

Lanchat

Landcare in the Southern New England, No. 115, October 2018 - March 2019



Southern
New England
Landcare

Our mission is to **lead, connect** and **enable** our communities to reach their sustainability goals in a changing environment.

Welcome

Welcome to a somewhat overdue Lanchat 115!

This issue is double sized due to the absence of our normal December issue! The team were all under the pump so to speak, applying for National Landcare Program Phase 2 grants, due on 11th January. Our apologies!

However, this one will keep you reading for some time - so much great stuff has happened in our region. Happy reading!

For regular updates on coming events, sign up for our eNews at www.snelandcare.org.au. It's free!

Diary Dates

SNELandcare Board Meeting 8 May

May Member Muster - Koala Spotlighting 15 May

NLP2 Smart Farm Partnership Grants close..... 17 May

Save the Date: NENW Landcare Adventure 12-13 June

August Member Muster - Focus on Ferals..... 14 August

Garry & Beatrice Awarded JWI Bequest

Harnham Landcare Group members and steadfast community supporters, Garry and Beatrice Bashford, were congratulated last week when they received the 2018 John Winter-Irving Bequest, made by John's wife Ona and their daughters.

Each year, the Board of Southern New England Landcare identifies a member or partner who has shown skills, interest and commitment in sustainable agriculture, natural resource management, rural development or leadership – and in the view of the Board has the potential for further development with the assistance of this bequest.

“Southern New England Landcare recommended Garry and Beatrice Bashford for the bequest

Continued on page 3

Below – Garry and Beatrice Bashford accept the JWI Bequest from Steve Harvey, Vice President, and the board of Southern New England Landcare in Armidale on 6th March.



National Biological Farming Conference impressed local participants

The Grass Grower's Tea Party has been a sub-group of Southern New England Landcare for many years after forming to coordinate and host the highly successful 2005 People in the Landscape Conference in Armidale.

The group had been dormant for some years but recently decided to spend funds remaining from the conference on supporting the 2018 Australian Biological Farming Conference & Expo held at the Gold Coast on 9-12 November 2018.

As a result, a number of locals were sponsored to attend. Here are some of the stories they brought home...

Justin Hoad impressed with speakers

I was very impressed by the professionalism, quality of speakers and array of displays at the conference.

The over-arching message for me was that chemical dependent agriculture will not be around in 100 years, maybe not in 50 years or even 20 years.

Below - food grade hemp grown by Mara Seeds at Mallanganee NSW. Mara Seeds are seeking grower cooperators.



The chemicals we use to grow crops and raise livestock not only affect our health, but also upset natural biological processes, reducing the nutrient density and the quality of our food, leading to poor human health.

We need to learn about growing food and fibre with reduced chemical inputs. Also to actively manage for increasing soil carbon and biological activity to build soil. The long-term outcome is better human health and our ability to increase food production for centuries.

Some specific talks that may be of interest to this area were:

- The possibility of growing food grade hemp seed crops. Hemp seed is 40% protein, with many health food product applications (separate to medicinal hemp or industrial fibre hemp). Possible yields of 1.5t in 110 days @ \$3500/t.
- Another possibility is supplementing livestock with a fungus that eats gut worms in the manure, breaking the lifecycle of the worms by 60-70%.

Feel free to contact me to find out more on these products or about the conference.

Justin Hoad, jahoad@bigpond.com or 0412 209328.

Fiona Smith all for 'insectories'

Thanks SNELandcare for enabling me to go – I had a great time both relaxing and networking. It is a great conference with real people doing the hard yards and collecting the data that we need.

My favourite speaker was Mary Retallack, Viticulturist/Managing Director of Retallack Viticulture, Crafters West, SA. Mary spoke on insectories – a very useful talk but we have heard it all before from Landcare and just need to do it on our farms whether we grow crops or not.

Mary has done some great research on all the different insects in vineyards which translates to other crops and farming operations.

From the overall experience it became obvious that everything we are reading about biological farming is that its not just one thing, it's a whole host of things but as a land manager you need to look at what you want to achieve and find ways to do it – Landcare has great options for information but you also need to do further investigations to get where you need to go.

I'm going to implement insectories – these will be little densely planted areas at the end of tree lots, plus fencing off corners in paddocks and filling them with a variety of local flowering plants to support all kinds of fauna – this is really important – now its time to put the time aside and just do it!

Bashford's note diversity at all levels

It certainly was an eye-opener to be in the presence of so many positive people with an intense passion about improving agricultural production.

One of my first realisations was that Biological producers have an end-focus of making and keeping people healthy. This of course

is achieved by providing healthy food derived from healthy soils.

‘Organic farming is modern farming’ was an often expressed theme and the whole ‘biological’ impetus seems to have adopted ‘Regenerative Farming’ as the best, all encompassing descriptor of what they are all about. The presenters and speakers were extremely interesting, knowledgeable and totally invested in their enterprises.

Along with this was their common messaging of diversity at all levels, which is what ultimately leads to healthy people. Diversity of animals, crops, cover crops, companion plants etc all lead to greater diversity in soil flora and fauna both macro and micro. The practices required to achieve the maximum diversity had to be economical and practical and would probably not be achievable overnight. If, along the path to regenerative production, some less than desirable practices are required (or are the only affordable practice) then they support this action being taken. However along with such action try to include some softening or ameliorating practice to lessen the negative impacts.

An example could be something as simple as having to plough a paddock for weed control or seed bed preparation. If then a suitable amount of compost was added this would help address the damage caused to soil structure and micro-organisms, just to name a couple. Things like weed and disease control may simply involve intelligent application of suitable crop rotations or managed grazing techniques. Other solutions may involve very precise selection and management of a cover crop, which is crimped at maturity (so it will not regrow, and provides mulch) and the crop being sown directly into it in one pass.

Minimising destructive practices, and if used, try to minimise their damaging impact, is I believe the take home message. An interesting, enjoyable and challenging conference. Great to experience and witness the huge size and breadth of the Biological Farming world and it’s increasing momentum.

In the end, regenerative practices will provide healthy food, can be viable for producers and are more than capable of providing enough food for the world’s population.

Garry & Beatrice Bashford.

Continued from page 1

because they have both shown real commitment to sustainable agriculture and leadership in their local community,” said Steve Harvey, Vice President of Southern New England Landcare, who presented the couple with the bequest.

The Bashfords are active members of Harnham Landcare Group, a sub-group of Southern New England Landcare, and practice planned grazing and careful management to improve soil health on their properties at Kentucky.

In addition to coordinating learning opportunities in their own district, such as Dr Christine Jones and Derek Smith from Working with Nature, the Bashfords also take on community volunteering roles with the Kentucky Hall Committee and the Rural Fire Service.

As keen learners, they attend

as many field days, workshops and conferences on sustainable and regenerative agriculture as they can.

“We are somewhat surprised, but very appreciative to have been recognised in John Winter-Irving’s memory,” said Garry Bashford.

The bequest is to be used as a study grant in an activity of the recipient’s choosing, in the field of sustainable agriculture, natural resource management, rural or regional development or leadership.

“We are looking into using the bequest to further enhance our ability to improve our soils, especially the microbiological activity,” said Beatrice.

“This is important because we are the guardians of the soil and many of us have been witnessing the deterioration of the soil structure in our lifetimes,” she said.

“Improving our soils will increase the water and nutrient holding capacity resulting in better resilience and healthier crops, pastures and animals,” she said.

The Board of Southern New England Landcare Ltd is honoured that the Winter-Irving family makes available an annual bequest to allow John’s unfailing commitment to Landcare in the Southern New England region to be continued.

2018 AGM & Celebration

The Southern New England Landcare AGM was held on 21 November 2018 in Uralla.

David Henderson (Aberfoyle Landcare) was elected as President with Stephen Harvey (Dangarsleigh Landcare) elected as Vice President.

Ordinary Directors elected were Bryan Johnston (Armidale Urban Rivercare), Jill Moore-Kashima (Soil Health Forum), Peter Metcalfe (Dumaresq Landcare), Bill Perrottet (Malpas Catchment Group), Bevely Stubberfield (Uralla Rivercare group), and new ordinary directors Rebecca Smith (BC² Group) and Richard Daugherty (Balala Brushgrove Landcare Group).

Karen Zirkler (Executive Officer) was re-appointed as Secretary and Public Officer.

After the formalities, members and guests were treated to Christmas refreshments while enjoying guest presentations by two previous John Winter Irving Bequest recipients, Bec Smith and Mark Fisher.

Bec spoke about the Chilean Needle Grass scientific trial she and the students at Armidale High School set up. Bec had spoken to a number of farmers about what they had observed about Chilean Needle Grass.

Mark has used his bequest to help produce the film which highlights the composting program that New England Girls School has implemented.

The pair teamed up earlier in the year to host students from several schools in the New England and North West at a regenerative agriculture day.

President's Report

Good evening and Welcome, to the 2018 Annual General Meeting of Southern New England Landcare Limited.

I am proud to recognise Aboriginal and Torres Strait Islander Elders, past and present and acknowledge custodians of the Aboriginal Land of the Anaiwan People, on which we meet.

