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Latest news from the REC

The REC again sponsored the annual NSW Roadside Environmental Management Award as part of Local Government NSW's Excellence in the Environment Awards.

There are two nominees for the roadside award:

- Bathurst Regional Council
- Mid-Western Regional Council

The Awards will be presented in Sydney, on Monday 3 December 2018 at Waterview, Bicentennial Drive, Bicentennial Park, Sydney Olympic Park. More details at <https://www.lgnsw.org.au/event-s-training/environment-awards>

Roadside Reserve Extension Project in Mid-Western LGA

In 2017, Mid-Western Regional Council was awarded a grant of \$60,000 from Central Tablelands Local Lands Service Targeted Ecosystems Program to assist in the enhancement of high conservation value roadside vegetation throughout the LGA.

Council developed a Roadside Vegetation Management Plan in 2011 which mapped all of the roads in the region as having high, moderate or low conservation value. This plan was used to identify areas to target for this project.

The project involved employing a casual Weeds Officer to work with one permanent Council Weed Officer to control weeds along roadsides classed as having high or moderate conservation value. Council spot sprayed along 642 km of roadside during a six month period. The casual Weeds Officer gained valuable experience and on-the-job training, and has gone on to permanent employment with Council's weeds department.

Council also advertised funding for landholders interested in undertaking planting projects adjacent to high or moderate conservation value roadsides. Council received 42 applications and selected eight landholders to plant 2,200 tubestock

plants, the aim of which was to extend the roadside vegetation into private property and improve the habitat linkages.

Land adjacent to EEC and/or known threatened species habitat was highly prioritised and landholders who could provide in-kind assistance in the form of fencing, ripping and slashing were also prioritised.

Planting was done by a contractor using locally-sourced stock. A total of 15.7 ha was planted which resulted in 216 ha of improved connectivity. All landholders agreed to the continued maintenance of the plantings on their property.

Council worked with Watershed Landcare and the Mudgee office of the Local Lands Service to engage landholders and promote the project.

More details from Cassie Liney, Environment Officer, Mid-Western Regional Council, cassie.liney@midwestern.nsw.gov.au



Roadside extension onto private property near Windeyer

Assessing roadside environmental values on the Tilligerry Peninsula



Training has been delivered to Port Stephens Council staff on applying the "Rapid Assessment Methodology" developed by Local Government NSW (LGNSW), Local Land Services and the NSW Office of Environment and Heritage to assist Councils to identify, assess and manage roadside environmental values. This activity is directly supporting Council to pilot implementation of the Regional Roadside

Environment Marker Scheme in Port Stephens, commencing on the Tilligerry Peninsula.

Similar training and roadside environmental assessments will soon be delivered to Muswellbrook and Upper Hunter Shire Councils to support them to review, consolidate and expand the Marker Schemes that are currently in place in their Council areas.

For more details contact Ashley Bacales, NRM Project Coordinator, Hunter Councils ashleyb@huntercouncils.com.au



Hunter & Central Coast
Regional Environmental
Management Strategy

This project has been assisted by the New South Wales Government through its Environmental Trust and supported by LGNSW

Murray Riverina Travelling Stock Reserves project wins award

The 2018 Albert Morris Award for an outstanding Ecological Restoration Project was recently presented to the Murray Riverina Travelling Stock Reserves (TSR) project.

The award, presented at the Gala Dinner of the Society for Ecological Restoration Australasia on 27 September, 2018, commemorates the visionary ecological restoration practitioner, Albert Morris, who initiated the Broken Hill Regeneration Reserves project in 1936 – one of the very earliest ecological restoration projects in the modern world.

The Murray Riverina TSR project was selected from a field of five very strong candidate projects from Australia and New Zealand.

Gary Rodda, General Manager of Murray Local Land Services, received the award on behalf of the project titled 'Enriching biodiversity in the NSW Riverina bioregion by managing the TSRR network for nature conservation'.

Convenor of the Award, Dr Tein McDonald commented that "The project particularly inspired the judges with its brilliant application of ecologically attuned grazing to improve the condition of native ecosystems. This makes it a highly fitting model for other public and private landholders who want to maintain and improve their native pastures and ecosystems rather than have them degrade over time."

