



Naturally Yours

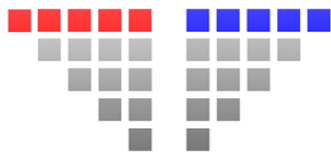
The official newsletter of Tamar NRM - Spring 2017



EXPO SPECIAL



Sustainable Energy Expo Declared a Success



Well we did it! Tamar NRM's inaugural Sustainable Energy Expo at the Albert Hall, Launceston, has been declared a huge success!

The Expo attracted 22 Exhibitors - 20 in the hall and 2 exhibitors, the Australian Electric Vehicles Association and Alternative Technologies Association out in the carpark with 5 Electric vehicles to start with and a sixth, plus an electric bike turning up randomly, later on.

The number of exhibitors was less than we originally estimated, but all aspects of sustainable energy generation and energy efficient building design were covered, although there was space for more exhibitors displaying wind and hydro generation, insulation and new double glazing to have a greater presence.

The speakers program attracted 9 different speakers, 7 of whom spoke twice during the day. They covered a range of relevant topics. Up to 80 patrons attended the various talks at any one time.

The Expo attracted 1100 people through the doors (not including those who just came into the carpark to look at the Electric vehicles and didn't come in to look inside.) This was just over twice the number of patrons estimated.

The feedback we have had so far from exhibitors, speakers and volunteers has been really positive and the reaction we've had from patrons has also been very encouraging.

Tamar NRM considers the day an amazingly successful event on a number of levels! As a consequence, we are seriously considering running an expanded event next year.

We are sincerely grateful for the support of the **City of Launceston**, **Mode Electrical** and **EPA Tasmania** who were our Platinum, Gold and Silver Sponsors respectively.

Thank you also to the 12 amazing volunteers who helped make the day run without a glitch. Our volunteers spent anything from 2 to 5 hours onsite on the day and we also had help with preparing and setting up signage around Launceston promoting the day.

Thank you also to everyone who came along to the Expo. There was a huge amount to see and learn!

EXPO sponsors:



**City of
LAUNCESTON**

**MODE
electrical**

Renewable energy,
engineered for you.



Cover - A view up one of the aisles at Tamar NRM's Sustainable Energy Expo in the Albert Hall, September 16th 2017.

Coordinator's Corner

This "EXPO SPECIAL" edition builds on the 2017 Tamar NRM Sustainable Energy Expo run on the 16th September at the Albert Hall.

We were delighted with the crowds that turned up and the positive feedback from visitors and exhibitors alike. The quality of information provided at booths and via the many presenters showed that more can be done at a personal level to source renewable energy and reduce domestic and commercial use.

Rather than spending all your tax return on paying ever increasing power bills, have you considered putting some of the money into insulation or more efficient appliances? But in the first instance, looking at how we use our energy can easily cut that winter power bill by a third without freezing or spending thousands of dollars.

As explained at the Expo, there are many ways to gain long term rewards that won't cost a fortune.

This Newsletter has articles and websites that can help you do just that.

Thanks to all who made the Expo a success. Special thanks goes to: Roger Tyshing for all his tireless energy in organising, promoting and running the event; the event sponsors, City of Launceston, Mode Electrical and EPA Tasmania; exhibitors that took the risk with us and the volunteers who made the day run so smoothly. Lastly thanks to everyone who came along for a look. We hope you all got something out of the day.

Greg & Gill

Can Homes/Suburbs Become Energy Generators?

By Roy Ramage - EnergyROI

In 2012, the Australian Energy Market Organisation (AEMO) annual report recorded that Australians paid \$2.2billion in unnecessary power costs. That figure has yet to be revised down.

All towns and suburbs are facing increased power costs. The lack of a national energy strategy appears to exacerbate the problem. Solar panels, made out of sand, turn sunlight into energy. Could they offer a partial solution?

Based on Professor Andrew Blakers (ANU) Solarisation paper, the City of Victor Harbor initiated a central purchasing program in 2009/10 enabling ratepayers to purchase a 1.5kWh set of solar panels for \$1995.00 installed. Thousands of ratepayers took up the offer. The program (www.solarprogram.com.au) was so successful 18 further councils adopted it. South Australians have been adding panels ever since in an effort to cut energy costs.

The CSIRO published its "Smart Grid" report in March 2010.

They indicated that such a system, or systems, across Australia would be worth \$130 billion by 2050. Distributed energy led by solar would play a major role.

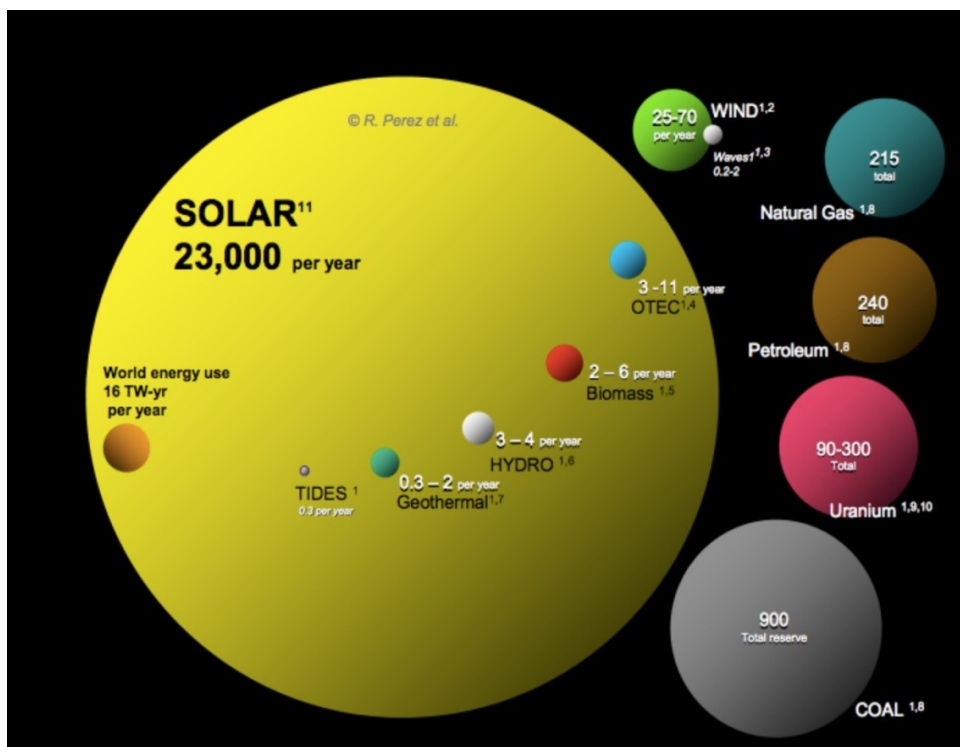
Batteries (storage) now complete the picture. If houses with panels can generate electricity and store it - then the power they don't need or use can be sold to a neighbour or into the grid. Streets and even suburbs can now become energy generators and, via batteries and smart grids, start cutting power costs.

