UnderStorie

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www.understorey-network.org.au

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NRM South Tasmania Australian Government

Coordinators News

I hope all growers are having some success with their seeds this year. I have had a few reports indicating that normally easy plants, such as Leptospermum species are taking awhile to germinate, and then only here and there. It may be due to the variable summer we have had, especially with a couple of early hot days followed by a cold snap around Christmas – too confusing for the plants!

All growers will be receiving a Germination results chart in the mail over the next few weeks – please take the time to fill it in and send it back, as it is vital to get some feedback on propagation successes and failures for future growing seasons. Feedback from the trial of an Autumn growing season last year indicated that germination was poor and seedlings grew slowly, except for a few species. I have therefore decided that it is more efficient to send all seeds out at the usual time in spring, with a note on those seeds that grow best if planted in Autumn.

Our stock of seeds is looking much healthier after several seed collecting days over January. If you have been seed collecting and have some extra – please send them in to the office. I will need assistance in cleaning and repacking seeds this summer's seeds for the seedbank. Please let me know if you can help out, either in the office or I can come to your spot and organise a seed sorting morning tea.

Other exciting news is that the Understorey Network is now one of three partners that

have signed a lease on a community nursery in Glenorchy, Hobart. This will make a big difference to our ability to support some of the larger NRM projects with plants, and provide backup for our growers. More about this in the newsletter.

Ruth Mollison, Coordinator

A word from the President

Well it hasn't been the best growing season we've ever had, so if you've had some spectacular failures you are not alone. However there have been spectacular successes too and several thousand plants are nearly ready for planting. Please, receivers, return your empty pots to us. Apart from the terrible waste of not re-using them, their cost is significant.

I have been doing the membership entering for Ruth, but will be away during July and August. Therefore we need a volunteer to do this for that time, as it will be the busiest time with renewing memberships. It would involve about two to three hours per week in the USN office. If there is a member out there who would like to help we'd be very grateful. If so please ring Ruth on 6234-4286

Propagation Database Project Update

As you know the Understorey Network has been running a small Envirofund project to update the plant propagation database. The project has involved researching and adding new records to the database.
This was a difficult task as the information gaps were often for the less well known species that did not appear in the literature. Thanks to those members who assisted Angela with information. We have added close to 400 records to the database, including many of the grasses and sedges. Many more photographs of individual species have also been added.

Before you rush off to check out the new information…….We are waiting to upload the updated database onto our new website. The redesigned website will be up and running by midyear. To ensure the plant propagation database is fully utilised by members and non-members alike, a flyer is

Tolosa Community Nursery and Garden

The Understorey Network , Sustainable Living Tasmania and Kallista Disability Services have combined forces and skills to run the ex-council nursery at Tolosa Street in Glenorchy as a community nursery. The nursery is located in the Tolosa Recreation Park at the end of Tolosa Street, along the fence on the MT Wellington side. There are several shadehouses and sheds on the fenced site, in need of some minor repairs. The consortium has been successful in obtaining a grant from the Tasmanian Community Fund to assist with repairs, tools and management of the nursery by a horticulturalist. The site is rapidly improving, with the shadehouses tidied up and filling up with plants.

We have also been successful in obtaining the assistance of a Green Corp team, who will help to remove weeds, plant around the outside of the site, collect seed and propagate plants for projects. A TAFE architecture class are designing and building a wooden deck next to the sheds with an easy access ramp for wheelchairs.

There will be an opening of the nursery in the coming weeks, for everyone to come and have a look at the progress to date.

The nursery is in need of more pots, particularly the standard 6inch round ones – so empty your garden shed out please. Pots can be dropped off at the nursery on Mondays to Wednesdays; all donations are rewarded with a **FREE NATIVE PLANT!**

Network will benefit from extra hands program

The Understorey Network is getting in early to make the most of a new volunteer placement program developed by the Tasmanian Landcare Association. Launched on Valentines Day, the extra hands program will link people who want a casual volunteer experience with people or groups that need volunteers (hosts).