The Murray Riverina TSR project bears many of the hallmarks of the work in Broken Hill in the 1930s led by Albert Morris, supported by his wife Margaret and many local and state organisations – as it has a similarly high relevance to conserving and renewing the native vegetation of regional Australia upon which we depend.

In the case of Albert Morris's Broken Hill Regeneration Reserves, the motivation for the work was to stabilise the desert sands after excessive overgrazing of the

town common, leading to a stable native shrubland regenerating around the town and stopping sand drift. In the case of the Riverina TSRs, the motivation has been and remains to renew the native vegetation for not only native fauna habitat but also to retain potential for managed grazing.

Indeed the outstanding results of the project, which was supported by the Biodiversity Fund of the Australian Government, are largely due to the TSR rangers allowing grazing when weed was growing but prior to its seeding, allowing a shift to more productive native pastures and recovery of other natives. Grazing thereby provided the main tool for renewing the ecosystems. The project also involved substantial seeding of native shrubs to improve habitats for declining woodland birds, many of which the project's monitoring has found returning slowly but surely.

At the Gala Dinner, citations were given to some of the key individuals in the project including TSR rangers Peter O'Shannassy, Stuart Watson, Roger Harris and field ecologist Ian Davidson.



Gary Rodda, General Manager of Murray Local Land Services, receives the 2018 Albert Morris Award

Council Roadside Reserves project investigates Natural Asset Management within councils

Councils have a variety of approaches to managing natural assets and many are looking for direction and guidance on integrating natural assets into their existing management systems. To help address this Local Government NSW (LGNSW) is currently undertaking a natural assets project to provide direction and resources for councils.

LGNSW engaged Cardno to undertake stage 1 of the natural assets project, to investigate and assess the current tools and approaches councils (and others) are using to manage their natural assets as a component of broader asset management systems. The report is currently being finalised, however the

findings indicate a strong interest in this area with opportunities for the development of resources to assist councils.

NSW councils have also been invited to undertake a short survey on how they currently manage their natural assets. The responses indicate that councils throughout the state are at various stages, with many working towards integration into broader council systems. A common theme from survey respondents is that there is further interest in these issues.

A summary of responses includes:

- 54 completed surveys were received, from 44 NSW councils including small, medium and large councils and also from urban, peri-urban and rural councils
- A broad selection of council staff completed the surveys, including asset managers, environmental/natural area managers, engineers, open space managers and planners.
- 70% of respondents indicated that their council uses a specific asset management IT system, of these over 50% use either TechOne or Civica
- Nearly half of the respondents have integrated either some or all of their natural assets into their asset management system
- Of those councils who have not yet integrated natural assets into council systems, 87% are interested in updating their Asset Management Plan to include natural asset information
- 70% of respondents collect natural asset data
- 70% of respondents undertake condition assessments of their natural assets, with 89% of the assessments being undertaken by council staff
- Resources, time and budget were listed as the most common issues or constraints for integrating natural assets
- There was a strong interest in the natural asset project, with nearly all respondents indicating that they would like to receive further information.

The survey responses, combined with the Cardno report will inform the next stage of the natural assets project, which intends to develop practical advice to guide councils in integrating natural assets into existing council systems.

This project is being undertaken as part of the [Council Roadside Reserves](#) project, funded by the NSW Environmental Trust.

For more information on the Natural Assets project please contact kathy.godfrey@lgnsw.org.au

Rapid Assessment Methodology and EcoRoadside App

With over 800 assessments already undertaken in seven local government areas, the EcoRoadside App is providing councils with an easy to use method for undertaking their roadside reserve assessments using the [Rapid Assessment Methodology](#) (RAM).

The RAM was developed by Local Land Services, NSW Office of Environment and Heritage (OEH) and LGNSW as part of the Linear Reserves grant program funded by the NSW Environmental Trust.