I would like to recognise my Deputy Chair, Steve Harvey, who has kept me on the straight and narrow, on more than one occasion, this past year. Thank you, Steve.

Partnership with Northern Tablelands LLS. As I think I said last year, this is progressing

David Henderson then announced the recipients of the 2018 John Winter Irving Bequest as Garry and Beatrice Bashford. Unfortunately Garry and Beatrice could not be present at the AGM but SNE Landcare congratulates them heartily. They were presented with their award at a special morning tea at the landcare office on 6th March 2019 (see front page article).

The recipient of the 2018 Coordinators Choice Award was Helen Webb for her amazing and tireless work restoring our creek lands in Armidale. As a volunteer she puts in hundreds of hours every month and the award is well-deserved.

and endures as a robust and potentially new way forward for Landcare program delivery into the future.

The manner in which the formal Consortium Partnership was established and conducted for the purpose of preparing the NLP2 tenders, late last year, has been recognised at the State level by Landcare NSW and NSW Local Land Services.

I would like to acknowledge the collaboration with and input from Northern Tablelands LLS, Paul Hutchings, General Manager, Leith Hawkins, RLF Team Leader and Anneka Ferguson, RLF Northern Tablelands (ret.) who helped make this successful partnership work so well.

The NLP2 Tender submitted in a Consortium Partnership with Northern Tablelands Local Land Services, was successful and much of this year has been spent finalising contracts with individual Networks, by Northern Tablelands LLS, for core funding of approximately \$35000 per annum, per Network, over four years and additionally funded special projects to commence from July 1 2018, not yet finalised.

Contiguously, The various NLP2 Smartfarms Partnership Programs offered, saw Northern Tablelands LLS and Southern New England Landcare, individually and on behalf of Members and community, submit tenders. Sadly these tenders were not successful and no clear explanation for leaving Landcare out of a National Landcare Program has been forthcoming to date. This funding shortfall will put pressure on us in the coming year.

The SNEL team; ably led by Karen, with Sara, Rachel (new to Landcare and the Malpas Program this year, welcome Rachel) Shane, Struan and Amanda, look after a relatively complicated, 'busy' organisation with all its many activities and those of its Network partners. I believe in them and thank them all, warmly, as friends.

In August it was my privilege to be invited to participate in the Network's Community of Practice Workshop held over three days at Sara Schmude's property 'Metuchin', near Macksville. This practice, guided so skilfully by David Newell, Moze Crozier and Mel Geltch, from Campfire Coop, gave an amazing insight into the true essence of Landcare and the love and respect that participants have for each other and their environment.

The current, four year Local Landcare Coordinator Initiative concludes in June 2019. The Network has lobbied Members of Parliament and Landcare NSW has responded to a request from Minister Niall Blair, for a Business Case, recently submitted, to justify the refunding of this core-funding source for Landcare, beyond next June.

New England North West Landcare Network Chairs, is thriving in its somewhat revised role of support network with minimal project management responsibilities and a revised Strategic Plan.

I would like to recognise the commitment, skill and dedication of all the Landcare Facilitators and Coordinators, in our region, during a year when Landcare has had to come to grips with uncertainty in a rapidly changing funding landscape.

In midyear we farewelled Anneka Ferguson, RLF Northern Tablelands (2015-2017), Anneka

used her considerable skills to change the 'shape' of the RLF role in Northern Tablelands, for the better.

Changes to the RLF role at the State level, during the year, saw the establishment of a new role, that of Regional Agricultural Landcare Facilitator, relocated from Environment to Agricultural Division, within Northern Tablelands LLS. At this time Paul Hutchings, in recognition of sustaining the partnership with Landcare, re-established an RLF role within Environment and Anya Salmon was successful in being appointed to the new position. We welcome Anya's considerable skill and experience in and knowledge of all matters Landcare. Her previous role was as Landcare Coordinator at GWYMAC.

Sonia Williams, State Landcare Facilitator, so very well known to all of us, is in our thoughts at this time as Sonia has been quite unwell and I extend our best wishes to Sonia and her family, at this time.

Our Directors, Steve Harvey, Bill Perrottet, Peter Metcalfe, Bev Stubberfield, Jill Moore-Kashima and Bryan Johnston, plus myself, make up a board that aspires to provide guidance and support as well as keeping a weather eye on policy direction and prudent financial management.

For the ensuing year we extend a warm welcome to the Board, to Rebecca Smith, and any new board members elected tonight. I know Bec, who has been a Landcare luminary for many years will be a valuable addition to the SNEL Landcare team.

To all Directors and the amazing SNEL Team, for your enthusiasm and expertise, this year. Thank you.

David Henderson,
21 November 2018

WALCHA

Storm Disaster: Ideas for Recovery

Taking small positives out of catastrophes is often enough to maintain hope, and it seems some folks are keen to look at how Southern New England Landcare we might be able to help following the disaster last December that saw much devastation to the native vegetation in the Walcha area.

Landcare is keen to work with small groups of landholders, with their property maps at hand, to help plan wind breaks, shade and shelter belts where scattered old trees with no succession used to be located.

As the 'clean up' proceeds, it's important to encourage and support natural regeneration in strategic places as part of the overall plan. Replant using seed or seedlings, depending on advice, on close to the same spot.

It may also be possible to chip some of the fallen timber to use as mulch, providing weed control and nutrients for beneficial insects and microbes.

Given the habitat benefits of hollows for birds, bats and beneficial insects, and the lack of any remaining, any hollow tree trunks surviving relatively intact could be sawn off appropriately and restood, tied to a steel post or two. And, where appropriate, leave some of the dead timber on the ground as habitat and for nutrient cycling, and long-term carbon inputs into the landscape.

These could also be relocated to make an artificial 'forest' in a corner, gully, or on a rocky ridge.

This would not only help the landholders 'mentally' recover from the disaster, but help enormously with recovery of the ecology of the area.

SNELandcare thanks Richard Makim for ideas in this article.

Regent Honeyeater Project Takes Flight

The Regent Honeyeater is a unique Australian songbird on the verge of extinction, with fewer than 400 estimated to survive in the wild.

At this level every individual counts, and the Northern Tablelands is significant for the conservation of this critically endangered species as breeding pairs regularly establish nests in our region.

The “Turning the Tide for Threatened Species - Regent Honeyeater” project is supported with funding over five years by the Australian Government’s National Landcare Program.

The project will deliver priority actions identified in the National Recovery Plan for the Regent Honeyeater that address threats and improve the amount and quality of habitat for the species.

The project is being delivered by the Northern Tablelands Regional Landcare Consortium – a partnership between Northern Tablelands Local Land Services and the four Landcare Networks on the Tablelands: Southern New England Landcare (Armidale), GLENRAC (Glen Innes),



GWYMAC (Inverell) and Granite Borders Landcare Committee (Tenterfield).

The project seeks to gain the support of the whole community to raise awareness of the Regent Honeyeater, and to empower and assist the community with resources and funding to take actions that address threats to the species.

Key project activities will include:

- Improving extent and quality of habitat for Regent Honeyeaters (through fencing, revegetation, weed control, noisy miner and other pest animal control, honeybee management, thinning, community education)
- Increase understanding of the size, structure and

population trends of wild populations of Regent Honeyeater (community bird surveys, formal bird surveys (nesting, breeding, feeding), habitat monitoring, promote/educate community to report sightings, local research projects)

- Maintain and increase community awareness, understanding and involvement in the recovery program (community education events - bird watching, on ground practices, farm planning, publications, planting events).

The project also aims to support and encourage landholders and community members to be involved in the conservation

of the Regent Honeyeater and other threatened woodland birds.

Ongoing monitoring of critical breeding and foraging habitat will evaluate breeding success at key sites and at other known or suspected Regent Honeyeater sites. The project will implement a broad strategy of education and awareness raising of the need for Regent Honeyeater conservation and continue to inform, support and encourage landholders and community members to be involved in the conservation of the Regent Honeyeater and other threatened woodland birds.

How you can help

Community members are invited to join Regent Honeyeater Focus Groups via their local Landcare Network as a way to become involved in this project.

Contact Southern New England Landcare for further information on 02 6772 9123 or mail@snelandcare.org.au.



NLP Smart Farm Partnership Grants Open

The Australian Government is inviting applications for projects to deliver services under the National Landcare Program - Smart Farming Partnerships Round 2. Projects are expected to commence before the end of 2019 and be complete by 30 April 2023.

Smart Farming Partnerships is an open, competitive, grant opportunity to support substantial, complex projects that are to be delivered in consortium partnerships to trial, develop and implement innovative tools and practices.

The purpose of Smart Farming Partnerships is to foster sustainable natural resource management innovation. Smart Farming Partnerships deliver against the Australian Government's policy of using innovation to cultivate more sustainable, productive and profitable agriculture, forestry, fishing and aquaculture industries; protect Australia's biodiversity; protect and improve the condition of natural resources (in particular on-farm soils, water and vegetation); and assist Australia to meet its national and international obligations.

