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Latest news from the REC

The NSW Roadside Environment Committee (REC) has developed a new logo which will appear in its upcoming newsletters and other publications.



2022 Linear Reserve Environmental Management Forum



The 2022 NSW Linear Reserve Environmental Management Forum, held on 17 May, was organised by the NSW Roadside Environment Committee (REC). Seventeen speakers from around Australia presented on developing, evaluating and promoting good practices in the environmental management of linear reserves. Over 80 people attended the Forum which was held in Sydney. The Forum covered a range of topics from 'Microbat Management Guidelines' to 'Aerial Weed Spraying' before finishing with a panel discussion and some Q and A.

The Forum was opened by Uncle Allen Madden (Metropolitan LALC) with a Welcome to Country.

The introduction was followed by the first keynote speaker, Dr Rodney van der Ree of WSP Australia. Rodney is a leading expert in urban ecology and transportation ecology in Australia and has worked internationally throughout Africa, Asia, Europe and the Americas. Rodney spoke about the history of road ecology in Australia, its current situation, and its potential future directions and areas of priority.

The second keynote speaker was Professor David Eldridge, a Principal Research Scientist with the Department of Planning and Environment. David has an extensive background on rangeland management and dryland ecosystems. He delivered a fascinating look into the condition of existing roadside verges, their ecological value for maintaining ecological functions, and what processes currently threaten them.

All Forum presentations are available at <u>https://www.molinostewart.com.au/2022-roadside-environment-committee-forum/</u>

Participants provided very positive feedback about the Forum and ideas for future improvements. A summary report of participant feedback is available at https://www.molinostewart.com.au/wp-content/uploads/2022-REC-Forum-feedback-report.pdf



How do you rate the forum overall? 33 responses



A range of new Bionet vegetation products

A major update to NSW vegetation classification and mapping has recently been released as part of the Integrated BioNet Vegetation Data (IBVD) program. These data and tools help modernise the way we work with vegetation information by providing a consistent map of the NSW Plant Community Types.

The release includes:

- Revised Plant Community Types (PCTs) for eastern NSW
- BioNet flora survey reference plots used in the definition of Plant Community Types
- State Vegetation Type Map (SVTM) including pre-clearing extent and % Cleared values for each PCT
- Threatened species and Threatened Ecological Community (TEC) associated with PCTs
- Trees-Near-Me mobile application for identifying PCTs in the field.

These products will be maintained and released on an annual cycle. As such the Department of Planning and Environment (DPE) welcomes feedback on areas for improvement of these important foundational products. If you have questions about how to use or integrate these products in your business, please reach out to the DPE BioNet team at <u>bionet@environment.nsw.gov.au</u>

Access the IBVD at https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet/integrated-bionet-vegetation-data-for-nsw



Systematic flora surveys (photo: Peter Robey/DPE)

State Vegetation Type Map



NSW Extant Plant Community Type Map (C1.1.M1)

The State Vegetation Type Map (SVTM) (C1.1.M1) went live on 24 June and represents the first regional scale map of Plant Community Types (PCTs) across all of NSW. It includes mapping of revised PCTs, Vegetation Class and Vegetation Formation, across all tenures in NSW.

There are two separate map products: the extant map which shows the distribution of the vegetation classification types within the limits of present-day native vegetation cover, while the pre-clearing map displays the likely distribution of types prior to the loss of native vegetation cover. For more information on how the maps were produced, refer to the State Vegetation Type Map homepage: https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity/nsw-bionet/state-vegetation-type-map

While a quick view of the map is available via the Trees Near Me NSW app, the data is available via the SEED portal: https://datasets.seed.nsw.gov.au/dataset/nsw-state-vegetation-type-map

SEED is a data portal that allows you to search for environmental data, display it in a built-in map viewer (Web Map Service) or download the data for use in your own GIS software. It also provides information on how the dataset was derived, the extent, data currency and quality. The newly updated BioNet Web Map services quick guide shows you how to access the map, either via a built in Web Map Service, or for browser and GIS users - <u>https://www.environment.nsw.gov.au/research-and-publications/publications-search/how-to-use-bionet-web-map-services</u>

Anyone can contribute to the ongoing improvement of the SVTM, by suggesting new or better information through the Provide Feedback button in SEED. Refer to this video to see how: <u>https://www.youtube.com/watch?v=MxG_NNCz7tg</u>

