UnderStories

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Visit our website and Plant Propagation Database
www.understorey-network.org.au

Has your newsletter got a RED DOT on the front? If it has, your membership is due!! Don't miss out on the Spring Growers' Scheme – fill in your Membership form and send it in with the Growers' Scheme registration form.

The Understorey Network would like to acknowledge the support of NRM South, the Tasmanian Government and the Australian Government.

Coordinator's News

It's been such a dry winter that planting at many sites has been delayed until there is rain. Fortunately early July saw the return to proper westerly winter weather, with rain, so hopefully remaining tube stock can go in the ground soon.
A successful winter planting day was held recently along the muddy edge of the New Town Rivulet in Hobart with reeds and rushes grown by USN members. The planting site is part of a stormwater mitigation project lead by Hobart City Council and it received good media coverage on the ABC local radio. Another planting day was held for the southern 'Biolinks' project, along the Snug river, with Snug landcare and USN members. Once again our healthy tube stock plants were used in revegetating this site. Hopefully the recent rain will give the plants a boost along.

The recent coastal gardening workshop series held around the north and east coastal towns in partnerships with NRM North has resulted in a number of keen new members interested in starting up an East Coast USN branch. This is a great way to strengthen the network within an area and will make administration from a central base more effective. Hopefully the lessons learnt from establishing this branch can be used for other regions with 'hotspots' of members.

It's the grant application time of year again, so the committee and I have been adapting our funding strategy to the new 'Caring for our Country' program that has replaced the NHT (National Heritage Trust) grants. The emphasis is on partnerships, which I think the USN is particularly good at, through the Grower's Scheme and workshops. However I will be working on strengthening existing partnerships and establishing new partners to ensure we remain an important part of the natural resource management community, by continuing to attract funding.

Our seed bank is looking fat and healthy, thanks to the assistance of Martin in the office, the 'Kettering mob' and Girl Guides. They have sorted, cleaned and repackaged boxes of brown paper bags of seed into neatly labelled packages ready for our Spring Growers' Scheme.

☆ ☆ **An important reminder** ☆☆

Don't forget to register for the upcoming Growers' Scheme (forms enclosed).

Message from the President

The end of the financial year is here and we look forward to another successful 12 months of growth. A problem however is the gap in funding between the end of the Liberals' Natural Heritage Trust on the 30th June 2008 and the beginning of Labor's Caring for our Country on July 1st 2009. We are exploring all the opportunities there are for us and for other smaller community groups such as ours to survive this difficult period and hopefully in the next newsletter we will be able to confirm that funding has been obtained to allow us to continue.

With the end of the financial year also comes the time for subscription renewal. If you have joined since October 2008 and therefore did not have access to the spring Growers' Scheme, your subscription will be carried over into this next year. Please remember too that as we have Deductible Grant Recipient status any donations you give us are tax deductible. Many of you last year gave us donations and for that we are extremely grateful.

I want to thank you all for your continued support through the year. The USN is a very strong community based, hands-on organisation that is growing every year. Last year members grew over 22,000 tubestock and 5000 cuttings for revegetation purposes throughout the state. No mean feat as most of it came from members' backyards!

✍ Please **"2007 Growers" remember to fill out your growers' forms and send them in to Ruth at the office**. The information you provide helps us to give better information to others. If you have lost the form it doesn't matter, just a page listing species planted, seed treatment (if any), time to germination and survival of seedlings is what we most need.

I look forward to seeing you all at the Annual General Meeting. *Anne Griffiths*

"What a great day"

About 15 enthusiastic growers attended a workshop hosted by Sally & Herbert Staubman at their lovely nursery at Liffey. It was heartening to see the different age groups mixing together in such a pleasant setting. A comprehensive information session was presented by Herbert and was followed by a picnic in beautiful surroundings. We then had a guided tour of their comprehensive nursery, including some very fascinating methods of propagation in indoor and outdoor systems. We also chose cuttings to take back to the workshop for propagation by ourselves under instructions from Herbert. All in al,l an excellent experience. Thanks to Ruth Mollison for organising this, and our thanks also to Sally & Herbert for their gracious hosting.