Tasmania already has success with this mix of renewable energy sources. King Island using wind, solar and a battery has cut the price of generation, using diesel, in half. This successful effort can be seen live at:

<http://www.kingislandrenewableenergy.com.au>

Another battery / solar project is underway on Bruny Island.

If this can be done for islands, why can it not be done for all Tasmanians? We have plenty of sun.



Roy Ramage spent 12 years in the Victorian Gas industry followed by 20 years in the computing industry. He then spent four years with the SA Department of Industry and Trade before joining the Victor Harbor Council as their economic development officer. It was while working there that Roy instituted a community solar program which was so successful that 18 other councils adopted it.

Left: Comparing finite and renewable planetary energy reserves (Terawatt-years). Total recoverable reserves are shown for finite resources. Yearly potential is shown for renewables." (Source: Perez & Perez, 2009a)/Screen capture.

Electric Vehicles - a Glimpse of the ~~Future~~ Present

By Christopher Walkden

The Australian Electric Vehicle Association (AEVA) greatly appreciated the opportunity to attend the Tamar NRM Sustainable Energy Expo and show what is available to those wanting to drive more sustainably on renewable energy.

We had five cars on display, including a Tesla Model X, Nissan Leaf, Holden Volt, Mitsubishi Outlander and a converted Subaru Brumby. Plus an e-bike and a BMW i3 came along when they saw all the other cars on display!

Patrons were keen to hear about the models of cars soon to be released in Australia. New electric models coming are:

- Tesla Model 3;
- Renault Zoe;
- Next generation Nissan Leaf;
- New model BMW i3;
- Hyundai Ioniq pure electric and plug in hybrid; and
- A number of other plug in hybrids from BMW, Mercedes, Jaguar and Audi.

All of these cars will have a range of 250km+. Cars with this range would be perfect for Tasmanian conditions - particularly when the DC fast charging network is up and operational. AEVA has been instrumental in developing plans for such a network, and a private company has been formed.

Charging stations should start rolling out over the next year or two. You can help by asking your local council when they are going to install one!

To see the latest in electric vehicle technology and infrastructure come to the AEVA's national electric vehicle festival, this year held in Devonport Tasmania. We're putting on a conference, a public vehicle display, and we're all going for a drive up to Cradle Mountain. We'll have more electric vehicles in Tasmania than have ever been.

See our website for details:
<https://evfest.aeva.asn.au/>



*The Electric cars at TNRM's Sustainable Energy Expo proved very popular with patrons
Photo: C Walkden*

Using your Wood Heater Efficiently and Responsibly

By Demi Brown

Demi Brown is the General Manager of the Australian Home Heating Association and is based in Adelaide. She has been with the industry for 15 years and is passionate about getting homeowners to use their wood heaters correctly so everyone can enjoy the benefits without harming the environment.

The Australian Home Heating Association (AHHA) was proud to be part of the recent Tamar NRM Sustainable Energy Expo. The Expo presentation explained how today's wood heaters are efficient, clean burning and when used correctly, release less emissions than home heating solutions that rely on fossil fuel.

By using firewood – a renewable source of energy – wood heating generates the lowest greenhouse emissions compared to other forms of domestic heating.

AHHA General Manager Demi Brown said contrary to what many people believe, wood heating provides one of the cheapest forms of domestic heating, and also delivers the smallest greenhouse footprint.

"With a range of contemporary designs to suit your home, lifestyle and budget, installing a wood heater means you can heat your home guilt free. This means enjoying efficient, affordable, responsible warmth for many years to come" Mrs Brown said.

When purchasing a wood heater Mrs Brown said to ensure it displays a compliance plate that certifies it meets Australian emissions standards.

Speak with your local AHHA member if you have any questions or if you're considering a wood heater for your home

<http://www.homeheat.com.au/>

Don't forget to follow AHHA on Facebook for the latest news and tips about wood heating in Australia.



FIVE TIPS FOR BETTER BURNING

1. Burn only dry, well-seasoned wood.
2. Allow full air for 15-20 minutes after each addition of wood.
3. Use kindling wood and firelighters to get the fire started.
4. Have your flue checked and cleaned annually.
5. Don't close air supply overnight; a little air avoids a lot of smoke.

Tamar NRM Skills & Knowledge Register

Tamar NRM are keen to develop a register of people with skills and knowledge who may be looking for part-time and casual project work that we are able to draw on from time to time. We know there are people out there who are underemployed or available occasionally for some casual work with some tremendous skills, we just don't know who they are. While there are no promises of work from us, we would love to know who's out there should the opportunity arise.

If that's you, please contact us and let us know what you can do. If you know of someone who fits this description get them to contact us.