Here's how it will work:

The extra hands program will invite volunteers to work on environmental projects that are being run by a host organization. Host organizations will include; landcare groups, an environmental organizations and, landowners. Volunteers register their interest by defining the type of work they would like to do, where they would like to work and what time of week suits them. When a suitable project turns up the Landcare office notifies volunteers. An annual $20 registration fee pays for the administration involved in matching people to projects and covering accident and public liability insurance.

Ruth recently attended the launch of the program in Launceston where chocolate hearts and plants provided by the Understorey Network 'wooed' the locals into joining up to lend a hand in repairing some of our environmental problems around Tassie.

Extra hands meets the Understorey Network:

Totally 'smitten' with the idea (it was Valentines Day after all!) Ruth signed the Understorey Network up as a host organization. This will mean that when we need all hands on deck for a large plant order, or a seed collecting blitz we can register our project with the extra hands program and access some eager volunteers. The Network is also signed up as a volunteer, so if members wish to work on a particular project that is being conducted by an extra hands host they can. Ruth will notify members via email of up and coming events they may like to take part in.

Being involved in the extra hands program is an exciting move for the Network. It will increase our ability to take on larger plant orders, collect more seed, and increase our skills by being involved in different projects. We may even gain some new members along the way!

If you would like to find out more about this exciting new project you can call Ruth or have a look at the website at www.taslandcare.org.au.

Chat with a Grower

Neve Quinn in the daisies

Liz Quinn has recently stepped down from her position on the Committee to concentrate on growing plants…..and chasing her one year old daughter, Neve.

Liz has been growing natives from seed for about eight years. It all began with her university honours project where she collected and grew thousands of seeds of threatened plants as part of a population dynamics study.

'At first I grew for myself, but now I enjoy growing for groups and landowners who are rehabilitating their local patch'. Liz says. Last year she grew for Friends of the Wild West Coast, and some 'prickleys for penguins' for a group rehabilitating a coastal reserve in Margate.

Liz is currently growing *Leptospermum* species and *Callistemon pallidus* for 'Murrayfields' on Bruny Island. 'It has been a funny year for growing, seeds were very slow to germinate and germination was patchy. Now the seedlings are through but are slow to take off.' Liz is really looking

Building a Grey Water Wetland –

A member's experience

By Tony Watton (RUTH CHECK SP)

My wife and I live on a 4 ha property in Sandford, which is predominantly heavy clay. There is no mains water supply or sewerage system. Therefore, we have a total of 90,000 litres capacity rainwater tank storage while toilet and kitchen waste go to a septic tank. Grey water from the laundry, hand basins, shower and bath first go to an underground holding tank near the back door. From there a submersible sump pump empties the tank through a movable hose to the grass about 20 metres from the house. As we live in an area of very low rainfall I thought I could make better use of the water than simply draining it onto the grass.

We already had a dam about 80 metres from the house inhabited by a community of frogs, beetles and other water creatures. There are reeds and rushes around it and some floating plants. Initially I trialled diverting some of the house grey water into the dam. However, when the water emptied into the dam I realised that this approach was a mistake and I reluctantly went back to the previous system.

Planning

I sought some advice from Nigel Jones, a local builder, who specialises in building environmentally appropriate homes, passive and active solar heating and traditional and alternative forms of construction. Nigel suggested that a constructed wetland might be appropriate for our needs and offered to visit us to provide some advice.

When estimating how big the pit should be Nigel suggested that it should be able to cope with the theoretical loading provided by a family of five or six, because we have a 4-bedroom house, even though currently only my wife and I (and our terrier Topsy) occupy the house. His recommendation was for a pit 5m long, 3m wide and 800mm deep.

The wetland pit next to the existing dam

I also scanned the internet for further information; these sites are listed at the end of the article.

Construction

The wetland was built next to the dam to allow the treated water to flow into the dam.

The bottom of the pit was covered by a layer of sand about 50mm thick and a thick pond liner was laid in the pit. This was then covered by another 50mm layer of sand. 2m wide lengths of Forticon were placed across the base and up the sides of the pit. The purpose of the Forticon was to provide a warning that the actual pond liner is close if future excavation of the wetland is undertaken.