The purpose will be achieved through substantial projects, funded, at least in part, by grants, that deliver against either or both of the outcomes described below:

- Outcome 1 – Innovation in sustainable resource management practice.
- Outcome 2 - Innovation in capacity building and promotion of sustainable resource management practice.

Find out more at <https://www.communitygrants.gov.au/grants/national-landcare-program-smart-farming-partnerships-round-2>

If you think you have a project idea and would like some feedback or assistance, please contact Southern New England Landcare on 6772 9123.

How you can help RAB support Landcare!

Dear Members,

Southern New England Landcare is pleased to announce our participation in Regional Australia Bank's Community Partnership Program. This program allows you to support us without costing you a cent!

All you need to do is save with an eFree, Community Partnership Account or Youth Account at Regional Australia Bank, and elect to support us. Regional Australia Bank calculates the average annual balance of each of our supporters and donates the equivalent of one percent to Southern New England Landcare.

By banking with Regional Australia Bank, you won't only have access to this great program, but competitive interest rates, fairer fees and sound guidance from their local experts.

For more information contact Kate or Sabrina from Regional Australia Bank on 132 067 or visit regionalaustriabank.com.au today.

Your sincerely,

Karen Zirkler,
Executive Officer, Southern New England Landcare.

Second ‘Closing the Gap’ Field Day near Uralla Increased Participant Knowledge

Learning how to identify key woodland bird species using their diagnostic characteristics was the focus of the second of three experiential field days under the “Closing the Gap” project on 29th September 2018.

Struan Ferguson, from Southern New England Landcare said, “We saw and heard various birds during the morning as we walked through an area of remnant vegetation just north east of Uralla even though the wind increased during the day – not ideal for bird watching”.

Dr Andrew Huggett, an ornithologist from InSight Ecology, was the guest presenter at the event. He played recordings of the calls of several of the target species of the project and pointed out their key physical characteristics to aid in identification. Participants also learned how to record and monitor woodland bird presence and habitat use.

“The highlight was seeing a Buff-rumped Thornbill which is a small insect-eating bird that requires intact forest/woodland and likes foraging among fallen woody debris and shrubs. It is locally conservation significant so it was exciting to get a good

look at it and hear it’s call”, she said.

During the walk through the remnant Andrew drew people’s attention to key habitat features that are important for woodland birds like woody debris for the ground feeding birds. He explained how the stands of *Bursaria spinosa*, an understory shrub, aid small woodland birds in moving through the woodland and avoid predation by Grey Butcherbirds and Pied Currawongs.

One participant said that they were getting new birds coming to their place and this event helped them to learn which species they are. Another participant appreciated

learning what species of plants are needed for habitat for specific species of birds.

A poster illustrating the results of the bird survey can be downloaded at www.snelandcare.org.au.

The Closing the Gap: Functional Habitat for Threatened New England Fauna project seeks to protect and re-connect habitat for woodland birds and other fauna in a highly fragmented landscape. It is run by Southern New England Landcare, with funding from the NSW Environmental Trust and input from local landholders.



Below - Participants learning how to identify key woodland bird species at Bush for Birds 2 before heading out into a nearby remnant to practice their skills. Image courtesy of SNElandcare.



Trees on Small Farms & Bush For Birds Field Day Attracts Crowd in December

Southern New England Landcare hosted 59 participants at a field day on Saturday 1st December targeting bird lovers and landholders who were keen to skill-up on revegetation and habitat creation techniques.

The field day was part of a project among local graziers who together, will progress closing a 23 km gap in habitat connectivity for threatened woodland birds and other fauna from Mount Butler and Invergowrie in the west to Gara Gorge and Dangars Falls in the east.

The three-year project is assisting landholders with fencing and native vegetation planting subsidies, along with technical assistance and expertise.

"During the morning, we were coached by ornithologist Andrew Huggett, on habitat design and monitoring techniques for threatened woodland birds," said Struan Ferguson, Southern New England Landcare Project Officer.

"Then, after a delicious lunch, local revegetation expert, Gordon Williams demonstrated ground preparation, weed control and watering options for revegetation projects," said Struan.

The field day took place on Gordon Williams' property Eastlake, east of Uralla.

"This field day attracted many of our 'Trees on Small Farms' project participants, which aims to assist those on smaller holdings

and who may also be new to revegetation, to implement sound practices on their properties," said Struan.

During Spring 2017 as part of the project, Southern New England Landcare engaged ornithologist Andrew Huggett of Insight Ecology, to conduct a bird survey, which recorded a total of 994 individual birds from 69 species. The results of the survey were presented to graziers involved in the project by Andrew Huggett at a field event on 29th September 2018.

Field Day inspires new bird watching group

Following the "Eastlake" field day, an attendee, Colin Ritchie who had travelled from Inverell, was so impressed that he formed a new birdwatching group in the area. While he lives in Inverell, he plans to organise birdwatching

visits to various areas in the New England and NorthWest area and connect with the other birdwatching groups in the area.

A new Facebook group called "New England and NorthWest NSW Birds and Birding 2019" has been set up by Colin Ritchie with the aim of generating more interest in birds and birdwatching in our area.

If you would like a forum to post photos of birds you see in the area, comment and identify the birds in the photos of others, hear about birdwatching and birdy things happening in the area or just connect with people who share a similar interest, check out this group. You can search for it by typing the group name into Facebook search.

If you are interested, want to hear about bird related activities in the area or just want to find out more, you can contact Colin at crit6588@bigpond.net.au or on mobile 0402 325728.

Below - Buff-rumped Thornbill on the eastern ridge of 'North Mihi'. Photo: InSight Ecology, 2/6/15 near Walcha.



The morning session was funded by the NSW Environmental Trust (2015/RR/0061) and the afternoon was funded through the \$26.5 million of Catchment Action NSW investment that Local Land Services is delivering to enable better management of our water, soil, vegetation, biodiversity and cultural heritage. These projects are supported by the NSW Local Landcare Coordinator Initiative, a partnership of Local Land Services and Landcare NSW.



Local Land
Services



Four Great Submissions to NLP2 Smart Farm Small Grants

Many other tasks were put on hold during December 2018 when the Australian Government opened Round 2 of the National Landcare Program Smart Farm Small Grants with a closing date of 11th January 2019.

Southern New England Landcare Ltd submitted four grants, modelled on ideas and requests from members, and on the types of grants that were successful in Round 1, in which we were completely unsuccessful!

Here's what's been submitted...

Mustering Members 4 Climate Change Challenges

By 30 September 2021, our project will build awareness, knowledge and skills among at least 280 members and friends of Southern New England Landcare, around four topics that align with NRM and sustainable agriculture priorities identified in our Strategic Plan: feral animal control, revegetation, grazing and pasture management, and soil health.

We aim to achieve this by delivering four major Member Muster events over a two year period:

Climate Change Challenge 1 - Focus on Ferals Forum (to be held August 2019).

Climate Change Challenge 2 - Species Selection for Revegetation Success (to be held Autumn 2020).

Climate Change Challenge 3 - Greener Grazing under Global Warming (to be held Spring 2020).

Climate Change Challenge 4 - Saving Soil Health and Hydration (to be held Autumn 2021).

These events will host special guest speakers and deliver specially designed interactive workshop sessions that focus on the challenges associated with climate change around each topic.

The events will provide a forum for land managers, extension and nursery staff, and local and state government representatives to exchange ideas, knowledge and techniques, and design ways forward that will be more successful given changing climatic conditions in our region.

We will also deliver four extension publications that outline the key outcomes of the events and be publicly available on www.snelandcare.org.au.

Every Stream Counts

Rachel Lawrence (Malpas Catchment Coordinator) put together a National Landcare Program Smart Farms Small grant to get demonstrations around the full range of cost-effective, site appropriate riparian restoration techniques.

If successful, the project would encourage people to consider stream/watercourse protection and restoration in the context of whole of farm planning for biodiversity, climate resilience and profitability.

Via field days and, it is hoped, the creation of an interest-based watercourse restoration and natural sequence farming group, the grant will demonstrate the

full range of techniques to protect watercourse areas.

On-farm demonstrations and discussions will range from simple protection of dry watercourses through appropriate grazing management and retaining enough perennial plant cover to protect these areas and filter sediments and nutrients; to more active protection of areas of near-permanent water (i.e. running creeks) through the careful management of stock.

This would include planned grazing to manage vegetation, right through to active interventionist techniques such as Natural Sequence Farming and other 'ecological engineering' practices.

The project will also highlight the value of precision fertiliser application and management so that people aren't wasting cash on fertilising areas with the wrong nutrients - or at all where those nutrients are already there.

By encouraging discussion and through the provision of information from experts, it will encourage people to consider the free ecological services that help to make nutrients available and also minimise their loss from the landscape.

If successful the project would assist in the protection of an endangered eucalypt population (*Eucalyptus magnificata*/Blue Box), three threatened ecological (woodland) communities and on-farm water resources including hydration of adjacent areas. It will also improve the resilience, profitability and productivity of farm businesses in our region.

The grant title is a play on The Armidale Tree Groups project “Every Tree Counts”: <http://armidaletreegroup.org.au/every-tree-counts/>

Paddocks of Plenty in Southern New England

In this project, farmers will learn how to balance soil nutrition and improve grazing management through the use of a little-known soil nutrient balancing technique and the introduction of planned grazing.