TEELS - 0% Finance for Small Business

The following information has been supplied by Mode Electrical and is available on their website <http://modeelectrical.com.au>.

Mode Electrical specialise in turnkey electrical power solutions in the renewable energy sector.

Tamar NRM was proud to have Mode Electrical as our Gold Sponsor for our 2017 Sustainable Energy Expo.



Offering interest-free finance on energy-efficient purchases between \$10,001 and \$40,000, TEELS for Small Business is now available.

TEELS for Small Business is a joint initiative of the Tasmanian Government, Aurora Energy, and Westpac.

\$20 Million has been allocated to provide the opportunity to apply for an interest-free business loan specifically for the purchase of energy efficient products, including:

- Solar Panels
- Solar-powered Battery Storage
- Gas/Air-source Heat Pump and Solar Hot Water Heating Systems (e.g. Sanden Eco)
- Non-ducted Reverse Cycle Air Conditioners (min. 2.5 star energy efficiency rating)
- Fridges, Freezers, and Washing Machines (rated above 3-star energy efficiency rating)
- Industrial Refrigeration
- Lighting
- Double Glazing
- Ceiling and Floor Insulation
- Condensation Control Systems
- Efficient Wood Heaters
- Block-out Curtains, Blinds, and Pelmet
- Irrigation Pumps
- Building Upgrades to reduce energy usage

The repayment period for small business is up to 5 years.

It is recommended that independent financial advice is sought prior to application to ensure TEELS is appropriate for your circumstances.

How it works:

- Review TEELS information, Terms & Conditions and FAQs available on Aurora's Website.
- Source a quote for your desired product/s.
- Submit your TEELS application request.
- When you submit your TEELS request, Aurora will provide your details to Capital Finance Australia Limited (subsidiary of Westpac Banking Corporation).
- Within 7 days of receipt of your application, you will be contacted by telephone by a representative of Capital Finance to discuss your application.
- Capital Finance will request information required to complete your application, including the product quote/s you have sourced.
- If your loan application is approved, you will be notified in writing.
- You will need to sign Capital Finance Australia Limited's lending Terms & Conditions.
- Arrange installation with your chosen installer. You will need to provide a copy of your written finance approval to your chosen installer.
- Your installer will provide a tax invoice to you and to Capital Finance. You need to retain this original Invoice for warranty purposes, and to send a copy of the Invoice to Capital Finance.

Your products can be installed. Once installed, you confirm that installation has been completed by signing a delivery/installation receipt

Capital Finance will then make payment directly to your chosen installer.

Things to google that may be helpful include:

[Tasmanian Government Tips for Businesses](#)

[Australian Government Your Home Energy Overview](#)

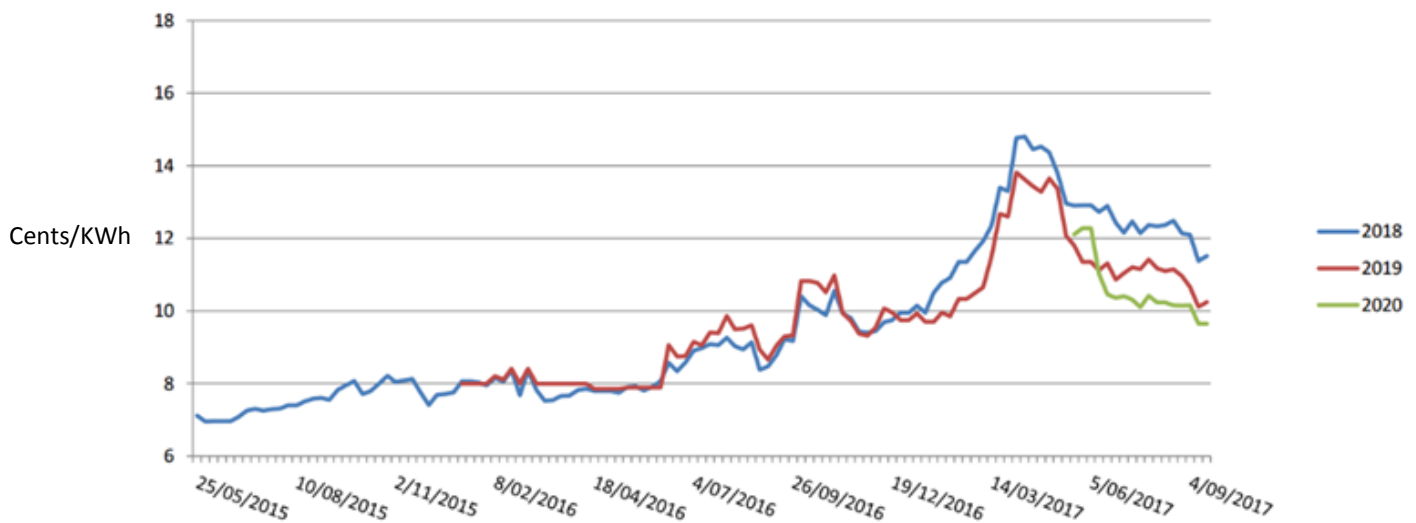
[Aurora Energy Saving Hints & Tips](#)

[Product Energy Rating](#)

Electricity Prices Forecasts Tasmania

By Duncan Livingstone

Peak Contract Prices - Calendar Years



Everybody wants to know where electricity prices are heading. There have been massive increases in prices to businesses all over Australia including Tasmania – where will it end?

Above is a chart that shows future contract prices that were available for peak electricity at the start of September 2017. Prices in Tasmania change on a weekly basis and any business can contract forward their prices for up to 3 years so they have known costs. This chart shows that if you signed a contract in January 2016 your peak price would have been 8c/kWh for 2018 where as if you waited till March 2017 to contract the 2018 year you would be paying 14c/kWh and September 2017 less than 12c/kWh.

I assist businesses to negotiate the best rates for electricity, help them choose the best time to enter into a contract and manage the risks involved.

