the environment struggles under unprecedented development pressures, climate change impacts and a crippling drought. The laws, formally known as the Environmental Protection and Biodiversity Conservation [EPBC Act](#), have been in place for 20 years. Announcing the review, Ley [said it would tackle green tape](#) and reduce delays in project approvals. She said the laws must remain "fit for purpose" as our environment changes. Serious declines in most biodiversity indicators strongly suggest the laws are not fit for purpose. Some [7.7 million hectares of endangered species habitat](#) has been destroyed since the Act was established and the lists of threatened and endangered species [continue to grow](#). The review should ensure Australia's environmental law achieves what it was designed to

do - protect our precious natural places. The list below reflects the EPBC Act priorities of 70 environmental lawyers and practitioners who were polled by the National Environmental Law Association." **Read more.....**

"Lord Howe Island rodent eradication program declared a success as last bait traps laid. Lord Howe Island could soon be declared a rodent-free zone, as a controversial baiting program aimed at killing a large rodent problem comes to an end. The rodent eradication program (REP) started on the popular tourist island in June and involved cereal pellets laced with poison being placed inside 22,000 lockable traps around the island. Inaccessible areas were targeted by aerial drops of the same bait. At the time, it was estimated there were 150,000 rats and 210,000 mice on Lord Howe — some 1,000 rodents for each of the island's 350 residents. Today, the last of the poisonous pellets will be placed into traps, marking the end of the baiting program." **Read more.....**

"Cane toads are on the menu for more native animals than we might think. A native water rat can rip out the heart and liver of a cane toad with surgical precision. They do this to avoid poisonous glands located behind the cane toad's head, according to recent research [published in Australian Mammalogy](#). Cane toads produce a poisonous cocktail of bufotoxins and bufogenins, making them deadly to most Australian animals. But native water rats are not the only Australian animals that have learnt to dodge the poison and make a meal out of the cane toad — *Rhinella marina*. Here are some of the native animals, and the sometimes ingenious methods they use to turn one of our worst pests into tasty tucker." **Read more.....**

"Residents in regional communities fighting the bottled water industry for groundwater. As the drought bites deeper, residents in a growing number of rural communities are fighting to stop local groundwater being taken to satisfy Australia's thirst for bottled water. At Tamborine Mountain in Queensland's Gold Coast hinterland, some locals are angry that bore water supplies are being used to supply bottled water companies. "We watch the water tankers go up and down the road," local Tanya Bregnsdal said. She believes the bottled water industry is to blame for her bore running dry." **Read more.....**

"Seabird surveys on CSIRO Investigator: Spotting migratory birds in northern Australian waters. In the Gulf of Carpentaria, a kingfisher appears and lands on the mast of the RV Investigator. The woodland bird — usually found between the Gold Coast and the Top End — is pretty far from the tropical savanna habitats it favours. Population ecologist Eric Woehler is a seabird expert, and admits he isn't as strong with his knowledge of land species. But spying migratory species in the middle of the ocean was a highlight of his 11th voyage on the Investigator, where he leads an effort to record every sighting of a bird or mammal between sunrise and sunset. "It's one thing to know reading the books that birds can migrate between Tasmania and the mainland, or Papua New Guinea and Australia," he said. "It's another thing to see small

woodland birds and no land in sight, knowing the nearest land might be 300 nautical miles away." **Read more.....**

"Life on Bon Bon. Bon Bon Station Reserve in South Australia is home to some pretty amazing plants and animals. Reserve managers Clint and Kate Taylor know this well; they first fell in love with the land when they began volunteering for Bush Heritage 10 years ago. Now, their days can consist of everything from [fauna surveys](#) to [weed management](#), infrastructure maintenance, [feral animal monitoring](#) and tracking, as well as a lot of bird-watching, and the occasional 180km drive to the supermarket if someone forgets the cheese." **View here.....**

"No Australian city has a long-term vision for living sustainably. We can't go on like this. Australia was already [one of the most urbanised nations](#) by the end of the 19th century. Unlike European and North American countries, Australia's pattern of settlement did not have a neat urban hierarchy. The gap between the large and small towns was huge. These patterns have intensified in the decades since federation, especially after the second world war. International and internal [migration trends](#) have driven rapid growth in the big cities, especially Melbourne and Sydney. This has created major problems with providing adequate [housing](#), [infrastructure](#) and [services](#). The fundamental issue is the reluctance of urban communities and their leaders to discuss what might be sustainable populations." **Read more.....**

"After being dredged to nearly nothing last century, Australia's lost shellfish reefs are roaring back to life. At a secret location, nine metres under Port Phillip Bay, divers are combing a newly created oyster reef with a high-powered camera. Up on the dive boat, the pictures on the video screen are a window into Bob Pearce's teenage years in the 1960s — before overfishing, pollution and disease wiped out 99 percent of Australia's shellfish reefs within a few decades. "We were left with a marine desert," he says. But this two-year-old reef is teeming with life — created from seafood shells collected from restaurants that would have otherwise ended up in landfill. "It's an amazing thing how critters know there's something there, and they come to it," he says. "Crabs, oysters, starfish, octopus, squid, snapper — you name it, they're all there." This is one of 10 pilot sites in four Australian states rebuilding the enormous chain of reefs that once stretched along the coast from Noosa to Perth, that were all but wiped out by dredge harvesting last century." **Read more.....**

