May 2016 Edition 26

In this issue

Latest news from the REC

Members of the NSW Roadside Environment Committee (REC) recently visited the Moree district to inspect and discuss linear reserve environmental management issues in the area.

The REC meeting was hosted by Moree Plains Shire Council, and a field trip by North West Local Land Services. Representatives from the NSW Office of Environment and Heritage also participated in the field trip.

A report on the meeting and field trip will appear in the August edition of the NSW REC Newsletter.

Council Roadside Reserves Project

NSW GOVERNMENT | NSW Environmental TRUST

The Council Roadside Reserves (CRR) Project is a three year project funded by the NSW Environmental Trust and managed by Local Government NSW to:

- Assess council roadside reserve areas using a simple rapid assessment tool developed by the project
- Embed roadside reserve management into council's internal planning and management systems
- Build capacity of councils to manage the environmental values in their roadside reserves.

The CRR project focusses on valuing and managing the natural asset of the roadside reserve in an integrated way across council, managing risks and allowing

for strategic prioritisation of works in areas of high biodiversity or ecological value.

The project will be delivered in three phases:

Phase 1: Development of framework - this involves investigating current vegetation assessment protocols and tools and the development of tools and templates for councils to undertake rapid assessment of roadside reserves and capture their natural asset data.

Phase 2: Testing the draft framework - in 2017, grants of up to $50,000 will be available to NSW councils to apply the framework developed for assessing and managing roadside reserves and integrating this data into council management and planning processes. Projects to be funded include: on-ground works, roadside vegetation assessments, integrating roadside vegetation data into other council plans and processes (including IPR processes) and training and skills development.

Phase 3: Dissemination and integrated management of assets and risks - this final phase of the project will update the framework with the lessons learnt from Phase 2. The framework will be disseminated to all councils within NSW and enable councils to embed practice change so that best practice roadside environmental management becomes business as usual.

For more information contact: kirsty.mcintyre@lgnsw.nsw.gov.au

Read more in the CRR project fact sheet http://www.lgnsw.org.au/files/imce-uploads/127/crrp-factsheet-31.03.16.pdf

Biodiversity Legislation Review

The Independent Biodiversity Legislation Review Panel presented its final report to Government on 18 December 2014. The report included recommendations to improve the legislative and policy framework for biodiversity conservation and native vegetation management in New South Wales. In March 2015, the NSW Government committed to implementing all 43 recommendations in the report.

On 3 May 2016 the NSW Government released a draft Biodiversity Conservation Bill, draft Local Land Services (Amendment) Bill and supporting products for public exhibition.

These documents and information about making a submission are available on the NSW Government's Have Your Say web page https://www.landmanagement.nsw.gov.au/have-your-say/

Regent Honeyeater Restoration Project

John Holland Rail, on behalf of Transport for NSW, Taronga Conservation Society Australia and the Hunter Valley Partnership of the Great Eastern Ranges, has formed a partnership to deliver a Regent Honeyeater Restoration Project along

the disused rail corridor from Merriwa to Sandy Hollow. This unique partnership aims to improve community education about native wildlife and restore habitat connectivity by increasing biodiversity within non-operational rail corridors.

The project, funded by Transport for NSW, commenced with a one-day workshop with children from Merriwa Central and Sandy Hollow primary schools. The workshop aimed to develop an understanding of locally occurring threatened species and to create a sense of stewardship among children for the protection of their local environment. As part of the workshop, children had the opportunity to work on environmental action plans to present back to their school, families and community.

The project concluded with a tree-planting day at a site along the disused rail corridor at Gungal. Restoration works will improve habitat for the critically endangered Regent Honeyeater, a nomadic visitor to the region as well as many other native plants and animals. The site is situated between the Goulburn River National Park and the Manobalai Nature Reserve and will create a 'stepping-stone' across the landscape, improving movement corridors for wildlife.

The Hunter region is ecologically unique due to a natural gap in the Great Eastern Ranges making it one of only three areas on the eastern seaboard of Australia where coastal ecosystems extend inland. As such, movement corridors between the east and west are important as well as those to the north and south along the Great Eastern Ranges Corridor.