Likewise, as full floristic survey plots are the highest quality of point-based feedback for validation of ongoing improvement to PCT classification and mapping, uploading your flora survey plot data to BioNet enables them to be integrated into future releases of PCT Classification and the SVTM and is a sure way to improve the quality of data in your area of management. Refer to the 'how to' videos – part 1 and part 2:

https://vimeo.com/showcase/6521210/video/718934864

https://vimeo.com/showcase/6521210/video/718935028

Request for koala food



Unfortunately, due the recent flood events, Taronga's eucalyptus plantations were significantly impacted, and we are currently experiencing a shortage of supply of koala food (eucalyptus leaves), Taronga Zoo is interested in speaking to anyone who:

- is preparing to prune, fell or remove eucalyptus trees; and
- has ownership over eucalypts from which we can potentially harvest branches for koala food.

The Zoo would be extremely grateful if you were able to assist it and/or share this information amongst your network. It will consider any eucalyptus at this stage and make a call dependent on individual specimens etc. If you can help, please contact Ben Zerbes, Manager Horticulture, Taronga Conservation Society Australia, phone 0417 201 180 <u>bzerbes@zoo.nsw.gov.au</u>

Trees Near Me app



The Trees Near Me NSW app, released as part of the IBVD program, provides an easy way to access PCT vegetation classification and view the State Vegetation Type Map from the palm of your hand. https://www.environment.nsw.gov.au/topics/animals-and-

plants/biodiversity/nsw-bionet/state-vegetation-type-map/trees-near-me-nsw

Watch the video here: https://vimeo.com/695581729/0ddd78941d

Trees Near Me NSW is available from Google Play and Apple Store, allowing it to be used in the field, as well as from your desk. For desktop users there is also a new Trees Near Me NSW website. <u>https://treesnearme.app/</u>

Built for landholders, conservationists, land managers and anyone with an intertest in NSW flora, the Trees Near Me NSW app provides a simple to use way to learn about which plants are growing anywhere in NSW. You can view current day and pre-clearing vegetation maps, know which native Plant Community Types and species are local to an area or select an individual tree or plant for pictures and descriptions.

PCTs and the State Vegetation Type Map play an important role in biodiversity management and as a decision support tool in environmental planning and assessment processes. Smarter and faster access to this information using Trees Near Me NSW brings significant benefits to a wide range of users.

Underlying data is sourced from BioNet and discoverable via SEED data portals. If you find any data problems, DPE is happy to examine any particular cases and make changes to the SVTM if required. Feedback can be sent to BioNet, or alternatively, via the SEED Feedback Tool. bionet@environment.nsw.gov.au

https://www.seed.nsw.gov.au/news-and-resources/news/enhanced-feedback

Review of North Coast High Risk Weed Species, Sites and Pathways Inspection Plan 2023-2025



Local Land Services (LLS), in partnership with the North Coast Regional Weed Committee, is reviewing the North Coast High Risk Weed Species, Sites and Pathways Inspection Plan 2023-2025. The aim of this Plan is to identify and nominate high risk sites and pathways in the region that should be inspected for high-risk weeds.

Road reserves, rivers, streams, and rail corridors have been identified in the Plan as high-risk pathways due to poor accessibility, unknown tenure, or safety issues associated with their management. As a result of inconsistent management, these parcels provide an opportunity for weeds to move through the landscape unnoticed.

In the Plan, these pathways are identified, with further details including: the length of the pathway, rationale for the inclusion and who holds the responsibility to inspect.

These linear parcels often contain critical and significant biodiversity, link ecological communities together, and have a high risk of weeds travelling due to water, people, vehicle, animal movements. These parcels require the quick identification and control of new and high-risk weed incursions through regular inspections.

Other linear reserves such as traveling stock reserves and infrastructure easements (powerline and transmission corridors) do have the potential to act as pathways for weed dispersal. Due to the number of these linear reserves across the region and varying risks of their pathways, they are not included in the Plan, and it is up to each Local Control Authority to identify further priority pathways for their inspections.

More information on the high-risk species for your region can be found through the relevant Regional Strategic Weed Management Plan and the *NSW Biosecurity Act 2015*.

Get in touch with your local Invasive Plants Officer or LLS for more information on this Plan and further weed management information.

Learning more about Murrumbidgee roadside and TSR environments

Excerpt from the "Murrumbidgee Naturalist", February 2022

"On the 25th of November 2021 Murrumbidgee Landcare organised a workshop on Local Leeton Bushland. The workshop was aimed at learning tips and tricks for preserving and identifying significant bushland. Dick Green facilitated a great morning helping us to identify local bush species giving us the tools to assess the bush health at a local Travelling Stock Route (TSR) in the afternoon. Looking at the past often helps with the direction for the future. We found this out by looking at vegetation surveys done over many years in the Leeton area. More discussions over lunch were very valuable to consolidate our learning.

