

NESSI NEWSLETTER

Providing land management
information to the community.



Winter 2008

EDITION 36

Welcome to the winter edition of NESSI newsletter. This edition is a little bit late due to staff being busy with on-ground works such as tree planting.

A lifetime Contribution- Phyl McLean

We were saddened to hear of the passing of Phyl recently. 'Involve me and I'll understand' this best describes Phyl's philosophy to tackling salinity when the NESSI team ran a story on her back in 2002.



Phyl's overall comment to landholders in the North East at the time that article was written, was "It is important to do the best we can, and not focus on questioning the past. We may not be able to cure salinity but we can learn to manage it". Times were different then and salinity was a bigger issue, however it has not gone away.

Phyl received an award from the Victorian Government for her contribution towards management of salinity with the North East Region in 2002. Previously as the secretary of the Indigo Valley Landcare Group she attended a Landcare Conference at Hamilton, Victoria in 1991. A salinity tour was part of that conference where Phyl became aware of the problems that salinity causes.

"At that stage I knew of three salt affected sites in the valley and thought there could be more," said Phyl. "With Denis Martin's encouragement I wrote a letter to the Department in Wangaratta raising Indigo Valley Landcare Group's concerns that salinity should be recognised and addressed in our area".

Her contribution led to the establishment of the salinity program in the North East. At Phyl's instigation DPI established a large number of bores to monitor the situation. Phyl was still coordinating and measuring some of the bores in Indigo Valley until she became gravely ill. Our condolences are with husband Norm and family.

A few tips on understanding climate change issues

Climate change is a very important issue. I recently attended a briefing on carbon and emissions trading and the potential for agriculture to be involved. There is so much information about at present. If you are confused like I am, a good place

to start to get your mind around the basic issues is Wikipedia http://en.wikipedia.org/wiki/Emissions_trading

Once you have solved the basics you may like to look at the Garnaut review. <http://www.garnautreview.org.au> Then the next step could be the Commonwealth Government timetable on how emission trading might be implemented. <http://www.greenhouse.gov.au/emissionstrading/timetable.html>

Landcare Tour launched

Recently I had the pleasure of being part of the launch for Springhurst/Byawatha Landcare Group Ecotour. This is a fantastic resource for the region and a first for the North East. By visiting the Springhurst Byawatha Hills Landcare area people can complete a self drive tour and view achievements from the roadside. Landholders have been active in managing dryland salinity, vermin and weed control and other environmental concerns. Along the way you get to see lots of revegetation and habitat improvements as well as some great views. The trip is enhanced by the opportunity to check up on some local history and the chance to see some work by North East Region Water Authority in re-use systems. It takes about two hours for the drive along 70 kilometres of country roads. Copies of the guide are available from the Wangaratta Visitor Information Centre or Colin Andrews colinsa@bigpond.com or from Peter Ockenden at DPI Wangaratta. Peter Ockenden

Salinity in a Drying Climate.

Any discussion on salinity today seems to pale into insignificance around the discussion about climate change. However the two are linked. Our DPI team have been monitoring groundwater levels across the region to better understand salinity since the early 1980s. This information is invaluable to our understanding of climate change.

Over that time we have noticed big fluctuations in the height of watertables across the catchments. These fluctuations are greatly influenced by trends in climate and can be matched with both seasonal and annual rainfall during the same period of time.

