



## February 2017 Edition 29

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### Latest news from the REC

The NSW Roadside Environment Committee held its November meeting at Wingecarribee Shire Council to learn more about Council's 'Wingecarribee protect and grow roadsides program: a data driven strategic approach'.

This project won the 2015 NSW Roadside Environmental Management Award. At the meeting, the REC also found out about the Southern Highlands koala project managed by the NSW Office of Environment and Heritage.

### Moree Plains Shire Council wins 2016 NSW Roadside Environmental Management Award

The Local Government Excellence in the Environment Awards were initiated in 1998 and are held annually. The Awards are open to all local government organisations in NSW.

The Awards culminate in two prestigious Local Sustainability Awards: one for overall council performance, and one to recognise the individual achievements of a council staff member or elected councillor in the field of sustainability.

The NSW Roadside Environment Committee has sponsored the Roadside Environmental Management Award for the past six years. The 2016 awards were held at Doltone House, Sydney on 29 November.

The Winner of Division A and Overall Category Winner was **Moree Plains Shire Council** for its Roadside Environmental Management Plan. This Roadside Environmental Management Plan project provided Moree Plains Shire Council with a clear strategy for conserving and enhancing native vegetation and habitat in its roadside reserves. This Plan is underpinned by the results of a survey of 1,250 km of Shire roads and the training of key council staff in how to identify local fauna and flora and the use of the Plan.

The Roadside Environmental Management Plan now forms part of Council's integrated planning and reporting processes, and includes Best Practice Guidelines for routine road construction and maintenance activities.

Further details about Moree Plains Shire Council's Roadside Environmental Management Plan can be found at [http://www.lgnsw.org.au/files/imce-uploads/90/Road\\_Environmental\\_Management%20\\_Plan\\_Moree.pdf](http://www.lgnsw.org.au/files/imce-uploads/90/Road_Environmental_Management%20_Plan_Moree.pdf)

Highly Commended in Division A was **Lachlan Shire Council** for its Roadside Corridor Assessment and Management Guidelines.

Highly Commended in Division B was **Ballina Shire Council** for its Chickiba Roadside Wetlands Restoration Project.



*Kylie Kerr and Dennis Purse of Moree Plains Shire Council receive the outright winner award*

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### **Restoring Roadside EECs in the Hunter**

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A two year project to improve native species diversity and condition of Endangered Ecological Communities (Lower Hunter Spotted Gum Ironbark, Hunter Lowland Redgum and Central Hunter Ironbark-Spotted Gum-Greybox Forest) along 41 kilometres of roadsides, at 14 project sites across the Port Stephens, Maitland and Dungog Council areas, has recently been completed. Funded by the NSW Environmental Trust, the project achieved an 80% to 95% reduction in high priority weed infestations including Lantana, Bridal Creeper, and Asparagus Fern.

Fauna surveys completed at nine project sites confirmed the importance of roadside vegetation in providing wildlife habitat, including maintaining corridors between larger areas of contiguous bushland. These surveys identified:

- 11 threatened fauna species foraging or roosting directly within roadside reserves, including the Swift Parrot, Koala, Brush-tailed Phascogale, Squirrel Gliders, Varied Sittella, Musk Lorikeet, Little Lorikeet, Speckled Warbler, Grey-crowned Babbler, White Throated Needle-tail and Grey-Headed Flying Fox
- A total of 100 bird species, 15 mammal species, 7 nocturnal bird species, 12 reptiles and 14 amphibians across the sites
- 124 hollow bearing trees with the potential to provide habitat for a range of native species.

The project also delivered a Weed Blitz Weekend, Weed Identification and Control Workshop, and Endangered Fauna Workshop to raise awareness among local residents of the value of roadside and other vegetation in their local area, and to encourage landholders to actively control weeds on their own properties.

For more details contact Eva Twarkowski [evat@huntercouncils.com.au](mailto:evat@huntercouncils.com.au)



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### **NSW Travelling Stock Reserves State Planning Framework 2016-2021 released**

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The Local Land Services Travelling Stock Reserves (TSR) Cross Regional Team, which formed and first met in 2014, developed the Draft NSW TSR State Planning Framework 2016-21 in September 2015. The document was approved for release for public consultation by the Local Land Services Board of Chairs in October 2015.

A total of 668 submissions were submitted to Local Land Services during the submission period from 4th November to 18th December 2015 from a large number of stakeholder groups.

The Response to Submission document is available on the Local Land Services website and shows how specific feedback was incorporated.