Energy Efficiency, Batteries and Solar

Becoming more efficient with using energy is the best option even before considering installing solar or batteries. Heat Pumps can come in many forms but their common factor is they are very efficient at converting electricity to heat. By a clever process they steal heat from one place (eg. outdoor air) and move it inside our homes or hot water cylinders.

A standard electric 3kW hot water cylinder uses 3kW

of electricity to make 3kW of heat. A heat pump may only use 1kW of electricity to make 3kW of heat... it can be 300% efficient.

Other efficiency opportunities are LED lighting, daylight harvesting, refrigeration optimisation, pump optimisation, thermal loss reduction.

After efficiency upgrades you may find instead of needing a 20kW solar system you only need 5kW, saving you thousands of dollars in capital costs.

Lastly look at energy storage. The most efficient energy storage system is a modern hot water cylinder. A brand name home battery system will cost many thousands of dollars and despite the glossy sales brochure that claims 92% efficiency the efficiency loss of the battery charger and inverter bring the real-world efficiency of a battery system to around 80% - in other words you use 10kWh of energy to charge a battery and you can only discharge 8kWh.

Your hot water cylinder however loses 1% of its heat per day and can be 99% efficient – when you have generated too much solar power charge your hot water becomes a battery. Couple that with a 300% efficient heat pump hot water cylinder you can charge with 10kWh of solar power and produce 30kWh of hot water energy to use after the sun goes down.

Duncan Livingstone of **Energy ROI** is an independent energy consultant and energy manager for Tasmanian businesses. **Energy ROI** can help with electricity contract negotiations, tariff analysis and bill error checking. Our real value however is in helping our clients save money and energy through increasing efficiency and making use of lowest cost options to reduce a business's overall energy spend. We help find the low hanging fruit that can give you simple paybacks of 0-3 years and give advice on longer payback efficiency measures.

Sustainable Living

Switching to renewable energy to power your home or business is one positive step to creating a more sustainable future for ourselves and the generations to follow. There are many adjustments you can make to your lifestyle and small everyday choices that can have a significant cumulative flow on effect to the well being of our environment.

Farmers Markets



- buy local and reduce the distance your products have travelled to get to you
- buy recycled, it reduces waste but also saves energy and resources in the production process
- bring your own bag
- choose your wood based products – from dining chairs to toilet roll – based on its Forest Stewardship Council (FSC) accreditation
- If you enjoy seafood look for products that have the Marine Stewardship Council (MSC) label – it ensures the seafood has come from well-managed sources.

Reduce your energy consumption at home

- turn off lights, heating, cooling, appliances etc. when you are not using them
- reduce heating usage by closing doors, curtains and blinds in winter
- insulate walls and ceilings, seal gaps around doors and cracks, and place blinds on westerly facing windows

*This information has been supplied by **Mode Electrical**. Mode Electrical leads the way in providing top quality up to date advice and solutions in renewable energy right across Tasmania.*

More info is available at <http://modeelectrical.com.au>

Tamar NRM was proud to have Mode Electrical as our Gold Sponsor for our 2017 Sustainable Energy Expo.

- turn off the hot water system before going on long holidays
- before you decide to live in a house be conscious of how its design and orientation affect energy usage and check past power
- be conscious of energy ratings and buy lights and appliances with high energy ratings energy ratings.

Reduce your waste

- buy fresh loose produce and avoid pre-packaged products
- keep a close reign on your cupboard and refrigerator to avoid food spoiling and store food in sealed containers
- compost waste food scraps – great for your veggie garden
- reuse glass and plastic containers
- make the most of the recycling services of your local area
- print only if you have to and then reuse paper or print both sides
- say no to junk mail
- try reading the news online instead of buying newspapers and magazines especially since most newspapers are just read once.

Reduce your carbon emissions through transport

- reduce the amount you drive your car
- ride a bicycle whenever possible or use public transport
- walk more, like to the local shops
- shop locally and if you drive do fewer, bigger shops or if you walk or ride do more, smaller shops
- choose holiday destinations closer to home and support local business in the process.

New Homes

Building a new home? Consider designing a 'green home' that uses a planning and design process that is environmentally responsible and resource efficient. The Australian Government's guide to environmentally sustainable homes has a wealth of information on new home design, materials, energy and water efficiency <http://www.yourhome.gov.au/>

Tamar Region Councils



The West Tamar Council is proud to showcase these great examples of plastic recycling, turning waste plastic containers into outside tables and chairs.

Recycling is only viable if you buy recycled products, so please shop wisely.

The following photos are great examples of seats and tables, made from recycled plastic that can be found around the West Tamar municipality.



Above: Seat at Exeter Depot

Below: Table and Chairs at Bonnie Beach



Editor's Note:

REPLAS, are the Australian plastic recycler making these products. They have a branch in Hobart with Australian Laser Charge (who recycle printer cartridges).



Bruce Jackson will step down as Sustainable Living Working Group chair in November.

AGM 2017

Tamar NRM held its 2017 AGM at West Tamar Council Offices on 21st September. As well as receiving the reports and election of officers, a presentation was made to Bruce Jackson who is standing down after more than two years as Sustainable Living Working Group chair. We will miss Bruce's enthusiasm and the way he revitalised the group at a time when it looked like folding. All the best in Hobart to you Bruce and we are sure we will catch up from time to time.

2017-18 Elected Officers of the Association:

President: Roger Tyshing

Treasurer: Juanita Sands

Committee: 3 Tamar Council Representatives, John Thorp, Anna Povey, Brian Baxter, Ben Hooper, Greg Unwin.

Public Officer: Greg Lundstrom

The meeting endorsed of the appointment of Ben Hooper to the Management Committee for a term of 2 years and reappointment of Greg Unwin and John Thorp to the Management Committee for a term of 2 years.