A wonderful day. Bob Sievers (USN member Launceston)

"What to Plant Where'

Species lists for revegetation and rehabilitation according to locality

The recognition of the importance of planting Tasmanian native species has grown in recent years; mainland natives are no longer considered suitable for revegetation projects. Beyond drawing the line between Tasmanian and mainland plants, the importance of planting species that are suitable for that particular area is growing in recognition also. Not only are the plants that naturally occur in an area most likely to survive in revegetation projects, because they are adapted to the conditions of that area, but those species also comprise the specific habitat for the animals to which the area is home. The Understorey Network has long since recognised the importance of local provenance and collects and distributes seeds according to local council areas, to ensure that species are planted where they belong. There are instances though where seed isn't available for an area or when plants for revegetation projects are coming from other sources, raising the question, which plants are suitable?

The Understorey Network, in conjunction with NRMSouth and NRMNorth, has developed a **database** and **species lists** to help answer that question. Supplementing the existing Understorey Network database (accessible on the website), which contains information on the soil and vegetation communities to which each species is suited, the database will shortly also say in which local council area that species occurs. As well as the update to the database, species lists for each local council will be available, showing species that are recommended for revegetation plantings and are native to that area. These species lists will be available in hardcopy from the Understorey Network and local councils.

The data that was used to determine the distribution of each species was sourced from the Department of Primary Industry and Water's Natural Values Atlas, which is a database of all the species recorded by botanists and the like across the state.

It is hoped that this resource will assist local governments, care groups and landholders in selecting the most appropriate species for revegetation projects or any plantings. In turn it is hoped that this will have improved biodiversity outcomes for revegetation and rehabilitation through the use of appropriate provenance species. Oliver Strutt

Project Officer Understorey Network

Paradise Regained

Bill Chestnut

Inverawe is a 22 acre property winding around the shores of North West Bay, Margate. It is now a garden landscaped in the grand tradition, using native Australian plants. But back then…

Margaret and I moved to what is now Inverawe in March 2001. A small area around the house was protected by a barbed wire fence. This household garden was a jungle of broom, lavender, cotoneaster and two metre high geraniums. A bougainvillea climbed in through the laundry window. The property had got away from the previous owners.

Elsewhere the property was overrun with hawthorn, blackberry, boneseed, briar, broom, vinca, hemlock and thistles. Old fencing wire accumulated junk and fallen timber added to the scene. Those black plastic trays on which meat comes are clearly indestructible, as are old shoes. We've moved an immense amount of broken beer bottles, a real puzzle since the previous owner was entirely abstemious. There are two gullies on the property that we didn't know existed, so choked were they with weeds.

Given our time over we would hire a back hoe for a few days but with the confidence of the ignorant (and the budget of the frugal) we attacked all this by hand, cutting and pasting, grubbing out, spot spraying with glyphosate and Grazon (a broad leaf specific), setting bonfires and dragging trailer loads of stuff to the tip. At night over dinner we would discuss tactics for the next day. We learnt to plant natives as we cleared weeds. If you don't, what you get is another crop of weeds. We also learnt that the most cost effective way of coping with woody weeds was constant, repetitive slashing.

We made an early decision that to grow only Australian species. Whilst most of our plants are from south east Tasmania, we have natives from all over. The objective is to encourage people everywhere to grow more native plants. Natives have a soft footprint, low chemical needs, low water requirements and modest maintenance needs. They also provide year round flowers, and attract native birds – 83 species so far at Inverawe.

In the grasslands Acacias and Eucalypts are the only plants that will take on and beat exotic grasses. Attempts to plant understorey there failed. We will have to get the trees to a reasonable size first. Some areas we are leaving to regenerate naturally although as the property has been subject to European agricultural practices from 1820, what regenerates will scarcely be what the first settlers saw. Areas that already have a tree cover but not much else are being planted with a wide variety of understorey plants. We plant in autumn and species still alive 12 months later are our heroes. We plant more of those. Nobody knows your micro climate or your soil better than you do.