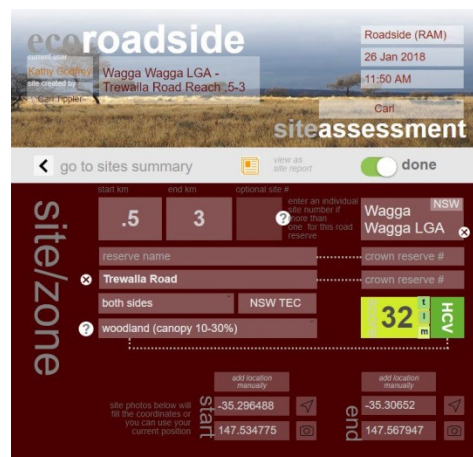
The RAM provides councils (and other linear reserve managers) with a tool to capture current information on their linear reserves, to assign conservation values and to assist them to prioritise and manage their roadside reserves.

The [EcoRoadside App](#) supports councils to undertake roadside assessments. It provides an electronic method to undertake the roadside assessments using the RAM. The App provides a visual guide with prompts and information to assist users. It includes an option to add photos and record additional information, including current and proposed management requirements. A final conservation value score is calculated for each site as the form is completed, which enables a 'live' in-field check to be undertaken. Data can be collected 'live' using a 4G signal or offline using an Apple (iOS) device and the offline version of the App, called EcoRoadside mobile.

LGNSW is holding training sessions for councils on the EcoRoadside App. Registrations are now open at the following locations:

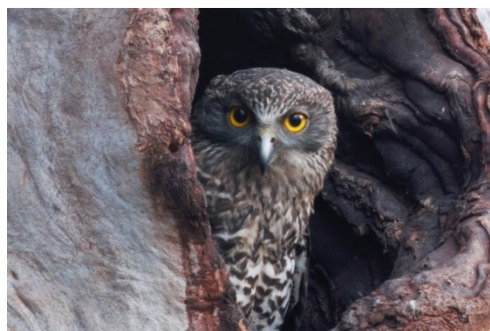
- [Penrith](#), 4 December
- [Wagga Wagga](#), 11 December

For more information contact: kathy.godfrey@lgnsw.org.au

The image shows the first page of the EcoRoadside App. At the top, there's a header with the 'eco roadside' logo and a 'Roadside (RAM)' status bar showing '26 Jan 2018' and '11:50 AM'. Below this, the location is identified as 'Wagga Wagga LGA - Trewalla Road Reach .5-3'. The main form area is titled 'siteassessment' and includes fields for 'site/zone' (with values '.5' and '3'), 'reserve name' ('Trewalla Road'), 'both sides', and 'woodland (canopy 10-30%)'. A large green box displays a score of '32' with 'HCV' next to it. At the bottom, there are location coordinates for 'start' (-35.296488, 147.534775) and 'end' (-35.30652, 147.567947).

EcoRoadside App – first page

The Powerful Owl Project



Powerful Owl (Dave Robson)

The Powerful Owl is our largest and perhaps most magnificent Australian owl. Powerful Owls are listed as Vulnerable in NSW and Threatened in each state in

which they occur. Their retention requires targeted management of key habitat features. As apex predators Powerful Owls are a keystone species, critical for preserving the health of ecosystems.

By protecting their critical habitat, we necessarily protect habitat for the greater community of urban fauna. In contrast to many threatened species, Powerful Owls are breeding well in urban spaces in the Sydney Basin. Ongoing and unexplained declines in the non-urban population of Powerful Owls may mean that in the future urban areas may become a stronghold for this species.

The Powerful Owl Project is a citizen science project that supports the conservation of Powerful Owls as an indicator of the health of urban bird populations in the Greater Sydney Basin.

The Project is one of the largest raptor-focused conservation projects in Australia and citizen scientists now monitor the ecology of urban Powerful Owls in 24 of the 35 LGAs in the Greater Sydney Basin. Since 2011, the Project has educated land managers and the community about building habitat to conserve Powerful Owls and other urban birds and provided fine-scale ecological data about habitat use to advise appropriate land management practices for this vulnerable species.