Tamar Ag in Focus



Pastures Field day

Tamar NRM continues to deliver locally relevant information to the Ag Sector via its Backyards to Broadacres Workshop/Field Day Series. Nine workshops have been run to date, six of which involved direct or indirect farm management topics that leads to pasture improvement.

Biology and nutrient content to pastures and animal health are all inter-related components of a sustainable system of production and were covered at field days this year.

Field days run in June (with East Tamar Landcare Group) and September by Tamar NRM included speakers from Tasmanian Institute of Agriculture (TIA) and looked at challenges and opportunities at a number of pasture sites.

A visit to Philip and Lucy Headlam's property on 21st September had 22 Tamar Farmers attend to witness first hand, paddocks presenting with special challenges for renovation. They also saw what pasture species persisted at the Tamar NRM trial site established there in 2010.

The day also included a session on what to do with pastures in spring and summer (led by agronomist Corey Hogarth) and a presentation by 2016 Christopher Strong Grant recipient Katrina Kelly on the value and use of native poa grass as a feed for horses.

It was pleasing to note that producers are sharing their experiences with a broader group of northern Tasmanian farmers at these field days.



Thanks Peter Ball and Tony Butler from TIA for their input and presentations.

Left: Tamar NRM President, Roger Tyshing introducing Katrina Kelly at the Pastures in Spring Field day



This project is supported by funding from the Australian Government

TFGA Tamar Valley Branch

East Tamar Landcare Group

Tamar Pasture Improvement Demonstration Project

A group of farmers in the Tamar Valley has joined forces to highlight what pasture performance can do for red meat production at three different sites in Tasmania's Tamar Valley. Funding from Meat and Livestock Australia has made this pasture demonstration site project (PDS) a reality.

The three year project is showcasing the best pasture species/cultivars for local soils and climatic conditions and innovative grazing management practices, to demonstrate profitability into the red meat supply chain.

A technical working group has been formed drawn from the ag sector and farming community to advice on project design and methodology.

With good numbers attending the Backyards to Broadacres Workshops, the PDS project will build on the knowledge presented over 2017.

Register your interest in receiving the information that will help you as a northern Tasmanian farmer become more sustainable and profitable.

Tamar Ag in Focus

Pasture Demonstration Site Project (PDS)

Eric Hall - The right man for the job!

Our newly appointed consultant for the PDS comes with a national reputation as a pasture expert in areas of plant collection, plant evaluation, plant breeding and pasture demonstration and extension. Eric has experience working with national research and extension programs, and has authored and co-authored numerous scientific papers, reports and fact sheets.

For 15 years, Eric worked as leader of TIA's Herbage Development Program. In this role he was instrumental in the design, establishment and running of over a dozen producer demonstration sites across Tasmania's lower rainfall region. This includes establishment of Tamar NRM demonstration sites at the properties "Greenhythe", "Nangara" and "Oakbank" in collaboration with Tamar Valley NRM in 2010. Pasture sites that we are revisiting now.

Despite retiring from full time employment four years ago, Eric has maintained a keen interest in pastures and continues to pursue plant breeding and pasture advisory activities.

"I believe this type of project has the potential to provide great benefits to the farmers in the Tamar Valley region by giving them a better understanding of the requirements for establishing and managing sustainable productive perennial pastures." Eric said.

Over the life of the project, Eric will be sharing with local producers some of the knowledge he has built up over 40 years working in pasture research.



Above: Tamar NRM's pastures consultant, Eric Hall, will be taking on the challenge of pasture demonstration site assessment.

Tamar Valley Weeds Strategy Working Group

Chairperson - John Thorp

Prioritising weeds impacting human and financial resources is an essential part of good management. On a national scale a process for determining and ranking significant weeds around Australia has existed since 1999. The responsible agency for administering the Weed Management Act in Tasmania is the Department of Primary Industries, Parks, Water and Environment (DPIPWE). Weeds 'declared' under the Act have the potential to significantly impact on Tasmania's productive capacity, natural or physical resources, genetic diversity or ecological processes.

Property managers are required by law to control declared weeds.

However in every region new and emergent weed threats appear and it seems logical that these weeds be dealt with promptly rather than wait until they are established and a decision made about eradication or containment.

Our Weeds Working Group are of the view that it is important to publicise and promote action on local priority weeds and are currently running a public awareness on two weeds the Tamar Valley needs to keep in check for agricultural and environmental protection. This issue features Patterson's Curse (*Echium plantagineum*) and our winter newsletter promoted action in an article on Serrated Tussock (*Nassella trichotoma*).

Property Fire Preparedness

By Gill Basnett

Last Thursday, Tamar NRM and Tasmanian Fire Service Bushfire Ready Neighbourhoods ran a Bushfire Property Assessment field day at Greens Beach.

David Cleaver, Bushfire Ready Neighbourhoods, ran residents through some of the areas around the home to consider when it comes to ember attack during a bushfire. Burning embers are one of the primary causes of house loss during a fire.

Although not exhaustive, and every property and person is different, here are some things I learned:

- You can't control what goes on "over the fence", but you can prepare your house and property to significantly reduce the risk of fire.
- **Plan, Prepare and Write it Down.** Planning and preparation is the key.
 - Have a written plan of what you need to do around the house and property to reduce the risk of fire and when you need to do it. Writing it down makes it easier to remember.
 - Some things like pruning and reducing likely ember hotspots around your buildings can be done well in advance to the fire season. Others like cobweb, fine fuel (leaves, bark and small twigs) and bird nest removal need to be done regularly throughout the fire season, particularly around wooden structures.
- **Written Survival Plan.** Sit down with everyone in your house before the fire season and write out what you will all do if a bushfire approaches. This may vary depending on the Bushfire Danger Rating on the day and may be different for each household member. E.g., someone may take the kids to a safe place and others stay and defend; or, on a medium fire danger day, you will stay and defend but anything over high, you will leave early. Practice your plan and adapt it as things change.
- Embers do not float softly down to the ground. They can be whipped up by the wind and get into all sorts of out of the way places. Look up, under and into eaves, doors, windows, verandas, cladding roofing, etc. to see where they may lodge and catch. Write down what you need to do in these places leading up the fire season and if a fire approaches.
- You need to remove every bit of vegetation from your property. If it is away from buildings it is less likely to be an issue. Plants next to buildings will need extra attention on the day of a fire. Plants and trees can be useful at blocking ember attack.