Editor: Kylie Macreadie

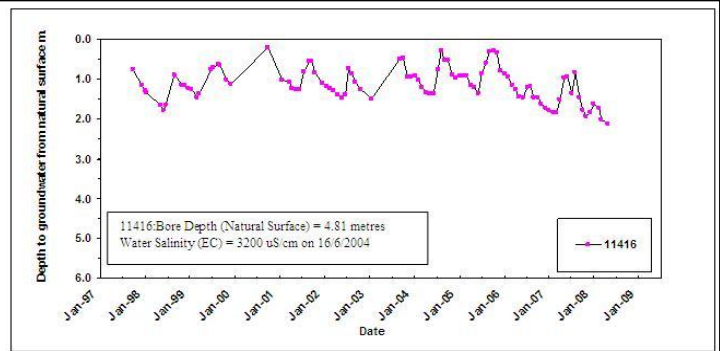
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So how are saline sites reacting to this change? The bore shown here (11416) is located in a saline discharge site in the Greta Valley area. The bore is relatively shallow (4.81 metres) but the pressure levels in the bore (measured by depth below natural surface) remain high despite the dry times. This groundwater trend is common in bores located within or close to saline discharge sites.

A seasonal watertable trend is evident in this graph – the watertable can fall over a short period of time but also quickly recovers with rainfall events. So these types of sites are actually recharging rapidly in response to rainfall events. There has been a gradual fall in watertable trend in this bore since about mid-2005, with some recovery during the first half of 2007 but falling again to its lowest level during 2008.

During 2008 the watertable is still within 2 metres of natural surface so capillary rise will still be occurring and the site displays all the normal characteristics of a saline discharge site. This site has been observed within the last month and it is still very much a saline discharge site – it appears no different to that of a few years ago in size & severity.

The other bore (11017) on page 5, shows the impact of



virtually no recharge across the wider catchment. This groundwater trend is typical of sites higher up the catchment, which take a lot of wetting of the soil profile before leakage to the watertable can occur.

The message here is that saline sites are still present in the landscape. These sites need to be managed appropriately. There may be some opportunity to encourage revegetation of such sites while they are relatively dry. In some instances sowing of salt tolerant vegetation may be an option. Please give one of our team a call if you have a saline site and wish to discuss its management.

Peter Ockenden - DPI Wangaratta

Local Weed Spotter Reports a Prickly Problem

A Weed Spotter from Chiltern recently sighted an unusual spiky shrub growing along a fence line near Barnawartha (west of Wodonga). Eileen Collins, an enthusiastic member of the Friends of Chiltern National Park, noticed the unusual plant while driving through farmland that adjoins the Park.

Eileen reported the weed to her local Weed Alert Contact Officer (WACO) while attending Weed Spotter training. A pressed specimen of the State Prohibited Weed called camel thorn (*Alhagi maurorum*), which was used for weed identification training on the day, prompted Eileen to report a similar plant she had found.

Realising the importance of Eileen's weed find, Wodonga WACO Stuart Roberton immediately obtained information about the plant's whereabouts. Eileen provided a detailed map of the site and Stuart followed up the report with a site visit. At first the plant indeed appeared to be camel thorn however, upon close inspection, several differences were identified that indicated the plant was not camel thorn but the Regionally Prohibited Weed spiny broom (*Calicotome spinosa*).

As a result of Eileen's fantastic observation skills and subsequent weed report, we have now found the only known spiny broom site in our region. The weed has since been treated with herbicide and DPI will follow up with treatment until the weed has been eradicated. This outcome is exactly what Weed Spotters are all about – finding and reporting new high risk weeds so we can keep them out of our region.

So how do you tell the two plants apart? The biggest identifying characteristic for spiny broom is the leaves, which grow in threes on the stem (figure 1), whereas camel thorn usually has single leaves attached to the

stem (figure 2). Camel thorn is also a smaller plant (to 150 cm) and has fewer leaves and more spines than spiny broom. Spiny broom flowers are yellow, whereas camel thorn flowers are pinkish purple to red and yellow.



Figure 1. Spiny broom's leaves in 3s
Image: Auckland Regional Council

If you have found a new weedy plant emerging in your area and would like to get it identified, DPI may be able to help. All you need to do is take good quality photographs of the plant on a digital camera and email the images to your local WACO. You will then be contacted once the plant has been identified, or if the WACO requires any further information or plant samples.