The water inlet consists of 20mm diameter irrigation pipe which leads down to the bottom of the pit at one end. This pipe was fed through a hole in an end cap that sealed a 1m length of 100mm sewer pipe. The other end was sealed. The sewer pipe had 5mm wide slots cut every 15mm to provide an even dispersion of the incoming water. This inlet was covered by blue metal.

The pit and water inlet pipe

The outlet was provided at the far end, close to the dam. A length of stormwater pipe with a grill set into the end was placed in position so that water would drain into the dam when the pit filled with water. The pit was filled with 14 cubic metres of 7mm blue metal.

Forty wetland plants have been planted in the blue metal. These include:

Juncus filicaulis
Juncus krausii
Juncus pauciflorus
Neopaxia australasica
Carex appressa
Carex longibrachiata
Xyris operculate.

Operation

I am concerned that the submersible sump pump that delivers untreated water to the wetland might be working harder than it was designed to. However, it is still working after (I believe) not having been looked at for up to 15 years.

It is too early to determine if the new wetland will do the job – that is, to treat the grey water to an extent that it will not harm the living creatures in the dam. As at January 2007 there is a large amount of frog spawn around reeds following heavy rain during the previous week. If all this develops into frogs we won't be able to sleep at night for the noise!

As I also use the dam water to water various areas of the property, I want the water to be clean enough so that natives are not harmed by its use.

Costs

Costs to date have been:

Excavation (pit and dam extension)	$1,100
Sand and blue metal	$900
Pond liner	$320
Forticon	$70
Plants	$120
Irrigation pipe and fittings	$100
New submersible sump pump	$550
Total	$3,160

Clearly, these costs would have been considerably higher if I had paid a contractor to undertake the work.

If you would like any further information about this project I can be contacted by email at: tony180@bigpond.net.au. Phone 03 6248 9117.

Resources:
Greywater Treatment Systems" by Sustainable Living Tasmania;

Household Greywater Wetlands by the Amphibian Research Centre;

Mobbs, Michael, 1998. *Sustainable House: Living for Our Future*. Marrickville, NSW Choice Books.

The completed greywater wetland

Project Funding Available

Round 9 of Envirofund is now open. Funding grants of up to $50 000 are available for individuals and small groups to carry out on-ground environmental projects. Eligible activities include planting native vegetation, fencing to protect native vegetation, controlling weeds and feral animals etc. Applications close Friday

MULCHES AREN'T JUST MULCHES

By Phil Watson

A satisfying sense of achievement can be enjoyed by enthusiastic bush carers, gardeners and landscapers alike, following a planting which features a fresh blanket of neatly spread mulch. These, committed folk take it for granted that by spreading mulch they will not only enjoy an attractive landscape, but will be rewarded from an array of water-saving, weed reducing, disease minimising, fire retarding and nutrient releasing benefits.

However, recent scientific studies, reported in the "Gardening Australia" magazine suggest that the anticipated outcomes don't eventuate, primarily due to poor selection of mulch ingredients and an inconsistent range of particle sizes.

This article aims to provide a solution to the frequently experienced grower's frustrations associated with loss of plants as well as planting and growing time, due to the poor performance of the mulch.

Three types of mulch:

Soil conditioner mulches (pea straw, Lucerne hay, compost, sea grass etc) are composed of a mixture of coarse and fine particles which will decompose into humus over short periods. Here they contribute significant amounts of nutrients to the soil as well as improving soil structure by clumping together soil particles to form peds. This in turn enhances its water holding capacity and air flow into the soil (air filled porosity). However, since they rapidly break down, they are of little use as a landscape or revegetation mulch.

Landscape or revegetation mulch (pine or gum barks, composted recycled organic mulches, woodchips, various grades of gravels etc) are a specialised group of mulches composed of carefully graded chunky pieces which are slow to break down.