[http://www.lls.nsw.gov.au/\\_data/assets/pdf\\_file/0007/691432/Response-to-Submissions-TSR-Planning-Framework.pdf](http://www.lls.nsw.gov.au/_data/assets/pdf_file/0007/691432/Response-to-Submissions-TSR-Planning-Framework.pdf)

Following the close of submissions, the Local Land Services Cross Regional Team considered all submissions and incorporated many amendments to the draft document.

The final NSW Travelling Stock Reserves State Planning Framework 2016-21 has now been approved by the Local Land Services Board of Chairs for public release and is available on the Local Land Services website at

<http://www.lls.nsw.gov.au/livestock/stock-routes/tsr-draft-state-planning-framework-faqs>

The document is a high-level document which guides Local Land Services on the way it manages all TSR within its care and control.

Only the 492,000 ha of TSRs under the care, control and management of Local Land Services are affected by this process. These are the TSRs gazetted to Local Land Services or previously to the Livestock Health and Pest Authority for the movement of stock and other stock purposes.

This framework does not deal with the 97,490 ha of TSRs under the care, control and management of NSW Department of Primary Industries – Lands (Crown Lands) or to the 1,397,563 ha of TSRs under other tenure (mostly Western Lands leases).

In 2017 Local Land Services regions will commence the development of their Regional TSR Plans of Management which will reflect the principles included in this document. All stakeholders who wish to participate in the development of regional plans are welcome to work with Local Land Services in your region.



*TSR near Albury (photo: N. Dufty)*

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### **Biodiversity Conservation Bill and the Local Land Services Act Amendment Bill passed**

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On 17 November 2016, the NSW Parliament passed the Biodiversity Conservation Bill and Local Land Services Amendment Bill. The new Acts will be supported by regulations and other detailed products. The government will continue to engage with stakeholders and the community as these are prepared over the coming months. The new scheme will be able to commence from mid-2017.

Work will continue as the enabling Regulation, tools and products to support the legislation are developed during 2017. Further consultation on more detailed components of the package will take place before the proposed legislation commences, including:

- Exhibiting the supporting Regulation.
- Consulting on the Native Vegetation Regulatory Map.
- Exhibiting a draft State Environmental Planning Policy for urban vegetation in early 2017.
- Exhibiting draft instruments such as the Biodiversity Assessment Method, wildlife management codes of practice and the land management codes of practice from early 2017.
- Engaging with wildlife rehabilitation providers to design a new accreditation program for wildlife rehabilitation and rescue services to start in early 2018.

Further details at <https://www.landmanagement.nsw.gov.au/>

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### **More than just a Long Paddock**

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A recently published article by Ian Davidson and Peter O'Shannassy presents the methods and progress of subsequent restoration works undertaken in two Riverina TSRs, Coreen/Round Swamp and Oil Tree Reserve in over more than a decade (from 2002 to the present). It additionally presents preliminary data on a recent five-year Biodiversity Fund Project that expands the program across a further 180 reserves.

In total, 251 TSRs were assessed and interventions have taken place on 180 reserves, with further works still occurring on 40 reserves.

Interventions have included grazing management, weed and pest species management and 800 ha of direct seeding on 60 sites. Direct seeding focused on shrubs that are commonly found in ungrazed examples of these ecosystems, but which have been reduced over time at the sites due to regular grazing.

Initial results are encouraging, with gradual demonstrable change occurring as a result of the combined treatments.

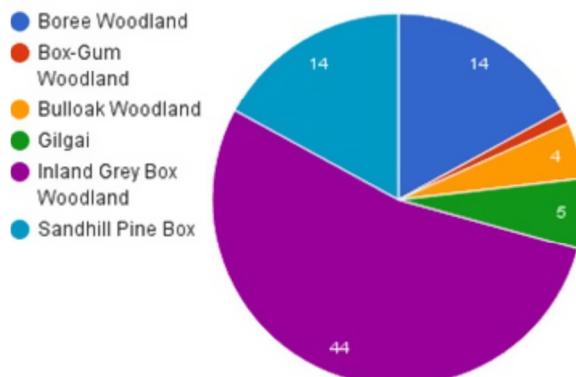
Some of the lessons learned from the research include:

- It will take longer than five years to progress the sites to substantially higher levels of recovery as it is “especially difficult in semi-arid areas where infrequent and sparse rainfall lead to lower germination and growth levels than higher rainfall areas. Even when good rainfall occurs in late spring/early summer, if is followed by harsh heat waves it can lead to high mortality of germinants”.
- “A stock proof fence, especially on more remote TSRs, often led to overgrazing because it was easy for drovers or neighbours to put stock on reserves illegally or longer periods than was permitted.”
- “In situ input by land managers (TSR Rangers) with knowledge of site management history was invaluable in piecing together why reserves were in their current condition and assisted greatly in realistic goal setting for future management.”