In addition, the Project has continued to upskill and support informed, passionate, and active community groups dedicated to conserving Threatened species.

Road trauma is the largest source of documented mortality for urban Powerful Owls and removes 5% of the Sydney Basin population annually. Dr Beth Mott will present on the status of populations, the impact of road trauma and strategies for effective land management for the Powerful Owl and other declining forest owls in urban spaces at the November NSW Roadside Environment Committee meeting.

Beth has been working with the Powerful Owl Coalition - a group of concerned community environment groups in northern Sydney - in developing a position paper aimed at educating and assisting a range of stakeholders - planners, land and infrastructure managers, local councils, arborists, bushcarers and gardeners - to protect and increase Powerful Owl numbers by conserving their habitat. You can find and download the document here

<https://www.step.org.au/images/STEPimages/PDFdownloads/POppweb.pdf>



Road Kill

According to the International Union for Conservation of Nature, which maintains the Red List of Threatened Species, of 13,761 endangered or critically

endangered species, 4,383 are directly threatened by infrastructure projects of one kind or another. These include residential and commercial development, extractive industries, energy projects and road building.

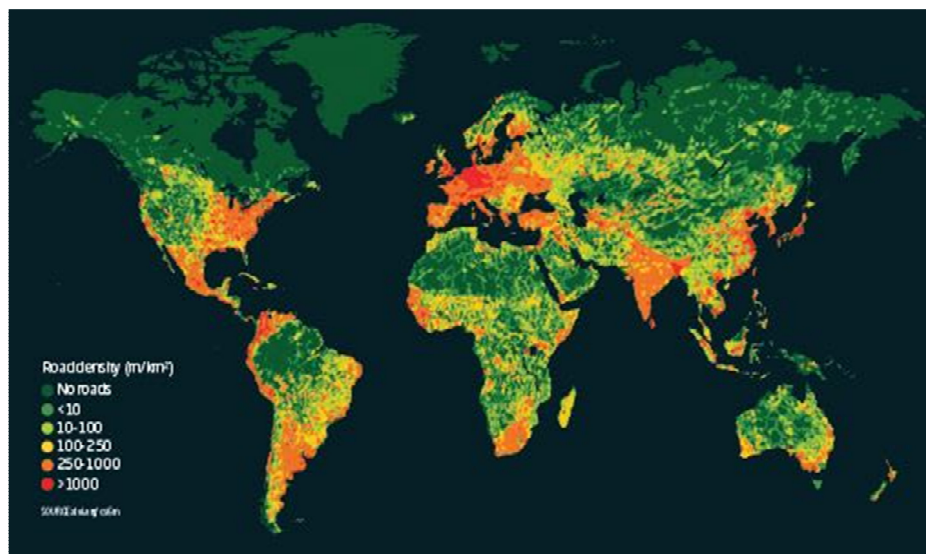
A further 7,500 or so species are at risk from farming, logging, hunting, gathering, trapping and fishing.

A recent paper on the risk of road building, co-authored by Bill Laurance of James Cook University in Australia, reported that “we are currently witnessing the most dramatic era of road expansion in human history”.

The researchers calculated that since 2000, the world’s legal road network has lengthened by 12 million kilometres, enough to encircle the globe 300 times – not including wildcat road building for illegal logging, farming and hunting. Most new roads are in the tropics, where the bulk of the world’s wildlife resides.

According to a recent article in the New Scientist, for these reasons, conservation biologists regard infrastructure development as the principal agent of biodiversity decline. An analysis of 35 years of research on habitat fragmentation caused by such development concluded that it reduces biodiversity by anything from 13 to 75 per cent.

Read more at: <https://mahb.stanford.edu/wp-content/uploads/2018/09/Lawton-2018-Road-Kill.pdf>



Density of roads across the world (source: New Scientist, 1 September 2018)

\$450,000 announced for Southern Highlands Koala Conservation Project

The Southern Highlands Koala Conservation Project team are thrilled by the announcement of a major funding boost by the NSW State Government.

The joint three-year project has been announced by the NSW Saving Our Species (SOS) program and Wingecarribee Shire Council to address koala conservation in the region.