At least 12 Southern New England Landcare network members will attend a soil nutrient balancing course during which, 8 Demonstration Site farmers will be engaged. We will then balance soil nutrients on approximately 80 ha at demonstration sites and monitor soil health, pasture and remnant vegetation health, animal production and profitability. Demonstration site farmers will be mentored throughout the project to increase their knowledge and understanding, so they can mentor others.

Some 220 Southern New England Landcare members and friends will attend project workshops (2) and field days (2), and we will produce 2 reports, 8 infographics and a short video to

extend our findings more broadly across the region and beyond the life of the project.

Managing Holistically Out of the Drought

We will run a program titled ‘Managing Holistically Out of the Drought’, made up of three key components designed to develop land manager’s skills, knowledge and confidence to implement practices that aid in drought recovery and building resilience to manage sustainably into the future, both individually and as a farming community.

Funding is sought to deliver the three components in the Southern New England region of northern NSW in 2019-2021:

1. a course entitled “Managing Holistically Out of the Drought” with Dr Judi Earl,
2. Peer Group Mentor training
3. 2 supplementary events with guest presenters.

The course, customised for drought recovery and resilience-building, will be delivered by Dr Judi Earl and is aimed at 20 land managers participating in course activities for 10-days over a 12-month period. Eight course participants will then gain mentoring skills during a 2-day

Peer Group Mentor training. They will then be able to work with other landholders beyond the timeframe of this program, to in turn build their capacity to manage more holistically out of drought.

We will complement the program with key guest speakers presenting on subjects of interest such as agroecology, grazing management, silviculture, financial and successional farm planning. These events will be open to the broader community and provide opportunity for course attendees and mentors to connect, engage and build stronger social cohesion.

The aim is to provide access to the most up-to-date information and resources for our farmers in a time of drought, to assist them to manage their complex, dynamic systems and make transformational changes in a way that ‘single-issue’ training programs are unable to do (Ogilvy et al. 2018). With an increase in participants’ capacity, we anticipate their skills and knowledge will influence other members of their community to respond effectively to drought.

[At the time of printing, we are aware that one of these grants is successful. Not sure about the others yet! Ed.]

MEPAAW Projects Rolling Out Now

Southern New England Landcare has been successful in winning two small Managing Established Pest Animals And Weeds grants (MEPAAW). The first assisted us to host the Chilean Needlegrass Conversation at Guyra Show, and will go some way to helping establish some trials in the Guyra district.

The second will see a community awareness program begin to combat feral cats through promotion of responsible cat ownership. This will be expanded with additional funding from Northern Tablelands Local Land Services’ Feral Fighters funding, which will enable purchase of a number of feral cat traps for loan.



Department of
Primary Industries

This project is supported by the NSW Department of Primary Industries and Landcare NSW through funding received from the Established Pest Animals and Weeds initiative, part of the Australian Government’s Agricultural Competitiveness White Paper, the government’s plan for stronger farmers and a stronger economy.



Landcare
New South Wales

Nourishing Australia Founder

Presented at February 2019 Member Muster

Evolution Bites Back Seminar

Thursday 21st February was the date members and friends gathered at the Uralla Top Pub to hear Dr Ron Ehrlich as the guest presenter for our February 2019 Member Muster.

Dr Ron Ehrlich, author and Holistic Dentist is on a journey to explore (and help others explore) how we can take control of our own health and that of the broader community and landscapes that nourish us.

At the seminar, he explored:

- how we respond to stress,
- the consequences of chronic inflammation for our health and how we can manage it
- why health messages are so confusing, providing background information to help people navigate through those messages.

Farm tours

On Friday 22nd February, Karen Zirkler and Inverell based grazier Glenn Morris accompanied Dr Ehrlich and his wife Annie on a tour of two properties making in-roads into regenerative agriculture.

First stop was Tim Wright's Lana, 20 km west of Uralla. Tim has been practicing Holistic Management for many years and Lana is a much visited property for those wishing to view first hand the results of this style of management.

After a fabulous lunch at Uralla's The Alternate Root

Cafe, the group travelled east of Armidale to Glen and Lucinda Chapman's property at Wollomombi.

Glen and Lucy have recently implemented Holistic Management and are transforming the property's soils in doing so.

Dr Ehrlich will prepare a podcast on his visit in the coming weeks.

Unstress and Simply Be Well Workshop

On Saturday February 23rd February, the day long workshop explored many of these issues in detail.

Dr Ehrlich explored how the fundamental pillars of health such as sleep, diet and breathing can influence our wellbeing.

There was lots of valuable and empowering information and a large amount of passionate and enthusiastic discussion around connections between human health messages and big issues we see in agriculture and rural communities.

This was an unusual, but great opportunity for Landcare, with a focus on people care.

It was a great few days and we hope to keep the connections between Dr Ehrlich and Landcare going.

Podcasts for everyone

In his podcast series (Unstress – available on iTunes or via <https://drronehrlich.com>),

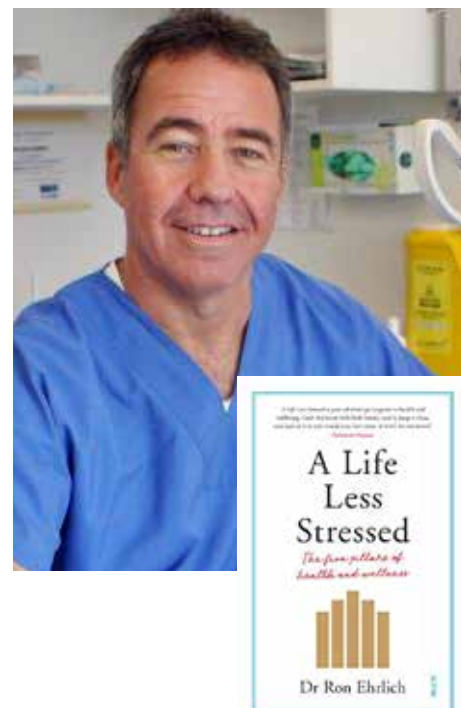
Dr Ehrlich interviews health and agricultural experts and innovators from around the world.

Some of the agricultural people include Joel Salatin, Allan Savory, Charles Massy - and even some of our local graziers.

Through his journey, Dr Ehrlich wants to help people understand the important connections between city and rural/regional communities and the value of supporting farmers to produce nutritionally dense food that comes from landscapes and communities that are nurtured and regenerated.

Southern New England Landcare is very grateful to Dr Ehrlich who generously offered his time for free to present the one-hour seminar and the one day workshop at Uralla.

Below - Dr Ron Ehrlich at his dental practice in Sydney. Inset - one of the books Dr Ehrlich has authored.



Koala Tracking Project

Southern New England Landcare recently formed a partnership with the NSW Office of Environment & Heritage and Stringybark Ecological, to help run two Koala field days in our region.

The field days aim to engage and encourage landholders and other stakeholders to learn best practice koala habitat management, and how to reduce threats to koala survival.

We will be seeking engagement and cooperation for the field days from Northern Tablelands LLS, Local Governments in our region, University of New England, and the New England North West Biodiversity Alliance.



Koala Spotighting: Kids Welcome at May 2019 Member Muster!

At our Member Muster in May, we will be spotlighting for Koalas with experts on hand to show us how and why they are trapping and tagging them!

And for all those budding feral fighters young and old, learn how to set a Cat Trap or an Indian Myna Trap and where you can get them for free!

Bring your kids as our Urban & Youth Landcare Coordinator will be in attendance with some great activities.

5 -8 pm Wednesday 15th May in the Walcha district (venue TBC - watch www.snelandcare.org.au for more information).

BYO warm clothing, good walking shoes and torch.

Supper will be available so please RSVP for catering purposes to 6772 9123 by Friday 10th May.

More information at www.snelandcare.org.au or call 6772 9123 to RSVP so we can cater for the right number!



Office of
Environment
& Heritage

Around Our Groups

Landcare Champions Feature in 2019 Australia Day Awards

Southern New England Landcare congratulates Armidale's Helen Webb and Walcha's Lower Apsley River Landcare Group for taking out the Environment category at the 2019 Australia Day Awards in their respective towns.

Helen has dedicated many hours over the years to helping maintain the natural integrity of the HiCUB biodiversity sites situated along Armidale's Dumaresq Creeklands.

Helen founded People's Park Landcare Group in response to a desire from locals in the area to help restore native habitat using chemical free methods of weed control.

Helen speaks of many highlights including the joys of working with like-minded people that are happy to get their hands dirty for the benefit of looking after nature in a public urban setting.

She also reports of the natural regeneration of callistemon, hakea and lomandra throughout the sites with many a day filled with various birdsong. Helen has plans to host walk and talk tours along the creek lands in the coming year and to expand her volunteer base to include regular school groups.

The Lower Apsley River Landcare Group have been restoring vegetation in the

catchment of the river to the east of Walcha since the mid 1990s. They have also instigated a number of field days, events and extension publications, including Greenhouse gas emissions, flows & stores in a mixed grazing landscape in the New England region of NSW.