The researchers conclude by saying “The TSRs are not pristine and they never will be, given they have had more than 150 years of grazing history. But they will be

able to achieve much higher biodiversity values if managed well for all their many uses". The article can be accessed at  
<http://onlinelibrary.wiley.com/doi/10.1111/emr.12247/abstract>

**Breakdown of EEC site type**



*Endangered Ecological Communities (EECs) represented by the sites - the fact that 76% of the sites included EECs highlights the nature conservation significance of TSRs in the NSW Riverina (source: Davidson & O'Shannassy, 2017)*

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### **Firebreak strategy for stock routes**

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Riverina Local Land Services and Griffith Rural Fire Service recently met to review preparations for the fire danger risk in the upcoming summer period.

The session involved reviewing existing control measures already in place, such as grazing permit fee reductions and hazard reduction permit arrangements that can be requested in consultation with local rangers. Landholders are able to install firebreaks alongside stock routes providing they obtain advice and approval from the local ranger. A focus of the meeting was looking at planning and placement of firebreaks along arterial highways such as the Cobb and Mid-Western.

With the aid of timely risk assessment, planning and greatly improved co-ordination of response efforts, fire outbreaks can be combatted quickly to minimise impacts and damages.



*Rural Fire Service Officer Jason Wall with Ranger James Gillespie*

Source: Article by Peter Beal, Team Leader Land Services in November 2016  
Riverina LLS E-Newsletter

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## Communities Koala counting

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The Great Koala Count 2 involved counting koalas on one weekend in South Australia in late November 2016. Members of the public searched for koalas on these two days and recorded their search using a bespoke smartphone app, Koala Counter (available on iTunes and Google Play).

Koalas are a good example of the challenges involved in wildlife monitoring because they are distributed over a large area, and it is time-consuming and costly to visit all the places where they are found. The University of South Australia used a combination of public participation (a "citizen science" approach) and new technology to overcome some of these difficulties during the Great Koala Count 2.

In 2012 (the first Great Koala Count) estimated the total population of koalas in the Adelaide Hills to be a median of 113,000 koalas in the Adelaide Hills, but the estimate was 'rough', with an uncertainty ranging from 27,000 to 200,000.

The main objective of the Great Koala Count 2 is to produce a more precise estimate of the koala population in South Australia, particularly where there have not been adequate professional surveys (e.g., in the Adelaide Hills and around the tip of the Eyre Peninsula). Like the 2012 project, the 2016 survey engaged volunteer citizen scientists to search for and record koalas. But the second count included an important improvement over the 2012 survey made possible by the development of a specialised smartphone app.

The custom-built smartphone app recorded the search paths of the citizen scientists during the survey. Participants simply turned on the app when they started looking and turned it off when they finished, recording koala sightings along the way. These data will enable the research team to generate absence records in places along these observer paths where koalas are not recorded. Additionally, the data collected by the app will enable an analysis of the observer error of the volunteer koala counters, by comparing the observations of multiple volunteers who follow the same paths. The app will also provide accurate data on the search effort of the volunteer koala counters (how long it takes to find each

koala). The generation of absence records, the understanding of observer error, and the data on search effort will all be used in the generation of models of the koala populations around South Australia, which will in turn be used to estimate the size and distribution of the entire koala population in South Australia.

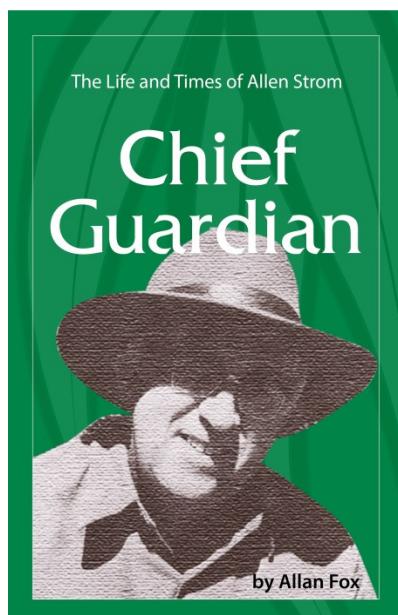
According to Philip Roetman from the University of South Australia, "The app is a game-changer for koala counting, and could be customised for similar wildlife projects around the world".

For more details and a video on how to use the app go to  
<https://www.linkedin.com/pulse/koala-counting-game-changer-citizen-science-philip-roetman>

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### New e-book about one of NSW's foremost conservationists

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A new biography about leading NSW conservationist and environmental educator Allen Strom has been recently launched. The Strom biography was written by another of Australia's leading conservationists and writers, Allan Fox.