And now, 6000 native plants later……. Visitors commend the peace and tranquillity, the colour, the bird life and the general ambience of Inverawe. Come and see us some time! (1565 Channel Highway Margate Ph (03) 6267 2020) www.inverawe.com.au / gardens@inverawe.com.au

Wellington Park Bushcare Group Update on Envirofund Project.

All was going fairly much to schedule with the Wellington Park Bushcare Group Envirofund project, until a significant logjam was met. As part of the project, an area that had been degraded by invading pines (Pinus radiata) was to be planted out with plants native to the location, once the pines were removed.

We put in a batch of seeds in late November 2007 and the Tolosa Nursery watered and took care of them, but when the time for planting approached it became clear that the site would not be ready. Although the pines were gone, the ground was littered with debris from the logging. It had been hoped that this would be shredded, but the cost weighed against that and the plan is to burn the heaps when they have dried sufficiently. This cannot be done in time for planting in 2008, so the autumn of 2009 will be the likely time.

Here is a photo that helps explain why planting cannot go ahead just yet.

To view before & after photos go to http://wellingtonpbg.googlepages.com/tolosaenvirointro

As well as plants at Tolosa Nursery we ordered some from Plants of Tasmania at Ridgeway, so there was a bit of negotiating to do. Planting out tube stock has a greater success rate than with repotted ones. Fortunately the Ridgeway nursery was happy to put the plants on sale and in fact all our Eucalyptus pulchella were sold before I had even left the nursery. Happily for us Understorey Network Coordinator, Ruth Mollison agreed to make use of our plants at Tolosa and allow us to sow more in spring.

The group provides opportunity for volunteers to repair environmental damage stemming from weeds and gain a sense of achievement and involvement in a project that has long term environmental and community benefit. It is always very happy to welcome along new volunteers and can be contacted at wellingtonpark@iprimus.com.au or by ringing Peter Franklin on 6228 4889.

Details of working bees can be found on the group's website at http://wellingtonpbg.googlepages.com/home

Derwent penguin numbers improve as community support continues

The collaborative Derwent Estuary Penguin Project, funded by the Australian Government's Envirofund, is strategically working with the community, state and local government to protect and enhance penguin habitat. The busy metropolitan Derwent estuary is not the ideal location for little penguins, which have become increasingly vulnerable to habitat loss and predation by cats and dogs. However, thanks to the Envirofund grants we now have a greater appreciation of penguin numbers in the estuary and have been able to make significant improvements to their habitat and nesting sites.

The hard work by community volunteers like the Understorey Network members, project officers and supporting organisations appears to be paying off as an increase in breeding pairs has been observed throughout the estuary. In Stage 1 (2004-2005) of the project a baseline survey of penguin habitat and threats in the estuary identified 98 breeding pairs at sites along the estuary foreshore. Stage 2 (2005-2006) focused on targeted habitat restoration involving revegetation, the installation of artificial burrows, upgrades of existing burrows and improving protection from predators (e.g. fencing, gates, signs). Monitoring over the 2007/08 season for Stage 3 (2007-2009) saw an increase in active nests not only at sites with management initiatives but even those without. There are now approximately 192 breeding pairs across 12 active sites.

The Understorey Network continues to play an important role in the current stage of the project by assisting with further habitat revegetation works. In 2007/08 USN members sourced and grew more than 770 native plants that have recently been planted around burrows at key colonies, in June, providing improved cover for the penguins.

Richard Greenhill giving a planting demonstration

Species planted included *Tetragonia implexicoma*, *Acacia dealbata*, *Acacia melanoxylon*, *Coprosma quadrifida*, *Dodonea viscosa*, *Bursaria spinosa*, *Rhagodia candolleana*, *Lomandra longifolia*, *Pomaderris apetala* /*P. elliptica* and *Carpobrotus rossii*. Further habitat restoration was also conducted in May involving upgrades of existing burrows and the construction of new burrows from naturally occurring materials at a colony site. Revegetation and burrow installation and upgrades mean more penguins are being provided with a safe overnight refuge from marauding dogs and cats, improving their chances of rearing chicks. Plans are also underway to erect fencing for the added protection of another penguin colony from domestic pets. An assessment of sites suitable for recolonisation in the estuary is intended for later in 2008.