Speaking to the Southern Highland News, Goulburn MP Pru Goward explained the

\$450,000 project was aligned with the SOS Koala Project and would deliver actions outlined by the NSW Koala Strategy.

Works will include habitat restoration, fire planning and management, initiatives to reduce vehicle strikes, landholder and community engagement, monitoring and data collection.

State-wide analysis has revealed that the Southern Highlands is home to a very significant koala population, with ecologists from the NSW Office of Environment & Heritage estimating the local koala population to be more than 3,000 individuals, making it the largest koala population in southern NSW and approximately 10% of the estimated total number of koalas remaining in NSW.

Interestingly, the population is thought to be stable or slowly increasing, with modelling showing the population to have a relatively high resilience to climate change. The region is also experiencing significantly less development pressure than in other parts of the State.

The funding will be over three years (2018-19 to 2020-21) and will support a project officer, employed and co-funded by the council and operating in the region.

Partnerships with other conservation groups in the region will be developed now the funding agreement is finalised with council.

Source: Wingecarribee Web, produced by the Environment & Sustainability team at Wingecarribee Shire Council

Wildlife on the highway to hell

Having systematically monitored wild animals killed on the Brazilian federal highway BR-262, which passes through the Pantanal region, a research team from the Federal University of Mato Grosso do Sul, Brazil, published their data concerning birds and reptiles in the open access journal Check List.

Having mapped bird and reptile roadkill on the highway between the cities of Campo Grande and Corumbá in the Brazilian savannah, the team reports a total of 930 animals representing 29 reptile and 47 bird species. In addition, the data provide the first regional geographic record of the colubrid snake *Hydrodynastes bicinctus*.

The researchers conclude that the species richness observed in the road-killed animals clearly confirms earlier concerns about wildlife-vehicle collisions in the Pantanal region. Such accidents lead to long-term and chronic impact on both wildlife and road safety.

"Mitigation of wildlife-vehicle collisions on this road continues to claim urgency for biodiversity conservation and for human and animal safety and care," say the authors.

"For managers, the main goal should be to determine target species of greatest concern, focusing on those vulnerable to local extinction or those which represent major risks of serious accidents."

In the past, the team's dataset had already been used as a guide to road fauna management. In particular, it was used by government road managers when planning animal overpasses and underpasses equipped with roadside fences as part of the long-term project Programa Estrada Viva: BR-262. So far, however, only some of the less efficient safety methods, such as road signs and lowered speed limits, have been applied at the most critical points.

"BR-262 keeps its inglorious fame as a highway to hell for human and wild lives," points out lead author Wagner Fischer.

Excerpts from: https://www.eurekalert.org/pub_releases/2018-10/pp-wot102318.php

The rise of the bin chicken



In just a few decades, the Australian White Ibis (*Threskiornis molucca*) has made itself at home in many of Australia's coastal and inland cities. And aside from the feathered birds we see daily (often foraging amongst garbage), representations of ibis have exploded in popular culture. The humble ibis, it seems, has gone viral.

From ibis tattoos to artworks to TV series, this often maligned bird has become a cultural phenomenon, bordering on a national obsession.

Ibis have entered the Australian English lexicon as "bin chickens", "tip turkeys", "sandwich snatchers" and "picnic pirates", to name just four of their many nicknames.

A generation ago it was rare to see ibis in Australia's cities. Now they are thriving on the endless waste our cities provide. Small ibis colonies were established by conservationists in the early 1970s in places like Sydney's Taronga Zoo and Healesville Sanctuary in Victoria.

Ibis also migrated from interior wetlands to the coasts of east and southeast Australia and the southwest. That migration was forced by drought and habitat loss, which have caused huge declines in inland ibis numbers. Sydney's ibis population today is estimated at about 10,000.

The Australian White Ibis is a native bird that is on the move. Ibis remind us every day of the environmental challenges we all face. Their tenacity and fearlessness as environmental refugees mean that they attract intense visceral rejections and groundswells of affection alike.