Green mulch These popular green mulches are produced by the tree pruning contractors from tree and shrub pruning or by the home gardener with their domestic mulching machines. Although cheaply available, caution should be given to its use. It results in nitrogen draw down problems and growth inhibiting properties derived from the phytotoxin chemicals (polyphenols) it contains.

Landscape mulches require uniform sized chunky particles

Many landscape mulches leave a high maintenance legacy simply because they are composed of more than the surprisingly small figure of 5% fine particles. The quality mulches (wood chips, chunky barks etc) are screened to a uniform particle size (15mm, 20mm, 30mm etc). This sieves out the finer particles, but does impose a significant increase in production costs.

Many types of mulch are water wasters not water misers

Unscreened Landscape Mulches (ULM) composed of fine and coarse particles initially soak up all the rain and irrigation rather than allowing it to flow freely down into the soil and onwards into the plant's root zone. Hence, there is a substantial volume of

precious water lost to the soil especially during light showers.

ULM are notorious for their tendency to become hydrophobic (water repellent). After a few months they compact down causing the smaller particles to fill up the air spaces between the larger particles resulting in an impervious layer over the soil. Coupled with this they form an ideal environment for rapid growth of fungi mycelium and the white actinomycetes (the white powder colour in mulch), which tend to strongly bind the soil particles into a very compact hydrophobic mass. Consequently it is nearly impossible for water to penetrate into the soil below. The only recourse is to regularly "fluff up" the mulch.

Chunky mulches promote air flow and limits microbial nasties

Chunky Landscape Mulches (CLM) allow air to flow freely through the network of spaces between the chunky particles, ensuring the air in the soil is maximised. A constant airflow allows the good microbes including the nutrient postmen of the soil *mycorrhiza* and nitrogen fixing *rhizobium* bacteria to dominate at the expense of the bad ones.

Chunky mulches are weed and fire retardant

The uniform grades of chunky particles in CLM mulches produce the advantages of restricting the germination of any wind borne weed seeds. The seed falls freely or is easily flushed by water, deep within air spaces of the mulch. If it does germinate the seedlings' first shoots would have a fight on their hands to reach the surface, and the first rootlets would find it difficult to permanently attach to the chunky particles. This contrasts to the ideal seed germination environment provided by the fine particles making up the surface of most ULM mulches.

Similarly in explaining the fire retarding properties of the chunky mulch, the presence of uniform chunky particles ensures limited flammability.

Summer Seed Days

Members and friends visited some lovely properties during January, for seed collection and plant identification. On a very hot day in early January, approximately 25 people collected seed from a dry wetland site at Murrayfields on North Bruny. We were joined by a group of overseas students learning first hand about our burning sun, and spiky plants!

Dry wetlands are easy access as they are flat, and snakes are more visible – as those attending the field day at Woodstock Lagoon at Longford discovered. A large copperhead was caught sunbaking after a feed of frogs, by seed collectors, and placidly posed for photos.

Seed collectors admiring the copperhead

We missed the summer weather for the Fort Chimo field day at Snug – however this wasn't a deterrent as over 40 people turned up! It was a bit of a squash in the tack room, kindly prepared by the owners with seating for 20, but everyone had an enjoyable day and quite a bit of seed from coastal vegetation was collected.

Collecting for the next generation at Fort Chimo

We has a smaller turn out for the Orford field day on the Friends School bush block, however those who did attend were very efficient at collecting some diverse seed, and we spotted a beautiful hyacinth orchid.

Ruth insert orchid photo

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UnderStories

Dipodium punctatum

What's Happening

Cuttings from Natives (South)
Come and learn how to take cuttings with Kris Schaffer from those natives that are difficult to grow from seed. The workshop will focus on coastal plants and those that are difficult to propagate such as the heath family.

When: Saturday 24th March, 10am to 12pm
Where: Royal Tasmanian Botanical Gardens Greenhouse (nr training rooms)
Cost: $6
Bring: Gardening gloves and notebook
You must RSVP as numbers are limited.

Cuttings from Natives (North)
Please contact Ruth if you are interested in a northern cuttings workshop to be held after Easter.

If undeliverable return to

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