- Block up holes and gaps around your home. For example round windows and doors, under the roof, brick vents and between timber boards. Some gaps can be permanently blocked; others may need easy coverings made up such as metal plates to fit over brick vents to be installed on the day.
- Remove curtains and blinds (especially fine ones) from windows during a fire as they can catch via heat through the glass.

Burning embers collect on combustible surfaces or blow through cracks in a home's external cladding. Embers begin falling before the fire reaches the home, and may continue falling for several hours after the fire has passed.

A properly prepared home can be actively defended by able-bodied people under most conditions experienced in Tasmania, but if severe, extreme or catastrophic conditions are forecast, leaving early is the safest option.



Ember-proofing your home

- You need to make sure your home is protected against 'ember attack'.
- Embers will build up on horizontal surfaces, particularly in corners. They can enter your home through small gaps around window and door frames, eaves, cladding and roofing.
- Timber decks can be ignited, particularly if embers can build up beneath them.
- Small gaps should be sealed with protection strips or non-combustible filler, and larger under-deck areas should be protected with non-flammable screens.
- Measures to ember-proof your home should be taken well before the beginning of summer.

More info at <https://www.fire.tas.gov.au/>

Focus on Weeds



Boneseed Blitz and Boags

September signifies Boneseed flowering season in the Tamar Region and to celebrate Tamar NRM runs the annual Tamar Region Boneseed Blitz to do our bit to manage this invasive weed.

This year, Tamar NRM partnered with Landcare Tasmania, Boags Brewery, West Tamar Landcare and the West Tamar Council to identify and address a 6 ha boneseed infestation in threatened Black Peppermint over Sandstone bushland on Crown Land at Beaconsfield.

With enthusiastic help from 45 amazing Boag's

Brewery volunteers, who put in an enormous effort, we removed a huge amount of Boneseed from the reserve.

When the community works together to tackle a significant problem, much can be achieved. This is an excellent example of how business, communities and community groups can collaborate to address local environmental issues.

TNRM's Green Army Team provided follow up over the next couple of days to take out the difficult to get plants.



Above: Boags volunteers taking a well-deserved rest from removing boneseed.

Boneseed

Boneseed is an erect, woody, evergreen shrub, growing 2 - 3 m tall. The fleshy leaves are an elongated oval shape with toothed edges. Young leaves are rounder and often covered in white 'cottony' down. The bright yellow daisy flowers have 5 - 8 petals and grow in clusters at branch tips. Fruits are round green berries that ripen to black. Each fruit contains one smooth, hard, bone-coloured seed. Boneseed flowers from September - December and is very conspicuous when flowering. Check out your garden to ensure you don't have it.

Focus on Weeds

Paterson's Curse

Paterson's Curse or Salvation Jane is a highly invasive weed, establishing itself in the Tamar Valley. Paterson's Curse has been found in parts of the West Tamar, St Leonards, Lilydale and Pipers River areas. With a long and damp spring last year, and prolific flowering in early summer, land managers will need to keep their eyes open this spring and act if necessary.



Left: Paterson's Curse, (Echium plantagineum) is an annual native throughout Mediterranean Europe and North Africa.

In Australia, Paterson's Curse can be a short-lived perennial and a highly invasive weed out-competing native grasses. Paterson's Curse contains alkaloids and if consumed in large quantities, will reduce livestock productivity due to weight loss and reduced woolclip weight in sheep. In severe cases death occurs.

Paterson's Curse is easily recognisable during spring and early summer due to its vivid purple flowers. In large infestations it is particularly noticeable as it looks like a purple carpet has been laid.

Since 2010, Tamar NRM has taken on a role with Paterson's Curse awareness and control, as we have with many other weeds in the Tamar region. Over this time, Tamar NRM has noticed a lack of compliance by some land managers which will inevitably lead to wider distribution. In the Tamar region, Paterson's curse is a declared weed requiring eradication.

If you find Paterson's Curse on your property you are required, by law, to eradicate it or if you notice infestations you think is Paterson's Curse elsewhere, then report it to the Regional Weed Management Officer on 1300 368 550. Provide an accurate location of the infestation with your sighting.

For more information go to Tamar Valley Weeds Strategy website: www.weeds.asn.au or department website <http://dpipwe.tas.gov.au/invasive-species/weeds>

Environmental Education



Above: Gill showing a young family how to make an origami frog that actually hops.

Our program Coordinators, Greg and Gill attended the hugely successful "Big Day of Science" on Saturday 12th August organised by, and held at, QVMAG. Over 1,200 people came through the doors, with many stopping at Tamar NRM's interactive frog education stall entitled "Tadpole Tales". This year's theme was Future Launceston, focusing on the possibilities for the region.

Gill also did a short presentation on fire and climate change to Environment and Geography students at a conference at Launceston College in August as well as delivering a presentation on the use of fire to improve biodiversity outcomes. to the School for Seniors.

Tamar NRM can help you with weed identification.

For more detailed descriptions weeds go to the Tamar Valley Weed Strategy Working Group website <http://www.weeds.asn.au> if you have a smart phone, take a photo as the GPS coordinates from the photo can assist in locating the plants.