Well done to our very own Landcare Champions!

Armidale Urban Rivercare Group Steams Ahead to a Chemical Free Future

Armidale Urban Rivercare Group (AURG) have received \$25,000 in funding through the NSW State Government's Community Building Partnerships Program.

The funds will go towards the purchase of a steam weeding machine to be used for planting preparations and maintenance in the Armidale creeklands and bushlands.

"Currently, Landcare, Rivercare, and Bushcare groups and the Armidale Tree Group (ATG) around Armidale use chemicals to eliminate invasive weeds, annual weeds and environmental weeds from areas they wish to restore or rehabilitate," said Bruce Whan, a spokesperson for AURG and the successful grant writer.

"Most of this activity takes place on public land, and frequently this activity takes place in areas of high public use," he said.

"Increasingly, members of the public are asking us to avoid the use of chemicals in public places.

"While we will not be able to completely avoid the use of chemicals, the Steam Weeder will enable us to avoid the repeat use of chemicals for routine weeding," said Bruce.

2018 Frog Dreaming Held at Newholme Field Station

The 11th annual Frog Dreaming event was held in October 2018 and clashed with some severe electrical storms. For the first time in eleven years, we were close to calling it off. Fortunately with the support of some wonderful teachers, mentors and presenters we made the most of one of the scheduled two days in the sun.

Students from Armidale Waldorf School, Kentucky Public School, St Mary's in Guyra, The Armidale School, Minimbah Public School joined with our devoted troupe of mentors from Armidale High School.

Participants experienced 'Forest Forensics' with Dr Karl Vernes and Todd Elliott (UNE), seed identification and collection with Dave Carr (Stringybark Ecological), frog explorations with Dr Debbie Bower (UNE) and seed bombing with Rachel Lawrence (Southern New England Landcare). The joy of the day was evident in the final gathering where student's creative seed balls were integrated into a bushland

sculpture that will, in time, disperse and form habitat.

We are proud that Frog Dreaming is a waste-free event. All food waste from the nutritious morning tea and lunch is composted, while all other waste is recycled. We are supported in this endeavour by our long-time partner, Northern Inland Regional Waste, who run successful programs and provide resources to support schools and the community to embrace



the reduce, reuse and recycle message.

We are grateful to be able to host Frog Dreaming at the University of New England's Newholme Field Station with the support of the School of Environment and Rural Science. In particular, we appreciate Dr Caroline Gross, Dr Karl Vernes, Paul Lisle and Tony McKinnon.

We would also like to thank Frog Dreaming co-founder Bec Smith for rallying the mentors each year – they are a keen bunch who participate wholeheartedly and help the younger students to rise to challenges and embrace the values of outdoor environmental education.



Ideas?

If you and your neighbours are keen to do landcare-type projects in your area, why not have a group get-together around the barbecue, and ask one of our Local Landcare Coordinators to come out and assist with some group action planning? We can also assist you to develop project idea(s) and source funding or other resources. The group need not be a formal landcare group, it could be just a keen group of neighbours.

Alternatively, if you are a member and would like to would like to 'shelve' your project idea(s) with us until a suitable opportunity arises, why not fill out a Southern New England Landcare Expression of Interest form? We can help members develop their project ideas, or include them in a regional-scale project idea, and submit to a suitable funding opportunity when the time comes. Anyone wishing to have an Expression of Interest held on file is required to be a member of Southern New England Landcare.

If you are interested in pursuing this further contact us by phone on 6772 9123 or at mail@snelandcare.org.au.

Left & then clockwise - 300 UNE students get stuck into planting at the 4th annual O'Week tree planting extravaganza; Aziz Winrow (UNE Landcare) supports the crew; the Landcare Touch Footy team scoring tries and raising awareness; Richard Morsely (ARC), Helen Stokes (Friends of Angophora Reserve) and Rachel Lawrence (SNElandcare) sign off another five-year conservation plan at Angophora Bushland Reserve in Armidale.

Malpas catchment Update

What does the future hold for Chilean Needle Grass in our region?

The Guyra Show pavilion provided the backdrop for a community to openly discuss the scope of the Chilean Needle Grass issue.

The conversation was hosted by Landcare Coordinator Sara Schmude, with a discussion panel including John McKemey

This project is supported by the NSW Department of Primary Industries and Landcare NSW Incorporated through funding received from the Established Pest Animals and Weeds initiative, part of the Australian Government's Agricultural Competitiveness White Paper, the government's plan for stronger farmers and a stronger economy.



Department of
Primary Industries



Landcare
New South Wales

(local grazier), Derek Smith (local farmer and educator), Bec Smith (teacher, farmer, SNE Landcare Board member) and Dr Judi Earl (grazier, educator).

The focus statement 'manage for what you want, not what you don't want' was introduced to encourage participants to think differently about their approach to land management and what is possible when we use different thinking to that which caused the problem.

Each member of the panel spoke of their experience with Chilean Needle Grass and the different methods they have explored to address it and other land management hurdles.

The main take-away messages from the conversation included:

- be vigilant at recognising the management practices that allow Chilean Needlegrass to establish
- weeds are valuable

indicators of what is happening in the soil

- encourage farmers to trial different approaches using grazing management and soil balancing. Derek Smith is currently using the Kinsey Albrecht methodology to balance soils in a paddock heavily infested with Chilean Needle Grass, and says he will be keeping Landcare posted of his results.
- Maintaining good stands of native pasture with 100 % ground cover has been effective at deterring Chilean Needle Grass getting established.

Southern New England Landcare thanks the panel for taking the time to share their knowledge, wisdom and experience.

Pasture monitoring help available in the Guyra area

Following on from the Chilean Needle grass session at Guyra Show, Rachel Lawrence (Malpas Catchment Officer) is able to support farmers to implement pasture monitoring (than will also help curtail the spread of CNG). Rachel wants to continue offering this support in the Malpas Catchment but also surrounding areas of Guyra.

For interested farmers, we

Below - The Chilean Needle Grass Conversation at Guyra Show on 23rd February.



hope to get some on-farm (farmer planned and guided) practice paddocks to help the community understand better ways to manage CNG and minimise it's further spread.

Rachel can also help with pasture identification skills – including the identification of valuable, resilient native species and offer support around enhancing healthy dung beetle populations. Dung beetle field days can be run in conjunction with UNE/the Dung Beetle Express.

There are also ongoing opportunities for applying for financial support for fencing and off-stream watering infrastructure. Rachel can help with these applications.



A field site for the 'Every Stream Counts' funding proposal is in the Malpas Catchment. It is hoped that this project will inspire people to continue to restore and protect riparian areas on farms. Through that project there will be an emphasis on the value of healthy on-farm (and within catchment) biodiversity for farm resilience and profitability – as well as because it makes your office a nice place to hang out in. We'll also look at precision fertilizer application that can help people optimize fertilizer applications and avoid wasting cash on areas that don't need it and optimize production on areas that do.

Stuart Andrews (Natural Sequence Farming) visited the area in early April, consulting to some local landholders. We hope that out of this an interest-based watercourse protection and restoration/Natural Sequence Farming Landcare group will emerge where people can support, and learn off, each other so that we can protect these essential areas of our landscapes.

Please contact Rachel at SNEL to discuss if you, or a group of you, are interested in tapping into any of this support.

Left - three images of stream beds in the Guyra area. Streams like these will become the focus of the 'Every Stream Counts' project.

The Malpas Catchment Project is generously supported by Armidale Regional Council.



Is your membership current?

You may have noticed that our financial members get special treats like free or discounted tickets – this is just one of the benefits of your membership with Southern New England Landcare!

There are currently 245 'members' however only 106 are financially up to date!

Only current financial members receive a hard copy of Landchat in their letterbox, so if you only have an electronic copy, chances are your membership is not current!

Please note all eNews recipients can access an electronic copy of Landchat via our website.

Anyone who has used our website membership portal to sign up should receive an email reminder to renew their membership in the lead up to their membership anniversary. The email provides a clickable link for easy renewal.

If you have missed your renewal email, or are unsure of your membership status, please visit www.snelandcare.org.au and login using your email address and password (top right of the home screen). This will direct you to your Member Profile page, OR if in doubt, please contact mail@snelandcare.org.au or on 02 6772 9123 and ask Struan to check for you.

Peter & Sue Burney's Agroforestry Journey

Story recorded by Ben Vincent,
Agroforestry Peer Group Mentor, 28th of
January 2018

Fifteen years ago we left our beautiful sandstone bush block in Sydney where we lived on the suburban outskirts backing onto National Park. Our 21 acres here was of great interest to both researchers and students of a neighbouring university for its diversity of bird species and native vegetation values. After a number of years spent travelling we decided to settle near Armidale on the New England Tablelands and purchased a small two hectare hobby farm in Arding called 'Myamba'. Our property's name 'Myamba' translates as 'Windy Hill' and is a relatively cleared block surrounded by sheep and cattle grazing properties and a little bit of roadside vegetation out along the front fence. Our observation and understanding suggested that our newly purchased block was both very barren and historically overgrazed and so we wanted to make it our aim to return some vegetation to the property for practical, functional and aesthetic reasons; reduce soil erosion, increase shade and privacy, decrease wind and provide habitat for birds and other wildlife, etc.