Figure 2. Camel thorn's single leaves

Your local WACOs are contactable at DPI Wodonga, or via:

Stuart Roberton: Ph: (02) 6043 7965
Email: stuart.roberton@dpi.vic.gov.au
Greg Johnson: Ph: (02) 6043 7967
Email: greg.johnson@dpi.vic.gov.au

Captive Release Trial Provides New Hope For Regent Honeyeater.

On the 1st May this year, 27 captive-bred Regent Honeyeaters were released into the Chiltern-Mt Pilot National Park. The innovative trial, a first for Victoria, aimed primarily to investigate whether captive-bred birds can survive in the wild. All birds were fitted with radio transmitters and coloured leg bands to assist with post-release monitoring. Information was also gathered on foraging patterns, interactions with other birds and habitat use.

Recent surveys have suggested that populations of the Regent Honeyeater, a nationally endangered species, have declined in recent decades. Across Australia there could be as few as 1000 birds in the wild. The Chiltern section of the Park was selected for the release as it is still one of the key areas for wild Regent Honeyeater sightings in Victoria and supports the largest Mugga Ironbark based autumn-winter eucalypt flower resource in the state.

The radio transmitters were expected to last up to two months, and have now stopped working, however despite this 70 per cent of released birds are still being regularly recorded alive and healthy in the Park. These birds are being identified by their unique coloured leg bands. They have been observed feeding on predominantly Ironbark blossom, hawking insects, avoiding predators and otherwise behaving much like the wild Regents that have also been recorded in the area.

The project's key feature and heart of the current monitoring program, is the huge participation of volunteers in both radio tracking and field observations. Volunteers include representatives from Friends of Chiltern-Mt Pilot National Park, local and state Bird Observers and Field Naturalist clubs, Landcare groups, and landholders from throughout Victoria and Southern NSW. Pre-release workshops and 'on-the-job' training in the efficient use of tracking receivers and GPS units helped to establish a well-oiled team that managed to track individual birds up to 10 kilometres from the release site. Over 100 people have been involved in more than 2200 hours of monitoring to collect 1600+ GPS data points.

The survival of the captive birds to date is an incredible success story. The focus of ongoing monitoring will be to confirm the ultimate goal – breeding and recruitment of young into the wild population.

The National Regent Honeyeater Recovery Team project is funded by the Federal Government's Natural Heritage Trust via the DSE's principle partner, the Department of Environment and Climate Change (NSW). However the project is a massive collaborative effort involving Birds Australia Threatened Bird Network, Threatened Species Network (WWF), LaTrobe University, University of New England, Parks Victoria, Trust for Nature and seven Australian zoos which participate in the Australasian Regional Association of Zoological Parks and Aquaria's (ARAZPA) captive management program.

The Regent Honeyeaters are expected to disperse from the Park in the near future so keep an eye out for them in your area. Native bush supporting flowering eucalypts or even larger native gardens (with other native flowering plants) are potential sites to spot this endangered species. For further information on the species, updates on the project or to report a Regent Honeyeater sighting please contact Sarah Kelly, DSE Wangaratta.



Released birds were fitted with transmitters and individually unique colored leg bands to assist with post-release monitoring. 'White/Mauve' a 3 year old female with back harness transmitter antennae showing. *Photo: Dean Ingwersen Birds Australia.*

1st May Release Day Monitoring Team

Are You Running Out of Water?

Recent dry years have seen farmers suffering from farm water supply problems including inadequate supply and poor water quality. Farmers with access to reliable bores or irrigation supplies are very fortunate, while those relying on surface runoff into dams or on small stream flows may not be considering themselves so fortunate.

Lower rainfall and less intense rainfall events have meant traditionally reliable dams, streams, creeks and springs have run dry, with many farmers being forced to cart water. This can be very costly and time consuming and may create a great deal of stress for the farm and their stock/produce. Water supply can also limit farm productivity by constraining the amount of produce you can grow. This is where a Farm Water Plan (FWP) may help and can be useful in addressing water issues in the grazing, cropping, horticulture and viticulture industries.