The partnership hopes to deliver further restoration projects of a similar nature in the future and will continue to engage new schools and the wider community in the process.

Merriwa Central and Sandy Hollow school students participating in the planting day held near the township of Gungal. Photo credit: Daniel Marsh, DEKM Photography

Source: Transport for NSW

NSW State Vegetation Map useful for environmental assessments

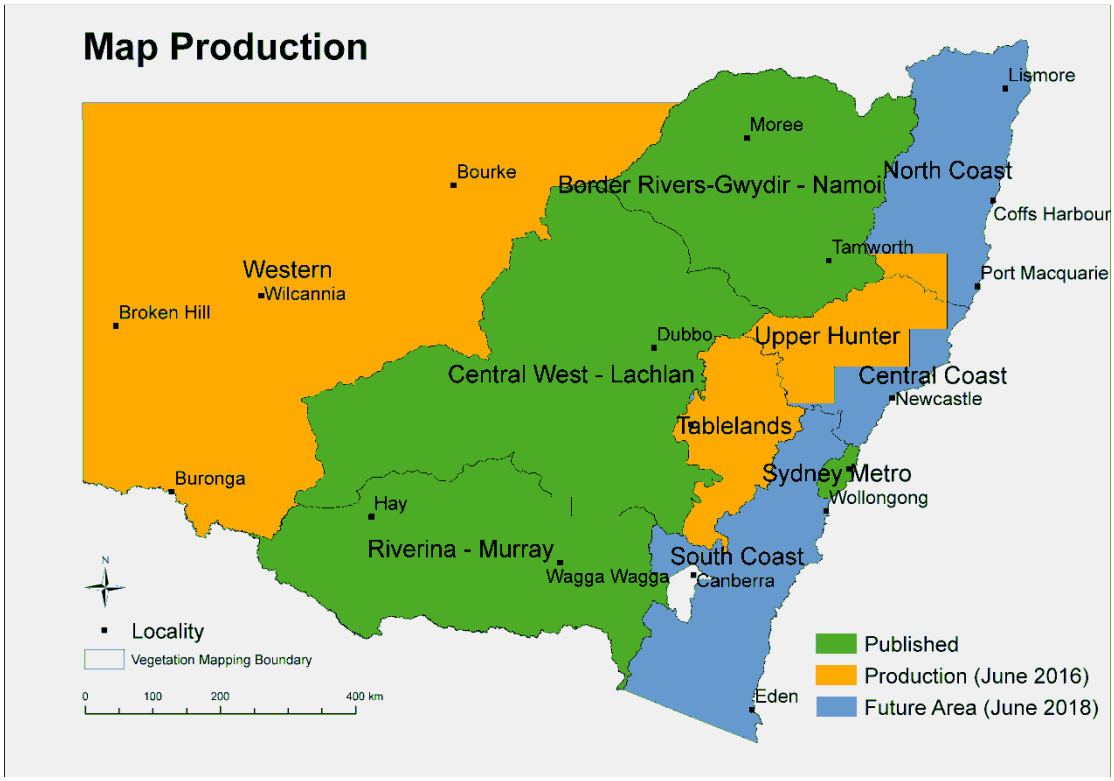
The NSW Office of Environment and Heritage (OEH) is producing a new map of the State's native vegetation based on very high spatial resolution imagery (0.5-2.5m). It will be a powerful tool in for carrying out linear reserve environmental assessments. The new data will help by collating the best available information in one place, provide a guide for the species you might expect in a field assessment, and supply GIS-ready products based on very high spatial resolution imagery.

1. Collecting existing information. The State Vegetation Map represents the best available information about native vegetation at any location in NSW. This includes plant survey records, tree cover and Plant Community Types (PCTs).