Christopher Strong Fellowship Grant

Matthew Tedford

The 2017 recipient of the Christopher Strong Fellowship Grant, Matthew Tedford of Launceston, has submitted his final report. In it, he primarily looked at rehabilitation efforts on Pipers River carried out in the past two decades, including willow removal, riparian fencing and native vegetation replanting, and the effect these efforts have had on the river itself. By using historical photographs (site based and satellite), site descriptions from previous studies, river hydraulic calculations and channel geomorphology assessment, he was able to show how sections of the river have recovered from an erosion-prone state to relatively stable reaches, with reduction in turbulent and critical flow. Natural vegetation regeneration that has occurred has replaced the invasive willow trees, improving water quality and providing homes for native species such as the endemic threatened Giant Freshwater Crayfish, and Platypus frequently seen in the area.

This geomorphic and hydraulic evidence contributes to existing understanding from water quality and aquatic ecological surveys, that investment in river rehabilitation has positive benefit. The long term outcomes of river rehabilitation initiatives in reducing channel degradation is a poorly researched area, and this assessment has shown community investment to be largely successful.

The report has since been co-authored by Joanna Ellison of the University of Tasmania, and has been submitted to be published in an academic journal for future reference by international researchers.



Above: Christopher Strong Fellowship Grant recipient, Matthew Tedford.

Christopher Strong's concept of "think globally and act locally" seems to resonate through, as he indirectly continues to improve Tasmania's environment.

Do have a great, small Project idea? We want to Hear from You!

This year, Tamar NRM has set aside a small amount in their 2017-18 budget to cover the cost of a project officer(s) to undertake small projects funded by external small grants. More often than not, small grants do not cover the cost of implementing a project. We are committed to "getting things done", so, if you have a great idea for a small project, that would benefit our Tamar Region community and fits within TNRM's purpose, themes and values and that you have the time to apply for and deliver under the Tamar NRM banner, we would like to hear from you.

Tamar NRM's Works Teams



Vernon Graham providing the Green Army team with a greater understanding of Aboriginal cultural heritage at a workshop at Weymouth.



How to water seedlings when you don't have a hose.

Our Tamar Meander Valley Green Army Team 1 has been running for 5 months. Attendance has been good and feedback from land managers, positive. So far they have planted (and checked kids plantings) 6610 trees, undertaken weed management in 40ha of council, Park/Crown and private land and track maintenance in over 12 ha. They have also removed 250kg of rubbish, repaired exclosure plots for threatened flora for Parks and Wildlife and undertaken some of the actions from the George Town Action Plan identified by the coastal communities from Hillwood to Bellingham.

The final weeks will be undertaking weeding and track works at Kate Reed Recreation Area, Greens Beach Foreshore and Bush Heritage in Liffey.



There has been a bit of coordination work to be done by Tamar NRM, which is not paid for, but the outcomes for council, landholders and other organisations, has been positive. This makes the project a success so far.

As part of their training, the Green Army team participated in some Aboriginal cultural heritage awareness training with Senior Aboriginal Heritage Consultant, Vernon Graham at Weymouth in early September.



"Please pass on my enormous gratitude to Ian and the great Green Army team. These guys worked really hard to remove and break down the timber boardwalk at Bell Buoy beach. Every time I have had an interaction with Ian and the army I noticed that everyone was together and enthusiastic. I have spoken to a few of the team and each person had an interesting comment or observation. This was impressive.

My experience on Barne's Hill with the same team was identical. Again, you could tell it was a team not just a collection of people in the same area. It's obvious Ian has great skills in managing people. Often with people that are not given a chance to really make a statement of who they are and what they can achieve."

Justin Widdowson, Ranger – Northern region, Tasmania Parks and Wildlife Service.

Biodiversity Page

By Gill Basnett

Thank goodness it is spring time! Temperatures are rising, flowers are bursting forth and the birds are back. But, for some, the start of spring means their allergies are starting to play up. Twice this week I have heard the blame for itchy eyes, runny noses and sneezing placed on the humble (and usually innocent) wattle.

Unfortunately for the poor wattle, their beautiful showy yellow blooms come out at the same time as many grasses and more subtle, unnoticed flowering species, which are the culprit of most hay fever (seasonal allergic rhinitis), allergies and asthma reactions during spring.

Wattles are insect pollinated (occasionally mammals and birds do the job), meaning that they produce only small amounts of heavy pollen that falls quickly to the ground. There are a range of species that flower all year round, but it is this time of year people complain most about hay fever, suggesting they are not reacting to the wattle. Introduced grasses and many weeds, on the other hand, are wind pollinated and they flower in spring and so their abundant, light pollens are borne by the wind very long distances and, often, up your nose.

Interestingly introduced species of grasses and trees seem to produce the most allergy causing pollen.

The worst offenders are pines, firs, cedars and cypress pines, poplars and other trees that develop catkins and cones like birches, maples, casuarinas, ash, walnuts, privet, liquidambar, mulberry, oak, olives, plane trees, oaks, willows, elms and melia/white cedar, many grasses and most weeds (such as Ragwort, Plantain,

Dock and Sorrel as well as Salvation Jane aka Paterson's Curse and Canola).

So, rather than chopping down that wattle, your first step should be to determine what you are actually allergic to. You can ask your GP for a referral to find out, or you can give a new(ish) app, AirRater, a try on your phone.



Acacia verticillata, Lilydale © Cowirrie

How AirRater works

The AirRater project involves two concurrent streams. Equipment has been installed around Tasmania to capture information on temperature and air pollution (in the form of pollen, smoke and some gasses).

This information is gathered in near real-time and fed back to a central database. At the same time, Tasmanians are being encouraged to use the free Sense-T AirRater smartphone app to report their daily symptoms of asthma, allergies and hay fever.

Once users have entered this information, they are given a reading of the current levels of potential triggers in their immediate area. Over time, the app is able to generate an individualised report showing each user how environmental conditions have impacted their symptoms, and then provide an alert when these conditions exist or are forecast. This allows users to manage their daily activities and symptoms of asthma, allergies and hay fever.