However, our knowledge on how to undertake such a project was limited and so we began talking to community members about their ideas and intentions. Through such discussions one community member introduced

us to Landcare and it was following this that we became members of Landcare and learnt about the availability of grants for planting trees on our property, existing support networks and useful short courses. We then signed up for a Small Farms Workshop where we were able to meet and converse with experts

in the field of silviculture and ecology and learn about tree planting specifics and concepts such as soil preparation and pre- and post-management.

Following this course we began to formulate a structured process for revegetation projects on 'Myamba', which included;

**PEER GROUP MENTORING
SERVICE FOR AGROFORESTRY**

**FARMER TO FARMER
EXTENSION**

FOR FARMERS
MANAGING TREES
FOR REASONS THAT
MATTER TO THEM!

**WHO ARE THE
MENTORS?**

- LOCAL EXPERIENCED TREE GROWERS
- MASTER TREEGROWER PROGRAM GRADUATES
- TRAINED MENTORS

WHAT SERVICES ARE PROVIDED?

- FARM VISITS SUPPORT YOUR IDEAS & GOALS
- TECHNICAL EXPERTISE AND INFORMATION
- SITE REPORTS

WHAT TOPICS CAN BE COVERED?

- Shade and shelter
- Farm aesthetics
- Natives or exotics
- Tree establishment
- Habitat
- Farm tree planning
- Native forest management
- Species identification
- Trees for timber

HOW DO WE KNOW IT WORKS?

Most suggestions change technique after the story ...

The suggestions and guidance of what species to try, planting locations, where and in what issues to plant, as well as planting designs have all been of tremendous value. Helen Niss & David Manning, Castlebrook, NSW.

The mentors passed on valuable insights about the diversity in my forest and helped me see it as a whole ecosystem. They also provided useful practical tips which fitted out much of my own opinions on where to go with its management. Rob Larkin, Bilgahoon, New South Wales.

WWW.SNELANDCARE.ORG.AU

Master TreeGrower

A project of the New England Agro Woodland Network (NEAWN), a sub-group of Southern New England's Landcare Ltd. This project is supported with funding from the Australian Government, and in-kind contributions from the Australian Agroforestry Foundation.

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discussing ideas with experts, mapping our property with digital spatial layers, designing plantings and actively applying for grants. At this point we were keen to get started and as we were in-between funding rounds we decided to undertake our very first plantings as a trial. So we purchased 40 small tubestock trees from the Armidale Tree Group and planted them out and 'learnt as we went' throughout the entire process.

Despite this experience and the information that we'd learnt throughout the Small Farms Workshop course we were still not quite sure how to go about the practicalities of larger tree plantings, particularly when it came to sourcing and selecting suitable plant species for our area and pre-planting ground preparation, i.e. spraying and ripping. And so, through our recently established connections with Landcare we got involved with the New England Agriwoodland Network and invited three Peer Group Mentors (Shane, Ruth and Michael) to 'Myamba' to discuss our long-term plans and re-vegetation goals for the farm.

The three PGM's came out to visit 'Myamba' on the coldest, windiest day of the year to undertake a farm inspection take some reference photos and discuss with us the reasons why we wanted to undertake tree planting on our property. We didn't want to plant trees in rows, but rather in 'clumps' for a more natural setting. It was suggested by the PGM group that of the 1,000 trees we would need for our next planting that two-thirds could be shrub species to assist with the establishment of a more effective windbreak and offer greater provision of habitat for

small birds. We were advised by the group on proper ground preparation (spraying and deep ripping) and post planting care and maintenance (mulching and watering regimes), suitable species to plant, and even received assistance by one of the PGM's to successfully apply for a tree planting grant which would provide 50% of the cost for the seedlings, stakes and milk cartons. We liked how this program evolved and found the experience to be quite efficient.

Since becoming members of the Arding Landcare group we have actively been involved with a number of tree plantings as part of revegetation projects on other properties and continue to gain experience and grow our network of contacts of other people interested in farm revegetation projects. Following the workshop we undertook, the interactions and discussions we have had with our PGM group, and our active involvement with our local Landcare group we now have a far better understanding of the processes involved in farm-scale revegetation processes, from applying for available grants to ground preparation, selecting suitable tube stock species for our property, tree guard selection, planting timing and approaches to planting, post planting management and environmental variability.

With all the theory and advice now firmly in place we were able to mow paths through the grass where we wanted our plantings and followed this activity up with a spraying exercise. Recently our neighbour kindly followed the mown paths with his tractor and a deep ripper in order to loosen the ground to optimise planting conditions. Supported by a farm dam and a 5,000 gallon water

tank for our watering plan and with assistance from our local Landcare group we are now all set up for a good spring planting.

When we first started out the initial idea of fulfilling planting contracts as a result of successful grants, the expenses involved for undertaking plantings, and the sheer number of enthusiastic people we have met that wanted to help us along the way was a little overwhelming. However, now that we have the full picture we have found the entire process to be very good, everything has fallen into place quite quickly and we no longer have any concerns. We are satisfied with what we can achieve and how straight forward the process can be. While at times we are still a little unsure of exactly which species we would like to have where in our plantings we now feel that we have the confidence and the skills to undertake any future farm planting project that we wish to embark on.

How to stay tuned with what's on the Landcare calendar?

Stay up to date with all our upcoming events, projects and latest news at www.snelandcare.org.au.

While you are there, sign up to our eNews, which provides all the important information direct to your email inbox approximately fortnightly!

Australian Agriculture: Vicious to Virtuous?

Interested in a regenerative agriculture that can change the future of Australia's landscapes and economies?

"The underlying resource base of Australian agriculture has been gripped in a cycle of decline for decades," states Ogilvy, Kulkarni and Hurley (2015).

The authors assert that Australian agriculture is trapped for the most part in a vicious cycle that they describe and illustrate clearly.

They then envision another way: a strategic future for Australian agriculture that embraces a virtuous cycle.

This report is highly recommended reading for anyone interested in the broader regenerative agriculture discussion.

You can use your favourite search engine to find and download the report by Sue Ogilvy, Dr Anand Kulkarni, Sam Hurley, 2015. "From vicious to virtuous cycles: a sustainable future for Australian agriculture", A Discussion Paper, Centre for Policy Development.

Strategies for coping with the adversity of drought

The recent dry times have been an issue in our region with a lot of media coverage of the struggles that people are having. While climate challenges are common for Australians on the land, there's a fair chance that, with climate change, these conditions will become more frequent and intense.

Clearly, these are challenging times for everyone, but it's likely that there are some folks who have been able to manage with reduced financial and emotional stress by implementing decisions that prepared them for drought - decisions that will also enable them to recover relatively quickly once conditions improve.

Through the Landcare network, we hope to provide a platform for folks to tell their story with the intention that sharing will support others to alter practices that improve land and people care.

A recent case study written by David Marsh from Boorowa, NSW that was shared across the Landcare network is a great format to follow.

David explains (with empathy) the circumstances that led them to make adaptations for challenging conditions and where they found support and useful information. Then coming into this dry time, the decisions they made to help cope. See David Marsh's article, at <http://landcarens.org.au/lessons-learned-on-how-to-plan-for-dry-times/>

Invitation

Southern New England Landcare invites land managers in our own region who would like to share their experience leading up to and during this drought by

writing a piece that we can make available through our networks.

The intention is to be constructive and supportive and increase awareness of programs, support personnel, networks and techniques that are available to assist through tough times.

An Agribusiness operator in a recent article in "The Land" claimed you could cut and paste the articles from each drought and "no-one would notice". Let's make it different this time.

If you would like to take us up on this invitation, please send your article to mail@snelandcare.org.au and we'll contact you!

Gordon Williams Shares his Strategy

Our first article comes from Gordon Williams. Gordon has lived on 'Eastlake' (1202 ha), between Uralla and Walcha for 47 years. Previous experiences during drought conditions led Gordon and his father to re-examine the way they were managing, and improve their drought resilience into the future. Gordon has documented the evolution of drought management on 'Eastlake' in his article Drought Management and History on 'Eastlake' (2018) G. Williams.

Today, Gordon and his family have made substantial changes on "Eastlake". He works closely with his grazing lessees to ensure that both native and improved pastures on the farm are managed in a sustainable, profitable and resilient way. Gordon is considered a leader in successful revegetation strategies. Read Gordon's story on the next page.

The Evolution of Drought Management on 'Eastlake'

From discussion with my late father, John, after the 1965 drought and leading into the 1980s drought we knew we had to learn from past mistakes.

There were three main areas of concern which stemmed from the 1965 drought:

- Water shortages in most areas of the farm, particularly for cattle
- How we could fine tune feeding or fodder conservation for best advantage
- The need to be more aware of emerging conditions and the necessity to destock earlier to match projected feed availability with stock numbers.