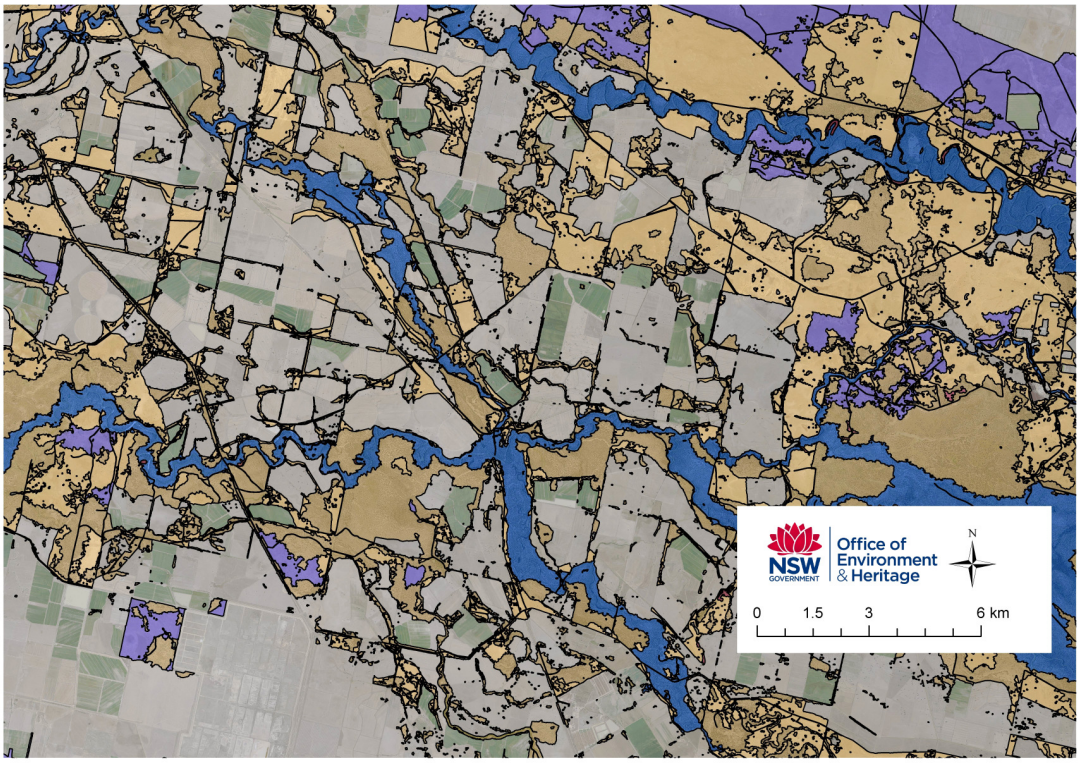
2. Assessment in the field. The maps are based on NSW Plant Community Types and have specific species associated with them. We supply the top three most likely PCTs that you may encounter.

3. GIS mapping. One of the biggest time savers is that we have created polygons based on very high spatial resolution for all of NSW. Simply select the polygon, measure the width, check the canopy cover supplied for each polygon, and check for a wildlife corridor.

4. Updating the mapping. We may not get everything right the first time. If you have any new information that can improve the mapping, send it into us and we will try and incorporate it into the next version of the State Vegetation Map.



Production schedule for the NSW State Vegetation Map



An extract of the SVM showing vegetation formations

Source: http://www.environment.nsw.gov.au/vegetation/state-vegetation-type-map.htm

Roadside Vegetation Training for Lachlan Shire Council

Lachlan Shire Council has produced a new Roadside Vegetation Management Plan Factsheet. Lachlan LGA is the largest in Central NSW, with an area of 15,000km^2 and has approximately 4,000km of roads.

Roadside vegetation is of particular importance in the Lachlan LGA because it often represents the only remnant vegetation in much of the shire. It also provides connectivity for a range of fauna species.