Once users have entered this information, they are given a reading of the current levels of potential triggers in their immediate area. Over time, the app is able to generate an individualised report showing each user how environmental conditions have impacted their symptoms, and then provide an alert when these conditions exist or are forecast. This allows users to manage their daily activities and improve their quality of life.

The sensor network also supports community-wide air pollution health advisories, heatwave forecasting and alerts, and fire weather mapping to assist firefighters, landowners and government. <http://www.sense-t.org.au/projects-and-research/health>

Tamar NRM Farm Forestry

By Greg Lundstrom

In a joint initiative between Tamar NRM and the Australian Agroforestry Foundation (AAF), local landholders were able to hear from founder of the Australian Master TreeGrower Program and published author, Rowan Reid.



Rowan Reid returned to Tasmania to once again explore the potential of trees on farms. Rowan lead the discussion at a Trees on Farms Field Day on the 10th October, followed by an evening function where he reflect on 30 years of farming a variety of tree species.

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Rowan lead the discussion at a Trees on Farms Field Day on the 10th October, followed by an evening function where he reflect on 30 years of farming a variety of tree species.

"For me, agroforestry is the integration of trees and shrubs into farming landscapes for conservation and profit. It's all about farmers using trees to improve the environmental, social and economic values of their land." Rowan said.

The field day had a turnout of over 40 people, starting with a farm forestry visit to a David Hamilton's Lilydale property with a variety of planted species and products, a visit to Hollybank forest reserve arboretum, followed by a sawmill tour of Neville-Smith products.

Tamar NRM formed a strong relationship with AAF and Rowan during the highly successful 2015 Master TreeGrower Course run in northern Tasmania. Rowan hosted us during a catchment tour of Woody-Yaloak and Otway's in 2016, visiting his forestry farm "Bambra".



Above: A large turnout for the Farm Forestry Workshop ensured some interesting discussion

Left: Farm forestry property owner David Hamilton explains his experience of establishing a variety of forestry species over 19 years of operation.

20 Million Trees School Tree Fortnight



This year's direct seeding and planting is almost completed. So far 22 ha have been direct seeded by Sean Guinane on 4 different properties with seeds already germinating despite the cold dry weather. This year, 6,800 tubestock plants have also been planted; 3982 on private land, 420 on school properties and 2400 in council reserves. Another 250 guards and stakes were donated to Trevallyn Primary and Scotch Oakburn for their school tree days.



The project has so far engaged with 14 schools and 3 community groups, connecting schools with their local reserves and community and increased their awareness of the importance of trees, habitats, bushland and reserves. Feedback from students and teachers has been overwhelmingly positive.



Because of the demand for Tamar NRM to work with schools for School Tree Day, this year we decide to have School Tree Fortnight with City of Launceston Council! That way we were able to engage with approximately 520 students and 60 adults and get more trees planted than ever before at schools and reserves.



Our Green Army crew, ably led by Ian Gleeson, planted any plants remaining from the school tree days as well as fixed up any of the plantings undertaken by the students, although they said there was not much that needed fixing the students were so capable.



 Australian Government
 National Landcare Programme
"This project is supported by funding from the Australian Government"

Coming Events

Tamar NRM

For more information view our website: www.tamarnrm.com.au www.facebook.com/TamarNRM15

Sunday 29th October 2017, 10.00 to 12.30 Coastal Plant Identification Workshop

Managing coastal areas, native plant and weed identification and treatments. Beechford
Bookings: Greg Lundstrom
Phone: 6323 3310 or 0438 642 112 or
Email: tamarnrm@launceston.tas.gov.au

Friday 10th November, 2017, 10.00 to 12.30

Coastal Weed Treatment Workshop

Managing coastal areas, weed identification and treatments. Followed by a BBQ - Lulworth.

Support our Working Groups:

Weeds Working Group

Chair: John Thorp (0419 323 400)

Sustainable Living Working Group

Chair: Bruce Jackson (0407 872 520) (retiring)

George Town Coastal Management Group

Chair: Ian Sauer (0407 046 346)

Thursday 30th November 2017, 10.00 to 11.30, Hillwood Hall

Serrated Tussock Workshop

Come along and hear how landholders and agencies are dealing with infestations in the Tamar Valley, Learn how to recognise it and management.

Bookings: Greg Lundstrom

Phone: 6323 3310 or 0438 642 112 or

Email: tamarnrm@launceston.tas.gov.au

For more information view our website:

www.tamarnrm.com.au

www.facebook.com/TamarNRM15

Tamar NRM Contacts

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email: tamarnrm@launceston.tas.gov.au

web: www.tamarnrm.com.au

facebook: www.facebook.com/tamarNRM15

Other Events

Expression of Interest: Bushfire Planning and / or Preparedness Workshops

If you live in the Tamar region and think you or people in your area or community group would be interested in attending a Bushfire Planning and / or Preparedness Workshop, please contact Gill to register your interest. We may either be able to run a workshop in your area or close by that you can attend.

Email: gill.basnett@launceston.tas.gov.au

Mobile: 0438 265 792

Thursday 9th to 10th November 2017

Are you prepared for the Electric Vehicle Era?

The Australian Electric Vehicle Association is holding a two day conference in Devonport, Tasmania. The conference brings together a range of national speakers with insights on what Local and State Government decision makers need to know. Over 35 presenters will share their knowledge.

Who should attend: Elected representatives, General Manager, fleet manager, parking/asset manager, planners, sustainability officers.

For a full programme and booking details go to: <https://evfest.aeva.asn.au/>

Saturday, 11th November 2017, 10.00 to 2.00

The Shannons Insurance Electric Vehicle display at the Devonport waterfront (free admission)

Presentation at CMax Cinema, 12.30 to 2.00, \$5

Sunday, 12th November 2017, all day

Mitsubishi Motors Cradle Mountain Charge