A FWP can help to relieve supply and quality problems. A FWP looks at how much water your enterprise needs, what quality that water needs to be, how you can obtain that water and then how you can most efficiently distribute that water to where it is needed.

A FWP also takes into account the benefits and costs associated with obtaining and redistributing that water to ensure your enterprise is managing its water efficiently and can help to improve overall farm returns. For example, on a grazing property, a well designed farm water supply system can greatly increase the efficiency of your pasture utilisation when integrated with a cell grazing approach, and help to increase returns by increasing the long-term carrying capacity of the property.

I am available to assist individual farmers and groups with planning and designing farm water supply systems. I am also currently working on a project looking at farm water supply deficiencies in the NE and I am looking for comments or feedback from producers in the grazing, dairy, horticulture, and viticulture industries. If you have recently been experiencing water supply problems, or would like to talk about Farm Water Planning, I would like to hear from you, so please contact Craig Turton - DPI Wangaratta, Ph 0357238 682.



North East EverGraze Supporting Site Field Days a Great Success

Five field days held across North East Victoria during May provided the opportunity for livestock producers and advisors to be introduced to the national EverGraze "More Livestock from Perennials" project. Paddock walks, practical demonstrations and interactive discussions saw over 90 participants learning new skills in pasture establishment, grazing management, species identification and soil test interpretation.

The field days were held at EverGraze Supporting Sites where local producers are implementing innovations associated with the project and demonstrating how the technology can be applied in different environments. The North East Supporting Sites cover a diverse area ranging from the river flats of Wangaratta to the high country of Benambra. The focus of the sites is on managing native perennials for maximum production and persistence in low-input, usually hilly country, while putting the right introduced perennial plant in the right place for increased production on high-input, flatter country. Grazing management of native pastures and hill country, establishment of a range of introduced perennial pasture species and rotational grazing are among the practices being implemented by the site hosts and their local Landcare groups.

The feedback received from these introductory field days was overwhelmingly positive and producers are keen to be involved. They are eagerly awaiting the next round of field days to be held in Spring when initial results should be available.



Participants at the Benambra Supporting Site Field Day identifying native pasture species.

For more information on EverGraze or to become part of a Supporting Site group, visit www.evergraze.com.au or contact:
Kate Sargeant (NE Extension Coordinator) DPI Seymour 03 5735 4352
Alison Desmond (NE Project Officer) DPI Rutherglen 02 6030 4613

The EverGraze project and the North East Supporting Sites are supported by the Future Farm Industries CRC, Australian Wool Innovation, Meat and Livestock Australia, Department of Primary Industries, Alpine Valley's Agribusiness Forum, Landcare and Woolworths.

EverGraze
More livestock from perennials

Local schools regularly approach the Department of Primary Industries (DPI) staff asking them to present to students or to provide information relating to a wide range of local environmental issues. To assist DPI support our local schools while still delivering DPI environmental objectives, DPI has participated in the SEED north east project.

The School Environment Education Directory (SEED) project has allowed a range of educational resources to be developed for students, teachers and environmental staff with a north east focus.

The highlight of the SEED project is the creation of the SEED website (www.necma.vic.gov.au/seed). This website provides a one – stop - shop with links to hundreds of sustainability websites, especially those with curriculum based activities. The information is presented in the topics of biodiversity, climate change, general sustainability, waste and water.



To support the website a range of local curriculum units to Victorian Essential Learning Standards (VELS) are being

created including short films showing roadside biodiversity, the recycling process and what our landfill waste looks like.

The SEED project has also made it easy for students to be hands-on with sustainability through the Schools Roadshows. As part of National Tree Day (23 July) over 100 local Grade 5/6 students participated in 11 environmental activities at Martin Park in Chiltern. Teacher professional development sessions are also being created as part of the SEED project.