"When looking around your local landscape for bushland people often look for National Parks, State Forests, remnant vegetation on farms or beside rivers. In Agricultural areas where the land is used for cropping and livestock pursuits the land on the roadsides and in TSRs are often overlooked. The roadside vegetation is not being valued as an asset in the local vegetation space. Roadside surveys were produced many years ago but are not easily accessible for councils and landholders to view. Significant Roadside Vegetation signs are minimal in some areas which leads to vegetation being cleared without consultation (e.g. around Leeton and Coleambally).

"Attendees shared their experiences about local bushland on roadsides and TSRs. We all gained a deeper understanding of mapping that has been done historically (Beadle 1940s) covering western NSW and how it was complemented by local surveys by Eric Whiting (1994). Having this baseline survey on vegetation species, demonstrated to younger members of the workshop how these vulnerable sites were monitored in the past.

"Site assessment sheets were used at the local Euroley Bypass Travelling Stock Reserve (Yanco) to establish a bushland health rating for the vegetation which can now be used to monitor for possible deterioration and plan for action.

"As a result of this workshop, we hope to install signs to notify locals and visitors of the Significant Roadside Vegetation which will help landholders and council employees to recognise the areas which are not to be removed or disturbed. These areas are critical for the survival of woodland birds who are decreasing in numbers and who require the corridors of roadside to safely move from nesting sites to feeding sites. The roadside vegetation also offers some protection from feral cats and foxes."

- Kathy Tenison, Local Landcare Coordinator, <u>bidgeeirrigation@mli.org.au</u>



Participants at the Euroley Bypass Travelling Stock Reserve

Construction starts on the world's largest wildlife crossing

Excerpt from "Sierra", 1 May 2022

"On April 21, 10 minutes from where I live in the Santa Monica Mountains and about 35 miles northwest of downtown Los Angeles, a groundbreaking ceremony is beginning for the \$87 million Wallis Annenberg Wildlife Crossing—the largest project of its kind in the world. The span, to be landscaped with native vegetation and fitted with barriers to reduce noise and light from the freeway, is designed to give the range's endangered mountain lions safe passage across 10 lanes of the US 101 freeway. When completed in 2025, it will create a car-free corridor from the Santa Monicas to wildlands farther inland. Although just three-fourths of an acre in size, this artificial isthmus could reconnect hundreds of square miles of mountain lion habitat.

"The Santa Monicas run 65 miles across the Los Angeles metropolitan area. With the ocean to the south and freeways and urbanization severing the range from other Southern California mountains, they are a biological island. The range's mountain lions—as well as bobcats, mule deer, coyotes, and even some bird species—can't freely reach surrounding areas without having to traverse the 101 and 405 freeways. The inability of the lions to move in and out of the range has led to significant inbreeding among the big cats. The happy word of a new litter of kittens is invariably balanced by a follow-up study that their mother and father are related, thus increasing the risk of deformities and potentially reducing fertility.

"In addition, male lions fiercely defend huge territories, often 150 square miles in size, according to the National Park Service. Even their own fathers consider the adolescent animals rivals and will kill them to protect territory. So young males typically leave the areas where they were born to seek out their own turf and find mates elsewhere.

"Driven by an instinct to disperse, an 18-month male known as P-97 was killed trying to cross the 405 just one day before the groundbreaking. Since the National Park Service began tracking mountain lions in 2002, vehicles have struck and killed 26 of them. (Of the five mountain lions I've seen in the wild, three were roadkill.) P-97's death underscores the urgent need for the Annenberg crossing, named after the philanthropist whose \$25 million challenge grant spurred construction.

"While the plight of the lions in the Santa Monicas garners the most publicity, cougars throughout California face similar challenges, says T. Winston Vickers, a wildlife research veterinarian who leads the UC Davis Wildlife Health Center's mountain lion project. He says studies are underway to identify other promising locations throughout the state for projects to enhance connectivity between wildlands. The California State Assembly is also considering the Safe Roads and Protection Act, which could lead to the construction of more wildlife crossings."