Lachlan Shire Council, with the assistance of Central West Local Land Services, engaged a consultant to assess the composition and condition of the roadside vegetation in the region. The findings of the assessment were condensed into a pair of complementary documents:

- Lachlan Shire Council Roadside Vegetation Management Guidelines
- Lachlan Shire Council Roadside Vegetation Assessment and Prioritisation for Rehabilitation

The roadside vegetation training program will provide targeted training to more than 40 staff members at Lachlan Shire Council, enabling them to:

- understand and interpret the Lachlan Shire Council Roadside Vegetation Management Guidelines, and Lachlan Shire Council Roadside Vegetation Assessment and Prioritisation for Rehabilitation
- recognise areas of high, medium, and low conservation value
- understand their obligations in relation to the management of these conservation areas
- understand legislative requirements and associated penalties related to native vegetation management.

Source:
http://static1.squarespace.com/static/55b839c6e4b0a286c4c4a481/t/571ef50e2eeb8154a24a931d/1461646632208/2016.03.15+Lachlan+Shire+Council.pdf

Power Line Easements and Bees

Anthropogenic landscape elements, such as roadsides, hedgerows, field edges, and power line clearings, can be managed to provide important habitats for wild bees. However, the effects of habitat improvement schemes in power line clearings on components of diversity are poorly studied.

Findings from a recent study in Norway suggest that changes in management practices, that is, removing debris after clearing, create a preferred habitat for bees and whether these translate into an increased pollen provisioning for offspring may enhance bee diversity in power line clearings. However, it should be noted that this study was limited to the diversity of solitary bees, and the suggested management advice might have different effects on other organisms.

In order to mitigate negative effects on the local diversity of decomposers, the woody debris could be left on site and collected in heaps, thereby creating a heterogeneous environment that benefits both bees and organisms that depend on dead wood. Moreover, the responses measured in this study are likely to be a mixture of population-level responses occurring at the site level, and behavioural-level responses occurring within sites. Future studies of bees should aim to test whether behavioural-level responses, such as those documented in this study, manifest themselves at the population level.

Source: http://onlinelibrary.wiley.com/doi/10.1002/ece3.1963/full

A letter of concern: Turtles Crossing the Orara Way

PO Box 5176
4 Connell St
Glenreagh NSW 2450
10 April 2016

Mr Neil Dufty
Executive Officer,
NSW Roadside Environment Committee

Dear Mr Dufty,

My name is Rachel Pobjoy and I am nine years of age. I am concerned by turtles crossing our roads and getting run over by cars. I am also worried that some people might swerve to get around the turtles and crash into dams and even die.

Figure 1 This is like the turtles we found.

Many turtles are crossing roads, but some are not happy about it. On Saturday the ninth of April, my family were on our way back from Dairyville after my brother's soccer game. We came across five turtles near Poperaperan Creek Road on the Orara Way, Karangi. We stopped to get them off the road. Three were on the grass on the Coffs Harbour bound side of the road, one turtle was on the edge of the road about to cross and two were a quarter of the way across. A car ran straight over one of these turtles and it died straight away. The tyre also ran right over the other turtle's head and died minutes later. It was sad to see because Mum and I are animal lovers. My Dad put the other turtles back to the water so they wouldn't be run over as well.

Figure 2 This is where we found the turtles. Google maps says it was outside 1142 Orara Way, Karangi.

So please can you put a sign that says watch out for turtles like we do for other animals? Would you please put them next to wetland areas and dams that are next to roads, especially on the Orara Way. My nana also says she sees them crossing at Mortons Flat. Please help them.

From Rachel Pobjoy
repobjoy@gmail.com
cc Coffs Harbour City Council, Coffs Harbour Regional Land Care

Combining fire and herbicide to control African Lovegrass

A project team of scientists and land managers have been trialling combinations of fire and herbicide to manage African Lovegrass and support restoration efforts in degraded woodlands in Scheyville and Cattai National Parks in Sydney's west. The trial allowed a good comparison of herbicide application, and fire, as methods of controlling Lovegrass, singly or in combination.

Jonathan Sanders from NSW National Parks and Wildlife Service said: "African Lovegrass is a highly resilient species of tussock grass that can alter both paddocks and grassy woodlands by forming thick monocultures and suppressing the growth of other plant species."