The Derwent Estuary Program (DEP) and its partners have learned a great deal from managing penguin habitat and it is hoped that a template for other penguin conservation projects can be developed from the lessons we have learned. Specifically, Management Guidelines and a regional workshop are planned with a view to transferring knowledge to other penguin managers in Tasmania.

Most of the hard work done so far in 2008 has been by a Green Corps team and volunteers from the Taroona Environment Network, with assistance from many other community volunteers. Bianca Priest and Steve Locke are overseeing the work with assistance from Richard Greenhill (with Kingborough and more recently Hobart City Councils) and Drew Lee from the Department of Primary Industries and Water is providing advice on Little Penguin requirements. The neighbouring residents have also assisted in numerous ways, including planting on their properties.

Bianca Priest, with bagged previous plantings (done in the 2nd stage of the project), going up the slope with new plants about to go in at the bottom of the picture.

Thanks to the magnificent efforts of all the volunteers and extensive financial and practical support from councils, the future of the colonies looks much brighter.

For further project information please contact Fiona Wells 62 333742 fiona.wells@environment.tas.gov.au or Bianca Priest 0413 300 797 bianca.priest@gmail.com

The Derwent Estuary Penguin Project is coordinated by the Derwent Estuary Program. It is also supported by the Biodiversity Conservation Branch (Department of Primary Industries and Water), Tasmanian Conservation Trust, Kingborough Council, Hobart City Council, Parks and Wildlife Service, Taroona Environment Network, the Understorey Network, Birds Tasmania, TAFE Tasmania and Wrest Point.

Threatened Species - Orchids

Tasmania boasts over 200 native orchid species, although regrettably a third of these, including over half of Tasmania's endemic orchids, are considered threatened with extinction. Prior to 2006, orchid conservation in Tasmania was undertaken on an *ad hoc* basis, whenever funding became available.

In 2006 the Threatened Species Section, TSS, (Department of Primary Industries and Water) secured two years NRM (Natural Resource Management) funding to implement the *Threatened Tasmanian Orchid Flora Recovery Plan 2006-2010* (TTOFRP) in order to promote a long-term, proactive approach to orchid conservation in Tasmania. The main objectives of TTOFRP are to prevent extinction and promote management practices that will result in populations becoming self-sustaining in the long-term. The implementation of the TTOFRP involves a wide range of recovery actions aimed at mitigating threatening processes and improving our understanding of orchid distributions and ecology.

Terrestrial orchids, which include all but three Tasmanian species, are cryptic by nature, making monitoring difficult. A key component of the TTOFRP is to improve baseline data on priority populations, collect accurate information on population location, size, recruitment status, habitat and threats. Since the start of the project in late 2006, 99 threatened orchid populations have been surveyed and data has been collected from 58 of these. This data is made publicly available through species listing statements, note sheets and the Natural Values Atlas (www.naturalvaluesatlas.dpiw.tas.gov.au). The information collected assists in the identification of biotic and abiotic factors important in determining species distributions. Understanding these factors is vital if we are to promote long-term self-sustaining populations.

The Critically Endangered Caladenia saggicola (the sag spider-orchid)
Photo courtesy Matt Larcombe

Several priority species and populations require on ground threat mitigation to ensure their persistence. For example, the Critically Endangered (EPBC 1999) *Caladenia saggicola* and *Prasophyllum milfordense* depend on a small habitat remnant for their survival. TSS has been working closely with the landowner on a range of conservation actions such as fencing, rabbit eradication, weeding, long-term monitoring, development of a bush fire management plan and ecological burning.

The recently rediscovered Corunastylis nudiscapa (the bear midge-orchid).