Excerpts from: <https://theconversation.com/friday-essay-the-rise-of-the-bin-chicken-a-totem-for-modern-australia-100673>



Roadside verges 'last refuge for wild flowers'



More than 700 species of wild plants - almost half of the native flora of the British Isles - are found on road verges, according to a study.

Many plants once found in meadows now only thrive beside roads, where they provide essential habitat for insects, says charity Plantlife [UK].

But it says one in 10 of the plants is at risk of extinction, in part because councils cut verges too early.

Local authorities say shorter verges are safer for drivers and pedestrians. Dr Trevor Dines, botanical specialist for the charity, said more than 97% of meadows had been destroyed in England since the 1930s, with road verges becoming the last stretches of natural habitat for wildlife such as bees and other insects.

"Most of our farmland is now hostile to many of our wild plants and other wildlife due to the loss of wild flower meadows and the use of herbicides and fertilisers," he told BBC News.

"The roadside verges are often the last refuge for wild flowers and the wildlife there depends on them.

"It's almost as if plants have been squeezed out of farmland and now they're being squeezed out of road verges from bad management."

The Local Government Association has said keeping road verges well-maintained means motorists have a good line of sight and allows pedestrians to walk more safely alongside busy roads.

Plantlife International says road verges are of particular importance to rare plants such as Deptford pink, tower mustard and spiked rampion.

They also act as wildlife corridors and provide pollen and nectar for bees, butterflies and moths.

The wild plant conservation charity says many of Britain's road verges are being cut down in full flower threatening the wildflowers and the wildlife that depends on them.

It is calling on members of the public to sign a petition urging councils to do more to enhance the wildlife value of road verges.

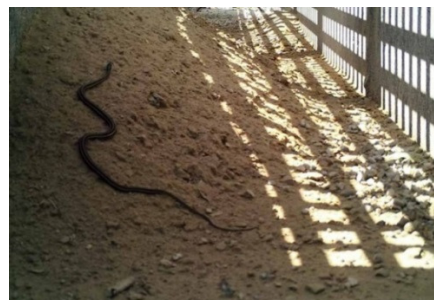
Its management principles for road verges include:

- Allowing plants to complete their full life cycle, i.e. to grow, flower and set seed
- Removing grass cuttings
- Allowing flowers to return over time as they spread naturally.

Dr Dines added: "If we just give them a chance, wildflowers can return."

Excerpts from: <https://www.bbc.com/news/science-environment-33029385>

New eco-passage to help critters cross the road



Wildlife is benefitting from the installation of eco-passages at Bruce Peninsula National Park, Canada.

Eco-passages are specialized wildlife tunnels which allow animals to safely cross busy roads. They are especially important in areas where a road fragments critical habitat and prevents animals from reaching their breeding grounds.

Scientists have identified seven high priority locations for eco-passages in Bruce Peninsula National Park. These are areas - also known as "hotspots" - where there have traditionally been a high number of road deaths or injuries to reptiles and amphibians because of cars.

Animals which try to cross the road in these areas will encounter a specialised fence. Snakes, turtles and small mammals such as rodents are not able to crawl over, or dig under these fences. Instead they are redirected to a tunnel. These tunnels are specially designed to be more attractive to reptiles and amphibians by allowing sunlight through the top so these cold blooded creatures (ectotherms) don't have to go into cold, dark places to get where they are going.

Results so far are positive. Many different animals have already been photographed using these tunnels and improvements to the original design started in 2012 made.

The researchers are confident they are on the right path to help at-risk species such as snapping turtle, massasauga rattlesnake, eastern ribbon snake and several others.

Excerpts from: <https://www.pc.gc.ca/en/pn-np/on/bruce/decouvrir-discover/rtr/ecopass?platform=hootsuite>

The aim of this newsletter is to share information about the management of NSW linear reserve environments and profile the NSW Roadside Environment Committee (REC).

For more information about the REC: <https://landcare.nsw.gov.au/groups/nsw-roadside-environment-committee/>

Please contact the REC Executive Officer if you wish to subscribe or unsubscribe.



NSW
Roadside
Environment
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