The biography is an inspiring story of a person who came from humble beginnings to become the Chief Guardian of Fauna in NSW for nine years, prior to the establishment of the National Parks and Wildlife Service in 1967.

As Chief Guardian of Fauna, Allen Strom was instrumental in the development of NSW's first wildlife service which improved the management of fauna in the State, particularly by developing a pragmatic approach to the management of kangaroos in liaison with rural landholders. This service also established the system of nature reserves and wildlife refuges throughout NSW, and instigated numerous conservation education activities.

Allen Strom was heavily involved in the development of the community-based nature conservation movement in the State. He was the foundation secretary of the National Parks Association of NSW and on the executive of several other groups.

Allen Strom also was a leader in environmental education in NSW. He became a pioneer education officer at the Australian Museum, Sydney. From 1967, he worked in the Department of Education as the Advisor in Conservation in schooling until his retirement. He was instrumental in the commencement of Environmental Education Centres across NSW, managed by the NSW Department of Education.

Allen was made a Member of the Order of Australia in 1977 in recognition of his services to conservation education.

Author Allan Fox only drafted sections of the biography before his death, and it appeared the Strom story would be lost. However, a group of Strom devotees obtained electronic first drafts of the book and then edited them to make an e-book.

All proceeds for the book go to the Australian Association for Environmental Education (NSW).

The book can be purchased at <https://www.amazon.com.au/Chief-Guardian-Times-Allen-Strom-ebook/dp/B01H8IEORQ>

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### **Review of SEPP 44 - Koala Habitat Protection**

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The NSW Department of Planning & Environment is seeking feedback on the Explanation of Intended Effect: State Environmental Planning Policy 44 – Koala Habitat Protection. The Explanation of Intended Effect (EIE) outlines the intent of the proposed amendment of *State Environmental Planning Policy 44 – Koala Habitat Protection (SEPP 44)*. The EIE describes how the various parts of the proposed amendment will work and what the Department is seeking to achieve. The key changes in the proposed amended SEPP relate to the:

- definitions of koala habitat;
- list of tree species;
- list of councils; and
- development assessment process.

The Department will also transfer the strategic planning outcomes in SEPP 44 to the Local Planning Directions under section 117 of the *Environmental Planning and Assessment Act 1979*.

Submissions can be made until 3 March 2017. Go to  
<http://www.planning.nsw.gov.au/Policy-and-Legislation/State-Environmental-Planning-Policies-Review/Draft-koala-habitat-protection-SEPP>

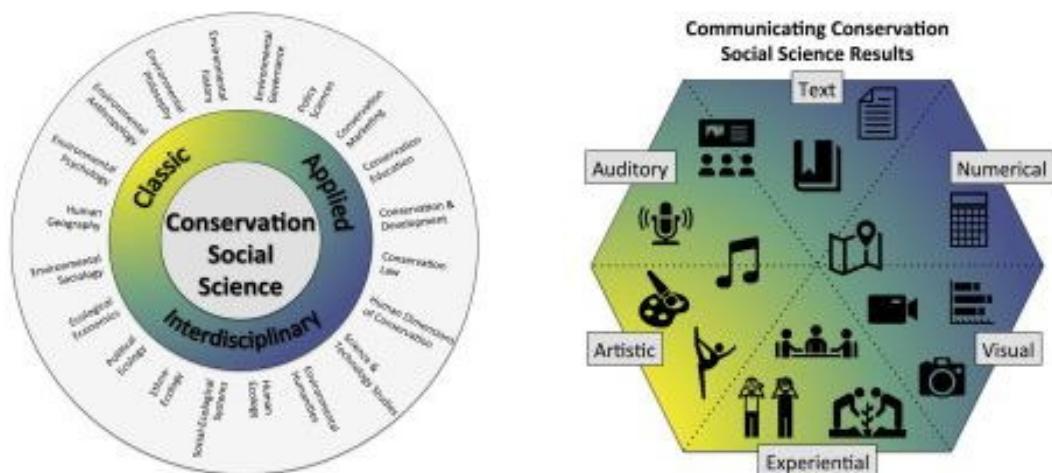
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### **Engaging the social sciences to improve conservation**

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A recent article in *Biological Conservation* shows the need for land managers to integrate the social and natural sciences for effective conservation decision-making during planning, implementation and management.

As shown in the figures below, the article identifies the different aspects of conservation social science for consideration in decision-making and how the results of conservation social science enquiry be communicated to stakeholders including local communities.



The article can be accessed at

<http://www.sciencedirect.com/science/article/pii/S0006320716305328>

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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.*