Photo courtesy Malcolm Wells

Tasmania has seven threatened orchid species known from a single population, some with as few as three individuals. A priority of the TTOFRP is to develop a threatened orchid seed bank for priority species as insurance against extinction. Orchid seed requires infection with specific mycorrhizal fungi to achieve germination and growth, making collection of fungal symbionts essential for an effective conservation seedbank. TSS has recently established a project aimed at collecting seed and isolating fungi from at least 17 priority orchid species. The project is acollaboration between TSS, the Royal Tasmanian Botanic Gardens (RTBG), the Tasmanian Seed Conservation Centre (TSCC), the Millennium Seed Bank Project (MSB) and Kings Park and Botanic Gardens (KPBG) (Perth, WA). Seed and fungi collected will be stored under a variety of conditions including cryo-storage at KPBG and germination testing will identify effective fungal symbionts. A subset of germinants from each species will be grown on in the RTBG *ex situ* conservation program as a living collection and the diversity of fungal isolates will be investigated using molecular genetic techniques at KPBG. This program will improve our understanding of orchid fungal specificity and the distribution of fungi in the landscape, which is thought to be highly significant in controlling orchid distributions and their ability to expand and colonise new areas.

TSS also works closely with the community. Field days to educate and raise awareness of Tasmania's orchid flora have been highly successful with one event attracting over 50 members of the public. Skilled volunteers have also been invaluable to the project, assisting in extension surveys and identifying new populations. In the up coming flowering season a series of extension surveys will use volunteers from the recently established Threatened Plant Action Group to cover 20,000 ha of recently burnt potential orchid habitat. This type of search effort would simply be unachievable without community assistance.

A fine example of why it is so important to raise awareness about our threatened orchid flora came in April this year, when local field naturalist Kevin Bonham re-discovered the presumed extinct *Corunastylis nudiscapa* (the bare midge orchid). This species was previously known in Tasmania from a collection made by Joseph Hooker in 1840 near Hobart and a recently discovered 1852 collection from Oyster Cove. Subsequently the bare midge orchid is listed as extinct under the *Threatened Species Protection Act 1995*, but will be downgraded to endangered in 2008.

The bare midge orchid was re-discovered near Hobart in dry *Eucalyptus tenuiramis* woodland on mudstone close to a well-used walking track. This initial population consisted of 14 individuals in an area around $2m^2$. Subsequent surveys by local orchid enthusiasts and TSS have located an additional 35 plants in the surrounding few hectares. However, targeted extension surveys in suitable habitat across the greater Hobart area have failed to uncover new populations, suggesting the species is indeed very rare. TSS will monitor the population closely in the future and work with land mangers to ensure the species persistence long-term.

It seems amazing that a species could be overlooked for 160 years, so close to Hobart, however *Corunastylis* species are tiny and *C. nudiscapa* is described as a dwarf midge orchid, making it extremely difficult to spot in the wild. Furthermore, the genus is taxonomically confusing and even an experienced botanist could miss the significance of these plants. We are just lucky that some one like Kevin came along who knew he was looking at something different and very important. This discovery highlights the need for an ongoing orchid conservation program in Tasmania and the importance of engaging the community in orchid conservation.

Matthew Larcombe Project Officer (threatened Orchid & Euphrasi), Threatened Species Section Dept of Primary Industries and Water Position funded through the cross regional NRM initiative to implement threatened species recovery plans

What's Happening

★Membership fees due

If you haven't yet paid your membership it is now due. However those people who have joined since Nov last year get an extension so they can get a grower's kit this year.

Date: July 1st Cost: $27.50

This entitles members to grow up to 250 plants for themselves, attend workshops, seed collecting days and seminars and receive the newsletter as well as being entitled to vote at the AGM.

★Fern Propagation Workshop

A fern propagation workshop will be held in the heated, easy access glasshouse at the Royal Tasmanian Botanical Gardens, by expert horticulturalist David Marrison. David will demonstrate how to grow ferns from spores and division. The cost is $12 with all materials supplied.

Date: Thurs, Aug 7th 10-12 noon

There is a maximum of 15 people for this workshop so ***please register your intention of attending***. Please bring with you a 1 or 2 litre square ice cream container, with lid, for the spore propagation

★Registration Forms – Growers and Receivers

Forms for people who want to grow plants in spring 2008 or receive plants in autumn 2009 are enclosed in this newsletter.