Charles Morris from Western Sydney University said: "African Lovegrass has proven to be a very difficult weed to control. It regrows quickly after fire, outcompeting native species, and when poisoned it creates a thick thatch that inhibits the germination of native species. Combining the use of fire and herbicide has shown very promising results as the Lovegrass sward is consumed by the fire, and the herbicide limits Lovegrass re-sprouting and germination."

Of the three ways of combining herbicide and fire that were trialled, the herbicide + fire + herbicide was the most effective at controlling the Lovegrass, closely followed by the fire + herbicide treatment.

The project has been assisted by the NSW Government through its Environmental Trust, and involved more than three years of work. There is already keen interest in the project results amongst other land managers.

Download the team's research findings, here
http://www.nature.org.au/media/213734/cumberland_african-lovegrass_web_jan2016.pdf

PROJECT TEAM: The team included personnel from the NSW National Parks and Wildlife Service, Western Sydney University, NSW Nature Conservation Council, Australian Association of Bush Regenerators, Muru Mittigar Aboriginal Centre, and Aquila Ecological.

Roadsides Provide Critical Habitat For Pollinators

The alarming loss of habitat over the past two decades has left untold millions of bees, butterflies and other wild pollinators hungry and homeless. The small creatures on which we depend for a significant portion of our food supply have hardly been without their champions; public support for monarch butterflies alone has been estimated in the billions of dollars. Still, the pollinator prognosis remained dire. But over the past 18 months, support for pollinators has undergone a seismic shift, led by President Obama, who called for a national Pollinator Task Force in the spring of 2014. Less than a year later, in a book-length "Strategy to Protect the Health of Honey Bees and Other Pollinators," the federal government set ambitious goals that include the restoration or enhancement of 7 million acres of land for pollinator habitat over the next five years. Roadsides will comprise a significant portion of that acreage.

"It's historic," says Scott Black, executive director of the Xerces Society for Invertebrate Conservation. "Two decades ago, we could have fit all the people who were interested in this topic in my dining room. It's incredible that the President has become involved. It's a major advance in pollinator conservation." Why are roadsides so important? Because they offer the space to support the wide variety of the wildflowers and other native plants essential to pollinator survival as anyone can observe on a summer stroll along a quiet country lane. But many people would be surprised to learn how vast our roadside acreage really is.

"Roadsides form one of the most extensive linear habitats on earth," says Jennifer Hopwood, a senior pollinator conservation specialist with the Xerces Society. Federal or state highway agencies manage more than 17 million acres of roadside lands not counting the thousands of miles of additional roadways maintained by our national parks and forests. In many areas, due largely to development and agricultural practices, pollinators have nowhere else to go.

"Roadsides that pass through urban areas and intensely farmed landscapes often provide the only natural or semi-natural habitat in the vicinity," Hopwood adds.

For the most part, this is public land, often ignored or abused, that, with caring management, can help our beleaguered pollinators begin to thrive once more. Many factors, some yet to be identified, have contributed to the collapse of wild pollinator populations. But an overarching cause is loss of safe habitat something roadsides don't always currently provide, even in the remote countryside. Safe habitat is pesticide and herbicide-free. It includes not only the plants that provide nectar (carbs) and pollen (protein) but also host plants for reproduction, rest stops for migrators and nesting areas for full-time residents, like the ground-nesting bees that often settle in the sunny bare patches between clumps of native grasses. Take away the plants and the pollinators are done for. This is what's happening at an alarming rate due to development, new agricultural norms and roadside management policies that favour a crew-cut landscape.

Source: https://www.wildflower.org/feature/?id=163

Retained native vegetation increase farm values, to a point

A University of Western Australia study has found retaining large tracts of native vegetation increases farm value. The research compared rates of native vegetation, land clearing and more than 7000 property sale prices in central Victoria.

Agricultural and resource economics head of school Professor David Pannell said on 1000 hectare farms, buyers liked to see about a fifth of the land covered in trees. "There's a clear link and a more positive link that some may have expected," Prof Pannell said.