- Matt Jaffe



Mountain Lion in Los Angeles (photo: Steve Winter/National Geographic)

Read the full article at https://www.sierraclub.org/sierra/new-hope-for-la-s-mountain-lions



For wildlife on Brazil's highways, roadkill is just the tip of the iceberg

Brazil, one of the largest countries in the world, is crisscrossed by a network of roads and highways that run more than 1.7 million kilometres — enough to circle the globe more than 40 times. Cutting through some of the most biodiverse areas on Earth, these roads are the scene of daily deaths of wildlife. But the problem of roadkill is just one of the many impacts wrought by the clearing of forests and construction of roads, scientists say.

"[Wildlife] fatalities are the most perceived impact, since all users see themselves as potentially involved in collisions or witness fresh meat and blood splattered across the asphalt," says Andreas Kindel, coordinator of the Center for Ecology of Roads and Railways at the Federal University of Rio Grande do Sul (NERF-UFRGS).

Kindel is reluctant to give an estimate of how many animals die on Brazil's roads and highways each year; such numbers are unreliable, he says. But he acknowledges that the data can help to raise awareness and make the issue more relevant because of the potential for numbers to mobilize public opinion.

The Brazilian Center for Road Ecology (CBEE) of the Federal University of Lavras (UFLA) came up with one such number in 2013: it estimated that 475 million wild vertebrates are killed by vehicles every year on Brazil's roads and highways. "I believe the [true] number is much higher, because it's only on a few roads where we have monitoring or any information at all," says biologist and researcher Cecília Bueno, from the Brazilian Network of Experts in Transport Ecology (REET Brasil).

For Kindel, the best opportunity to reduce or eliminate negative impacts on wildlife is when planning a new road, starting by choosing the route with the least impact. "And we are still in the early stages of adopting robust approaches to this," he says.

Read the full article at https://news.mongabay.com/2022/05/for-wildlife-on-brazils-highways-roadkill-is-just-the-tip-of-the-iceberg/



Vegetated viaduct over the BR-101 highway in the state of Rio de Janeiro (photo: Associação Mico-Leão-Dourado)

Roads watched in Reef check

Queensland councils want to protect the Great Barrier Reef by monitoring thousands of kilometres of unsealed country roads.

An estimated average 25mm of road material washes off the top of 38,000km of unsealed roads in the Reef catchment every year.

A new research project has started monitoring unsealed roads and their impact on water quality at test sites in Whitsunday Regional Council and Gladstone Regional Council in a bid to protect the Reef.

Local Government Association of Queensland (LGAQ) CEO Alison Smith says: "Councils – on behalf of their communities - continually demonstrate their commitment to protect the Reef".

"This research will give us critical information to help advocate for funding to create cleaner road runoff to protect our Reef and better roads for communities," she said.

Fine sediments like those washed from unsealed roads and drains are one of the three greatest water quality risks to the Reef, reducing light to seagrass beds and inshore coral reefs.

The Cleaner Road Runoff project results are expected to form the basis of guidelines to improve road design and maintenance.

The program is now expanding with the Local Government Association of Queensland securing an additional \$1 million of funding from the Great Barrier Reef Foundation (GBRF), extending the research until May 2024 and including another two reef catchment councils.

The Cleaner Road Runoff Project is funded by the partnership between the Australian Government's Reef Trust and the Great Barrier Reef Foundation with support from Griffith University, IPWEAQ, Department of Environment and Science, Office of the Great Barrier Reef, Bundaberg Regional Council, Whitsunday Regional Council and Gladstone Regional Council.

Excerpt from "Water Career": <u>http://www.watercareer.com.au/news/roads-watched-in-reef-check</u>

New Bird ID Book

The "Compact Australian Bird Guide" is an easy-to-use and beautifully illustrated quick identification guide to all bird species regularly occurring in Australia. The content has been carefully designed to provide the reader with key information to enable rapid identification of a bird, in a convenient form.

Based on the award-winning The Australian Bird Guide, this compact format features over 700 bird species that are residents of, or regular visitors, to the Australian mainland and Tasmania, and surrounding seas.

The Compact Australian Bird Guide will appeal to both the beginner and experienced birdwatcher, and includes up-to-date species descriptions, distribution maps, illustrations and quick guide comparison pages for major groups. Ideal for your next holiday, field trip, or simply to use in your own backyard.

THE COMPACT Australian BIRDBUDDE GUUDDE

More about the book at https://www.publish.csiro.au/book/7916/

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: <u>https://roads-</u> waterways.transport.nsw.gov.au/about/what-we-do/committees/roadsideenvironment-committee.html

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