With pasture improvement, my observation is that we now have less average rainfall run off because of better ground cover, as well as having better growth in cooler months, due to fertility and plant species, including natives. I am not sure what the situation was prior to European settlement. Grasses and legumes are transpiring and growing longer throughout the season now, thus drying out the soil more continuously. Therefore, with extra livestock numbers, as well as this reduced run off, there is a need for more efficient water storage and distribution.

Since 1980, in dry times or prolonged droughts, there has never been an occasion when I decided to sell livestock early, that in hindsight was an incorrect decision. My conclusion from that

is to be conservative in those decisions; by selling livestock early, any upside due to better than expected feed availability or more favourable seasonal conditions will be well and truly repaid later in better lambing, wool cuts or calves. As well, the recovery of pastures for even better returns in the medium to longer term and the myriad of better environmental outcomes will be a positive, rather than entering a downward spiral of degradation of the base asset of the farm.

A very early piece of advice I was given by an old school friend's father (who worked for the Queensland DPI) when I was around 19 years old in 1970, was to always work through management scenarios or issues with a pencil and paper. Today we might have computers, spreadsheets, grazing plans or computerised grazing management planning software to enhance our decision-making process. However, it all really comes back to the pieces of information we put down on paper in 1970, or what we enter into the computer now. The value of our decision outcomes either then or now will only be as good as the information we put in and how well we, or the computer programme, critically analyses that data, so we can act upon it. This was the best advice I ever received regarding farm business management, but it did take a few years to realise and implement it in various ways in what has been a rapidly changing



rural business environment over the last nearly 50 years of my involvement in grazing.

Analyse the situation, plan, execute, evaluate and adapt as time progresses. We must keep making considered decisions in droughts as well as good times.

On the critical issue of water, my father decided in 1968 to build a 500 ML dam on a creek to ensure at least a permanent water supply for livestock and possibly some irrigation. Over the last 40 years we have developed and extended a reticulation system of three elevated storage dams, pipes, troughs and header tanks that can deliver water to most of the farm to supplement unreliable water supply from ephemeral creeks and small farm dams. Other larger dams service parts that are not readily accessible. There is a current fuel cost of around \$3000 pa for pumping to the elevated storage dams/turkey's nests, but this cost is far less than building and maintaining dams and delivers clean and safe water access. Eventually we will change over to

solar pumping when the pump needs upgrading.

In the 1965 drought we were in early stages of pasture improvement with many clover dominant pastures, either sown or aerially improved native pastures, but these folded quickly leaving little remaining feed and bare ground. We had not encountered a drought like this with our changed pastures and management decisions were made with little experience behind us. Cattle were sold too late and grain feeding of sheep was more aimed at survival than having some productive outcome.

In the autumn leading into the 1980 drought we made a conscious decision to sell at least half of our cattle, (from a total of 350 head) only retaining 140 cows and 35 heifers which were fed for 6 months on conserved hay made on the farm. The plan was always that if the drought had not broken in the spring, we would then sell the remainder of the cattle, which we did. The fine wool sheep flock was reduced by around 15% in early autumn, retaining most of the ewes but reducing older wool

cutting wethers, which were further reduced in number in spring to allow the ewes extra feed for lambing. We also used the strategy of full feeding in 'sacrifice' paddocks to remove pressure from other pastures, but this feeding regime was never open ended, with some stock then sold in good condition or returned to spelled paddocks if possible. Our overall strategy was not perfect, but we emerged from that period in a sound financial position (in the black) and with pastures in reasonable order considering the situation and with a core of breeding sheep from which to continue.

The drought of the early 90s was equally challenging, particularly after the crash of the wool market, and we emerged with a yearly financial loss of \$20k in 1992. This was largely due to not having as many cattle to sell off early and low sheep and wool prices. We quickly returned to surplus though, as the farm had not been too heavily grazed due to early numbers reductions, allowing the pasture to recover quickly, as well as very importantly, targeting

the supplementary feeding of breeding ewes for productive purposes and not just survival.

In 2001 we decided to lease the farm to pursue other endeavours for 5 years and have continued to lease to this time. We currently lease to a neighbour to grass fatten, or background, weaner and yearling steers and heifers. We have always had limitations on stocking numbers for "Eastlake" under these leases to four different lessees over time and all have worked well bar one, with a good mutual understanding of what each party needs to achieve. As a lessee, I need a fair return on my capital investment with the farm's natural capital of soils and pastures maintained or improved, and the lessee needs also a fair return for their working capital investment and time and effort.

Managing stock numbers and grazing has been very challenging over the past five seasons due to an average of 70% of annual rainfall and a run of poor springs and autumns and very hot summers, as well as one of the driest winters on record in 2018. In close consultation with our lessee we have navigated these seasons well, with no hand feeding and by adjusting stock numbers at crucial times of the year, particularly autumn, to suit current and projected pasture availability. Over the last 4 ½ years our average stocking rate has been 6100 dse, which is around 67% of a "normal" season 9000 DSE to 10,000 DSE, and ties in closely with the average rainfall during that time. Management is obviously easier with dry stock, but the same principles apply to matching feed availability to stock numbers. There is no profit in having stock eventually destined for slaughter in poor condition, so it is about

Below - leasee's cattle on native pastures at 'Eastlake' are protected by native and non-native stands of woody vegetation which provide habitat for wildlife.



managing their growth as best as possible. The result has been at least two thirds of the heifers and one third of the steers have been sold directly for slaughter, grass fed to Coles , JBS or Wingham Abattoir. Most of the remaining steers have reached weights suitable for entry to feedlots for a 60–100 day feeding regime. The small number of steers and heifers that have not quite reached specifications, have been topped up for 6–8 weeks on an oat crop on another of their local properties, or some have received a supplementary feedlot ration for 60–100 days on their home farm to then go for slaughter for another grain assisted market.

Over the last 35 to 40 years we have developed more subdivision fencing on “Eastlake”. This is to better manage different pastures, both improved exotic and improved native pastures (improved natives still comprise 70% of the farm). On average we set stock for around 80% of the time with strategic spelling or heavier grazing at times to suit the seasonal growth stages of particular pastures. These subdivisions are based as much as possible on slope, aspect and soil type, with some limitations regarding water, access or other practicalities. These features relate well to the type of pastures present and how they respond to rainfall, seasonal conditions and time of year. We now have around 40 main paddocks over the 1200 ha, as well as some smaller paddocks for holding areas etc. This set up can allow, for example, heavier grazing of native pastures dominated by warm season native perennials (e.g. Red grass or Paramatta grass) in wet seasons over summer, to keep them vegetative, palatable and

productive. At the same time, we can rest improved exotic pastures to bulk up and regenerate for autumn/winter grazing.

For a month to 6 weeks in autumn and late spring some of these native pastures can also be strategically spelled to allow cool season perennials, such as Weeping Rice grass, Wallaby grass, and Elymus to seed or regenerate.

In addition, with this subdivision of paddocks we have incorporated shelter belts and regenerated remaining native timber stands by fencing off, direct seeding and/or plantings. This improves production of both pastures and livestock from positive shelter effects, as well as adding biodiversity for improved resilience of the overall landscape. We have recently set aside 75 ha into a Biodiversity Conservation Trust (BCT) 15-year agreement. This arrangement is a way of diversifying income and gives more profit than running sheep or cattle on that area, and as an added bonus we still have some grazing rights. We now have about 9% of “Eastlake” under destocked shelter areas and windbreaks, and another 6% under a native BCT timber area which can be used for occasional stocking. There is another 4% under woodland or scattered trees.

This system we have developed has suited us, and our farm, but may not suit others. With this arrangement we have been able to run a profitable farm business, over a variety of seasons, either running it ourselves or leasing. We have pastures that were sown between 1958 and 1987 that are still productive despite at least three severe drought periods. The farm infrastructure has been greatly improved and pastures and soil fertility has been

maintained or improved. Over the last 18 years with more cattle and less sheep, and only cattle since 2010, I have observed a continual improvement in quality (certainly less thistle) and diversity of pastures.

So, what do I think are the key strategies we have used to achieve this?

1. Always being a bit conservative on stocking rates – I think higher production through higher inputs and/or higher stocking rates, will not over time lead to the best nett income. In the short and long term, financial, environmental and operational costs and issues must be balanced. It is about optimising production to suit our farm - finding the “sweet spot” which I believe is around 10–20% below maximum production or stocking rate.
2. Taking a longer-term view of all aspects of farm management.
3. Plan, prepare, act and review, but be adaptive and flexible.
4. Being as proactive as possible in all aspects of management rather than reactive.
5. A sustainable farm must be profitable (financial management), must not degrade the landscape (environmental management) and the overall management must be realistically achievable given any restraints of labour, landscape or personal goals etc. (operational management). All three of these areas are linked and interrelated, so I try look at the big picture when making decisions.