"On one hectare properties almost half of the property being in native vegetation was a benefit. That's wasn't so surprising, what was more surprising was the quite large areas that remain positive even on the commercial farms."

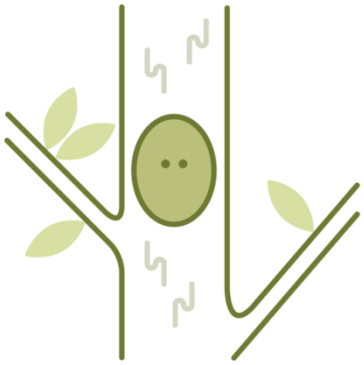
Professor Pannell said there were a number of factors that may have contributed to the findings. "One thing is that farmers do value the aesthetic; they like to live in a nice environment, they like to look at a view that's attractive, they like to be able to support biodiversity in their environment and get some personal pleasure from that," he said.

"There might be agricultural benefits as well, through provision of shelter for livestock.

"The other aspect is most farms have areas of relatively low productivity soils. Leaving that land in a wooded state is not such a big sacrifice. It's possible a combination of those factors, and other factors we haven't thought of."

Source: http://www.abc.net.au/news/2015-11-27/retaining-native-vegetation-increases-land-value/6979266

Homes as Hollows citizen science project



Through your involvement:

- Discover what animals are using hollows in your neighbourhood
- Provide land managers with valuable information
- Assist in providing first landscape assessment of hollow resources

Go to: https://www.rbgsyd.nsw.gov.au/Hollows-as-Homes/Hollows-as-Homes

Hollows for Habitat Forum

A 'Hollows for Habitat Forum' was held in Orange on Thursday 28 April to educate landholders, Local Government, Aboriginal Communities and Landcare groups to the plight of hollow-dependent fauna and best management practice for rehabilitation and restoration projects aimed at these species.

The keynote presentation from Sean Dooley set the tone for the day. Sean's presentation was funny, engaging, concerning but overall full of hope for the future. As editor of 'Birdlife Australia', Sean has a thorough understanding of the plight of native birdlife, as well as knowledge of much of the great work across the country being done to protect and restore habitat.

An extensive array of expert speakers discussed a whole host of topics including:

- nest box construction, installation and maintenance
- plant selection and species composition for revegetation projects
- the importance of protecting hollows and mature trees across the landscape
- management of feral species including hollow users and predatory animals
- management of hollows through the development application process for Local Government
- bats, gliders, birds and other hollow dependent fauna species and their requirements.

Additionally, local case studies covered the Cowra Woodland Birds project, the Glideways program and the work that Orange City Council is achieving throughout its natural reserve network engaging volunteers to provide and monitor nest boxes.

For many attendees the highlight of the day was a series of demonstrations of the hollow augmentation technique as demonstrated by local arborist Oliver Shoemark Tree Services. These demonstrations showed how artificial hollows can be cut into standing trees, utilising chainsaws, to provide a more natural and durable hollow than nest boxes currently provide.

Key themes to come out of the day included the importance of partnerships and networking for sharing knowledge and resources, the need to link habitat throughout the landscape, importance of long term monitoring and management, as well as the fact that improving habitat for flagship species has the potential to benefit a range of fauna.

The event was hosted by Central West Councils' Environment & Waterways Alliance, in partnership with Central Tablelands Local Land Services and Orange City Council, with the support of NSW Office of Environment & Heritage and the Great Eastern Ranges Initiative - K2W Link.

It is anticipated that this forum will lead to a notable increase in the number and range of projects across the Central Tablelands region aimed at improving habitat for hollow dependent species.

Approximately 100 people attended the Hollows for Habitat Forum in Orange. Image: C. Kerr

Arborist Henry Shoemark prepares to attach the face plate to a newly created glider hollow. Image: C. Kerr

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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 on the REC, including how to develop roadside vegetation management plans, go to:
http://www.rms.nsw.gov.au/about/what-we-do/committees/roadside-environment-committee.html

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

NSW Roadside Environment Committee

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