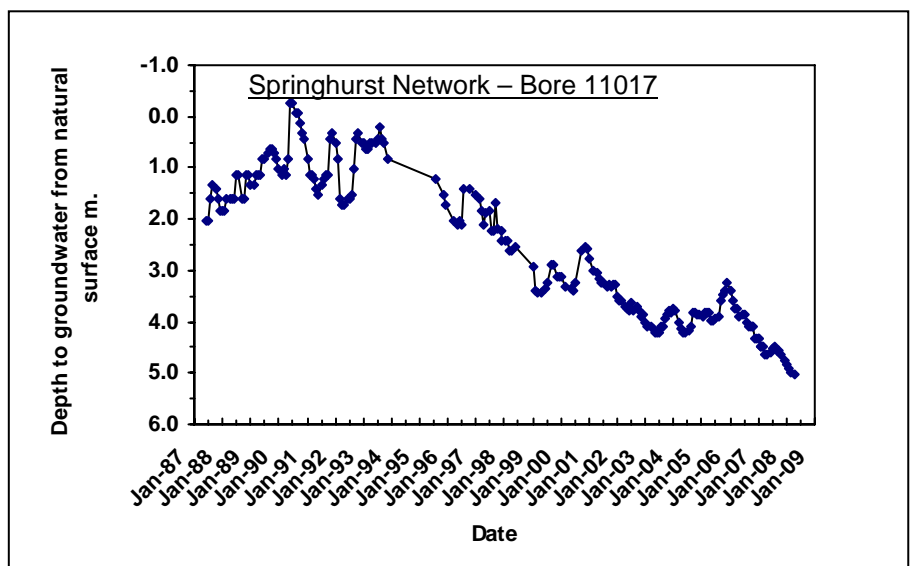


This is a ground breaking project and has been a collaborative effort between the North East Greenhouse Alliance, North East Catchment Management Authority, NervWaste, Indigo Shire Council, the Rural City of Wangaratta and North East Regional Water Authority. Funding has been provided by the Federal Government as part of the Natural Heritage Trust. If you would like further information on the SEED project or would like a SEED presentation at your school, organisation or community group please contact Karen Jones SEED Project Manager on email seed@nevrwaste.vic.gov.au or phone (03) 5722 9232.

Groundwater Trend Update

This bore has previously been used in this newsletter to highlight long-term watertable trends. The bore is located in the foothills a few kilometres south of Springhurst on the eastern side of the Hume freeway. It is 50.6 metres in depth and has a water salinity of about 9000 uS/cm (electrical conductivity). The sub-catchment in which it is located has both recharge and saline discharge areas that have had considerable revegetation work completed since 1987. This has consisted of establishing deep-rooted perennial grass pasture and tree shelterbelts. These shelterbelts have been planted on 7% of the discharge area, 14% of mid-slopes and 28% of upper slopes up until the year 2000. Further tree planting has occurred

between 2000 and 2008. It is difficult to determine the relative contribution between these revegetation works and the lower annual rainfall that has occurred in the last few years on the falling watertable trend. However it is highly likely that these revegetation works have made a contribution to this watertable trend. The overall trend since the early 1990s is downward, with climate influences having a major impact.



Ian Gamble - DPI Wangaratta

Landholder Information Sessions

The Greta Valley Landcare Group, in conjunction with the Department of Primary Industries (DPI) is running a series of information sessions for landholders designed to help them improve all aspects of natural resource management.

The sessions are designed to provide hands-on information using a mix of class and field work with specialist guest speakers. Groups are kept small and will cost only \$10 per session per couple/family, including lunch and all session notes. For further information or bookings please contact Mary Anderson at DPI Wangaratta on phone 5723 8655 or email mary.anderson@dpi.vic.gov.au.

Following Sessions:

Property Water Supply Planning, 5th October

Planning for Hard Times, including drought and fire planning, 2nd November

Wrap up and Christmas BBQ, 7th December



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To The Landholder

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