"Fire, climate change and prescribed burning: What do the experts have to say? As flames destroyed lives and homes in recent days, there's been a lot of debate about past fires, finger-pointing over prescribed burning, questioning the influence of climate change, or if indeed it was the right time to be talking about it at all. But what do scientists have to say?" **Read more.....**

"Waterbird population has fallen as much as 90 per cent in Australia's east, shows 37-year study. The drought has decimated the population of waterbirds across eastern

Australia, with researchers saying numbers have fallen by as much as 90 per cent in the last four decades. When Sydney scientist Richard Kingsford and his team from the University of NSW began their research in the early 1980s, they clocked up to a million waterbirds in aerial surveys. "Now it's crashed to less than 100,000," Professor Kingsford said. "While the birds could have gone elsewhere, it's most likely that they've died." **Read more.....**

"These two Western Sydney streets are completely different temperatures — here's why. These two western Sydney streets are only 1 kilometre apart, but when it comes to temperature there's a lot that separates them. Last summer, Galloway Street in North Parramatta experienced five days of temperatures above 40 degrees. People on Daking Street — which is a short walk north — sweated through 13 days above 40 degrees. It's the hottest street in the City of Parramatta's municipality. The reason? Trees." **Read more.....**

"Acoustic observatory will record 'galaxy of sounds' to help scientists monitor Australian wildlife. Scientists have launched a "Google maps for sounds" in a world-first project that will continuously record the calls and choruses of Australian wildlife for five years. Hundreds of solar-powered audio recorders are being installed across remote parts of Australia to create a unique "soundscape" as the environment changes. The [National Acoustic Observatory project](#), funded by the Australian Research Council, was a collaboration of academics from five universities." **Read more.....**

Global

"Failure to agree on new Antarctic protection calls group's 'credibility into question'. Australia's bid to have areas of the east Antarctic region — together larger than the state of New South Wales — declared a marine sanctuary has again been dashed. Delegates from 26 country members of the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) failed to reach a consensus on the proposal at a meeting in Hobart this week. It was hoped declaring a million square kilometres of the region as a marine protected zone would protect its biodiversity, and help manage the impacts of climate change." **Read more.....**

"Intact forest loss 'six times worse' for climate. The impact of losing intact tropical forests is more devastating on the climate than previously thought, according to University of Queensland-led research. The international study has revealed between 2000 and 2013 the clearance of intact tropical forests resulted in a much higher level of carbon being emitted to the atmosphere than first believed — resulting in a 626 per cent increase in the calculated impact on climate." **Read more.....**

"Leading conservation scientists call for reverse to biodiversity loss with 'net positive' goals. A group of international conservationists is urging governments across the globe to adopt a new approach to address the impact of economic development on the natural world. Renowned researchers, including University of

Queensland scientists, aim to draw attention to what they call "net positive outcomes for nature". [Professor James Watson](#), of UQ and the [Wildlife Conservation Society](#), said the new approach rejected the idea that biodiversity loss was an inevitable consequence of economic development. "This new net positive approach is underpinned by the concept of a conservation hierarchy, which provides a framework for structuring biodiversity conservation actions based on how they contribute to worldwide conservation," he said. "We're calling for more ambitious, proactive measures to ensure greater benefits to the natural environment are achieved in concert with development activities. Conservation actions should be based on how they contribute to our shared overall vision for the natural world, rather than piecemeal actions to protect species or habitats." **Read more.....**

"What is a 'mass extinction' and are we in one now? For more than 3.5 billion years, living organisms have thrived, multiplied and diversified to occupy every ecosystem on Earth. The flip side to this explosion of new species is that species extinctions have also always been part of the evolutionary life cycle. But these two processes are not always in step. When the loss of species rapidly outpaces the formation of new species, this balance can be tipped enough to elicit what are known as "mass extinction" events. A mass extinction is usually defined as a loss of about three quarters of all species in existence across the entire Earth over a "short" geological period of time. Given the vast amount of time since life first evolved on the planet, "short" is defined as anything less than 2.8 million years. Since at least the [Cambrian period that began](#) around 540 million years ago when the diversity of life [first exploded](#) into a vast array of forms, only five extinction events have definitively met these mass-extinction criteria. These so-called "Big Five" have become part of the scientific benchmark to determine whether human beings have today created the conditions for a sixth mass extinction." **Read more.....**

"Healthy mangroves help coral reef fisheries under climate stress. Healthy mangroves can help fight the consequences of climate change on coral reef fisheries, according to a University of Queensland-led study. UQ's [Professor Peter Mumby](#) said corals have been bleached and reefs have lost their structural complexity as a major consequence of warming seas. "Many people are worried that — due to climate change — reef fishery yields could halve if coral reefs flatten, losing the hiding places that support thousands of fish," he said. "When a young fish arrives at a degraded reef it has nowhere to hide and is easily targeted by predators. "Of course, predators experience the same problem when they're young, so the entire food web becomes unproductive and few fish survive." Despite the alarming trend, the team found mangroves provided a partial solution." **Read more.....**

HAPPY READING! (Editor)