Date: Friday, September 5th

★ Annual General Meeting

All members and friends are invited to attend the Understorey Network annual general meeting followed by afternoon tea. Please RSVP

WE WOULD WELCOME NEW MEMBERS TO THE COMMITTEE, FROM NORTH, WEST AND EAST TOO. SHOULD YOU REQUIRE MORE INFORMATION OR WISH TO NOMINATE FOR A POSITION PLEASE CONTACT RUTH.

Guest Speaker will be Nathan Males, who is the Chief Executive Officer of the Tasmanian Land Conservancy. He will talk about the work of his organisation, including a discussion of some of the sites for which our members have grown plants.

Date: Sat, Aug 30th 1.30 - 3.30pm

The meeting will be held at the Riverview Meeting Room (Visitor's Centre), Royal Tasmanian Botanical Gardens.

Email: secretary@understorey-network.org.au
Phone: (03) 6234 4286

Bush Tucker Plants

By Anna Povey

One of the most enjoyable ways to get to know the bush is to eat in it! Knowing something about bush tucker helps people to feel at home in the natural environment – it's a great attraction to kids, and adults too. Of course Aboriginal Tasmanians found all their food in nature, but now few of us know any bush tucker and we are more likely to bring a picnic.

In fact, some of the Aborigines' favourite foods have now declined in abundance so that they are difficult to find at all, let alone enough for a family meal. For instance, the root of the yam daisy, *Microseris lanceolata*, was once a staple food, and apparently quite sweet and tasty. Victorian settlers recorded that these were "so abundant, and so easily procured, that one might have collected in an hour, with a pointed stick, as many as would have served a family for the day". This daisy also fed Tasmanian Aborigines, and the women knew the best time to harvest this and various lily tubers. Now you would be lucky to find one at all, and of course it doesn't do to dig up the only one left in the bush! The problem is that stock also like the taste of this plant, so that within 10 years of settlement it had become "exceedingly scarce".

However, luckily there are still many native plants which can be eaten enjoyably, and I will describe a few of the ones I have encountered.

(CAUTION!
You should always be very careful tasting any new food plant. Be absolutely sure of its identification and use as a food. Find out if any special preparation is necessary first to remove toxins (probably best to avoid such plants actually). Taste only small quantities – any food might lead to problems if consumed to excess. Don't take too much from the bush. Be conscious of food allergies and intolerances, which are increasingly common in our children – you may not know of an allergy until too late. I recommend the book listed below.)

The native cherry, *Exocarpus cupressiformis*, is one of the best known bush tucker plants. Its red fruits are sweet and juicy. Everyone loves this tree, for its dense foliage and tidy look. Unfortunately it is not easy to grow in the garden, as its seeds require special treatment (usually a bird's digestive system!) to germinate, and then it is semi-parasitic and does not thrive on its own. If you are lucky enough to have one in your bush, then enjoy the fruits if you can beat the birds to them!

Another personal favourite is the fruit of pigface, *Carpobrotus rossii.* This one is easy to grow from seed (and probably cuttings), and makes a really attractive groundcover with bright pink flowers. The fruit (not pictured, sorry) is red and soft, with two big "horns". The pulp inside is deliciously salty sweet. It is found in coastal sandy places, but I am hoping some will survive on my dolerite clay hillside – wish me luck! (Be careful of the commonly planted South African pigface, *Carpobrotus edulis* – I am not sure if it is edible, and you don't want to grow this weed anyway.)

A less glamorous but more widespread food plant is sagg, *Lomandra longifolia.* You can chew the soft white bases of its leaves – pull the centre out of a tuft. They taste like green peas. If you find it stringy or astringent, find another tuft with softer bases. The plump unripe seeds are also tasty, but when ripe they seem to become bitter and rock hard. A friend, Pat Barwick, once unsuccessfully tried everything to make the ripe seeds edible – neither soaking nor boiling nor grinding worked. Anyway, the leaf bases are easy, and can keep children happy on a long bushwalk.

There are many more bush food plants, which I may describe in future articles.

An excellent book (which I used for this article) is:
Wild Food Plants of Australia, by Tim Low (1991). Australian Nature Field guide. Angus & Robertson Publishers (ISBN 0 207 16930 6)

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