6. At the end of March each year it is highly improbable that my farm will have any more feed on the ground until late September, given lower winter growth rates at 1100 m altitude and summer-dominated rainfall. Therefore, the need for any early autumn adjustment of stock numbers is paramount, particularly in bad seasons. This is even more so if the previous spring has been bad, (we have had five bad springs in a row to 2017, and 2018 has also been late) as there is a need to have breeding stock in good condition so they can live reasonably well with projected feed and the fat on their backs. If they are in reasonable condition, they can also be efficiently given supplementary feed at critical times, for example, to ensure a good lambing in the spring. Dry stock can afford to lose some weight, but if over-grazing of pastures occurs, starting from a poor position in spring with recovering pastures will take more time to fatten animals.
 7. We have continued to work with the view, based on sound evidence, that the particular stock management system that is used (i.e. variations of rotational, set stocking with strategic spelling etc. and a myriad of other systems that farmers employ) is not the dominant factor, but how well any system is managed that really matters. I believe it is fundamental to match pasture production with stock numbers and thereby managing both the groundcover and retained herbage mass. Strategic fencing and water infrastructure gives me (the grazing manager) the control we require to monitor pastures and manage stock numbers accordingly. I have observed different systems fail because of the belief, or just hoping, that they would grow feed even when it did not rain, and stock numbers were not reduced when there was little prospect of feed ahead due to lack of rain or time of growing season.
 8. We have always matched our annual average stock numbers with approximately 1 kg of Phosphorus per dse per year. We usually use superphosphate that adds Sulphur as well, to match the losses of those critical elements out the farm gate in meat and bone and wool, as well as other losses from some leaching and tie up in the soil. By doing this, when it rains during or after a drought, grass responds well and has good feed value, if reasonable ground cover has been maintained prior. We have light metasedimentary 'Trap' soils and some fine monzo-granite soils. We have also recently applied lime, on agronomic advice, to the monzo-granite soils to remove an aluminium toxicity issue.
 9. After storing farm made fodder for feeding 140 cows in 1980 and having to sell them when we ran low anyway, we then took the attitude that it was better to store money in some sort of investment, rather than have a deteriorating asset of hay or grain stored on farm for droughts. We invested some on-farm profits during the 80s and 90s off-farm, and this gave us an income buffer when farm profits were down, as well as cash to buy grain if needed for short term feeding of sheep breeding stock. It did not however, change our attitude to lowering stock numbers at critical times.
- While there is discussion around the pros and cons of rotational grazing versus set stocking, and the different variations in between, I think that if the goal of managing ground cover and pasture herbage mass is always kept at the forefront of the mind, no matter which system is used, and stock numbers managed to suit feed availability, then this is likely to produce the best long-term outcome. If some pastures, for whatever reason, are over-grazed, then it is even more important to allow them to recover after the drought is broken, less you risk continued degradation of the farms core assets. Improved fencing and water infrastructure also critically allows control over the distribution of grazing animals in the landscape and therefore this is a sound investment no matter what stocking system is used. It has been about finding and developing a system for our farm, in good seasons and bad, that fulfils the base criteria of financial prosperity, environmental stewardship and operational feasibility. We have managed droughts and good seasons incrementally better since 1965, but there will always be room for improvement. The key is to analyse the situation, plan, execute, evaluate and adapt.
- This has been our journey and if even one idea that has worked for us can fit into someone else's farm management situation it has been worth sharing.
- Gordon Williams - "Eastlake",
Uralla, 2358. gweastlake@yahoo.com.au

Wanted: Landcare MEMBERS to HOST DRY TIME DINNERS

**Know a farmer who needs
a break and a night out
with friends?**



If you are a Southern New England Landcare member and primary producer, how about coordinating some of your neighbours and hosting Dinner at a venue near you?

Dry Time Dinners aim to support small groups of neighbouring farmers experiencing drought by helping them have a night out AND support a local venue in one of our smaller towns (because they too are feeling the effects of the drought).

7 Dry Time Dinner vouchers valued at \$200 each are available to groups of neighbours.

To find out more or book your voucher, please call 02 6772 9123.

This initiative has been made possible with a generous \$1000 donation from the **Northern Yarra Landcare Network in Victoria**, which Southern New England Landcare has matched with a further \$1000. Additional donations would enable us to extend this opportunity to more groups. If you know someone who wants to donate, we welcome donor enquiries on 02 6772 9123.



Drought & Weeds

When feed and fodder are brought onto your property from outside NSW, you risk introducing new weeds.

During dry times we move a lot of feed interstate. From a weed perspective, this means we may be importing weeds from anywhere on the mainland.

Although feed movement is a necessary activity, there are a number of strategies we can put in place to help ensure this difficult period is not compounded by years of costly and labour intensive weed control into the future.

Sacrifice Paddocks

Where possible feed out imported stock feeds in the same location. If we are introducing weeds in stock feed, particularly hay, it is best we limit the area over which these weeds are spread. If there are few feeding locations it is easier to be on the lookout for the growth of unfamiliar species when conditions improve.

Vehicle Hygiene

The trucks that are transporting this stock feed have also been on properties in the source location. Vehicles and agricultural equipment have always been a major vector for transporting weeds. Be mindful of how clean these vehicles are when they enter your property and again be observant for new species in places these vehicles have been.

Bare Soils

The reduction in vegetative cover during prolonged dry spells provides great opportunity for new species to become established. As we often discuss the best way to control the introduction of weeds to a property is by having a healthy pasture with good ground coverage. Unfortunately that is not always possible.

Weeds are a costly Biosecurity threat, so keep an eye out for any plants you don't recognize and act quickly. You can call NEWA if you spot an unknown plant on your property and they will assist in identification and control methods. You can also download the NSW WeedWise app from the app store or online at weeds.nsw.dpi.gov.au.

For help with weed identification and management please contact any of the NEWA Biosecurity Officers (Weeds) on 6770 3602, call into our office at 2/129 Rusden St Armidale, follow our facebook site or visit www.newa.com.au.

Water Weeds—A Serious Problem

Three-quarters of our current aquatic weeds were introduced into Australia through the aquarium plant trade which then escaped into waterways after sale.

Cabomba, Salvinia, Sagittaria

and Water Hyacinth are examples of introduced aquarium plants that have become significant environmental weeds, these plants are included on the list of 32 Weeds of National Significance due to their invasiveness, potential for spread and severe impacts.

Aquatic plants make an attractive addition to home fish tanks, ponds and water features, but several species threaten Australia's waterways and water resources.

Management of our water resources is under increasing scrutiny and water weeds receives increasing attention from Government, landholders and water management authorities.

Boating and fishing in waterways infested with weeds has also contributed to the spread of aquatic weeds from one site to another where propellers and anchors can cut plants into fragments and spread them within and between waterbodies. Fragments can attach to watercraft, trailers and fishing equipment and be spread to new waterbodies. Some weeds can survive considerable time out of water and a single plant fragment can start a new infestation.

Stop the introduction and spread of water weeds into new waterbodies areas by:

- Preventing unwanted hitchhikers (inspect and

remove any plant fragments from water craft, trailers and equipment before leaving a site),

- Not accessing waterbodies in infested areas and if in an infested area avoid running the engine through weed beds.
- Prevent accidental escapes from backyard pond by screening outdoor ponds to prevent overflow during heavy rains; source your plants from a reputable nursery/seller; never dump pond plants in the green waste or local water way, (dry specimen thoroughly then dispose in a sealed bag).

It is important to keep a lookout for suspected new water weeds in you local waterways and report any suspicious water weeds to your local Biosecurity Officer. For help with weed identification and management please contact any of our Biosecurity Officers (Weeds) on 6770 3602, call into our office at 2/129 Rusden St Armidale, follow our facebook site or visit www.newa.com.au.

NO space for WEEEEEDS

NSW Department of Primary Industries has many great resources to assist with weed management. Here are two useful links:

<https://www.dpi.nsw.gov.au/biosecurity/weeds/no-space-for-weeeeds>

<https://www.dpi.nsw.gov.au/biosecurity/weeds>

Get the FREE WeedWise App

NSW Department of Primary Industries' WeedWise is provided as a free smartphone app through the app stores.

Like the web version, the smartphone app provides key information to help users reduce the impact of over 300 weeds in New South Wales.

Users, ranging from home gardeners and residents to farmers, land managers and weeds professionals, can search or browse weed names (common or scientific); recognise a weed by its physical description and image gallery; and find out about its impacts, where it occurs, how it spreads and its preferred habitat.

Control options are described for each weed and the herbicides registered for control by the Australian Pesticide and Veterinary Medicines Authority are listed, including application rates and techniques, and any minor-use permits that must be complied with.

General, state or regional biosecurity duties under the Biosecurity Act 2015 are displayed for each weed.



If undeliverable return to Southern New England Landcare,
Suite 10, 128 Beardy Street, PO Box 85, Armidale 2350.
Tel 02 6772 9123, mail@snelandcare.org.au.

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Landchat presents a forum for the expression of a range of opinions. While every effort is made to publish accurate information, Southern New England Landcare and its employees do not accept responsibility for statements made and opinions expressed in this newsletter.



Need Insurance

for your farm, equipment, car or household?

We recommend Wesfarmers Federation Insurance, proud supporters of Landcare.

Mention you are a member of Southern New England Landcare, and 3% of the value of your premium is returned to SNELandcare to support projects! Contact David de Ferranti on 1300 934934 or 0412 328 911.



Local Land
Services
Northern Tablelands



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