

Welcome to our summer edition. It is a time for insects; dragonflies, damselflies and butterflies all appreciate the warmer weather. Insects provide food for the many bird species that migrate to the Wombat Forest to breed. Beautiful mauve fringe lilies are starting to appear. It is also a time to look for sun orchids, and in the swampy areas, the large sickle greenhood orchids. **Gayle Osborne** (editor) and **Angela Halpin** (design)

Owl Watch - Powerful Owls South of Trentham

By Trevor Speirs

In December last year, when searching for Rose Robins and Pink Robins, Gayle and I stopped at a well-treed gully south of Trentham. No robins, but to our great



Powerful Owl Ninox strenua roosting in a Mountain Grey Gum Photography © Gayle Osborne

delight two Powerful Owls *Ninox strenua* were found roosting in a Blackwood *Acacia melanoxylon* along the dry creek bed.

They appeared young, being slight in build and lightish in colour, and were a bit nervous, quickly taking off into the forest, but judging by the amount of familiar chalky excreta and small animal bones on the ground, this roost had been in use for some time.

The surrounding bush looked like good owl habitat, with a stand of large Mountain Grey Gums *Eucalyptus cypellocarpa* with spacious hollows, and we made a note to return during next year's breeding season.

We visited on and off over the winter months, and while there was still plenty of evidence of owl presence, it was not until mid-September that we saw our first bird, a female. This was a good day, as shortly after dusk an owlet could be heard trilling from one of the grey gums that we suspected was being used for breeding.

Subsequent regular visits always resulted in a sighting of one or both adults, often with the previous night's prey, always a ringtail possum, usually decapitated and being firmly held by the bird's huge talons.

Our 2014 owls on the Lerderderg River had a chick fledged around the 2nd of October, but these South Trentham birds were obviously very late starters, as at least one chick could still be heard trilling from the nest hollow on the night of 15th of October.

On October 26th, shortly after dusk, a soft trill coming from the nest, was overtaken by a much louder one some 80 metres away. A not so quick scramble through the bush failed to spotlight the youngster, which proved far too elusive.

Of course after dark in the forest everything changes and the directions of sounds can be deceptive, but we were now pretty confident that two chicks had been born. This is the norm, as Powerful Owls nearly always lay two eggs, four days apart.

All our visits over the next few weeks (bar one at dusk) were in daylight hours, and while we could always locate one, sometimes both adults, we never sighted any chicks. Interestingly, there still appeared to be activity at and near the nest tree (fresh splash, bones etc.) but it was well after the usual fledging period.

On November 19th we made one last visit, this time arriving 40 minutes before dawn. It was a warm, still morning and an adult male was whoo-hooing from its favourite roost, but there were no trilling chicks to be heard.

Once it was light, we made the surprising and sad discovery of a dead owlet at the foot of the nest tree.

The body was intact and it appears to have died the previous evening. The feathers on one wing were strangely damaged. It can only be assumed that the owlet was in the nest all along, (most chicks would have left many weeks before), was possibly ill, and crashed to the ground when attempting to fly.

Hopefully the loud trilling away from the nesting tree, which we heard on October 26th was that of a successfully fledged stronger sibling, which we have been unable to locate. I must mention that not wanting to disturb the birds unnecessarily, all our visits were reasonably



Adult Powerful Owl with ringtail possum, firmly held by huge talons. Photography © Gayle Osborne

short and at a good distance from the roosting birds and the nest tree after dark. All breeding records are supplied to Department of Environment, Land, Water



The surprising and sad discovery of a dead owlet at the foot of the nest tree. Photography $\mbox{$^{\odot}$}$ Gayle Osborne

& Planning to assist in forest management such as planned burns etc.

The dead chick was placed in a freezer. Thanks to Margret Lockwood (and all those who offered) and it will be taken to the Melbourne Museum for analysis and research.

Our regular observations of the Powerful Owls this breeding season have been an instructive, absorbing and somewhat addictive experience. Our dusk (and one dawn) visits were particularly exciting as this is when the owls can be quite vocal, and, of course, this is a beautiful time to be in the forest. Even though sometimes we were left with more questions than answers, our overall understanding of these great birds has grown significantly.

Footnote:

The Lerderderg Owls failed to breed successfully this year, deserting the nest area in late July. The reasons are unknown, but may have been a consequence of heavy trail bike and 4-wheel drive traffic below the nest tree.

We are in discussion with DELWP regarding protection of the birds in the next breeding season.

Eastern Bronze Stegostyla Stegostyla transitoria

(previously known as Caladenia transitoria)

This unusual orchid was noticed flowering in November in the Wombat Forest by Teresa Castley. The first thoughts were Musky Caladenia, but it seemed greener, and the photo was forwarded to Cathy Powers for identification.

Cathy reports that this orchid is 'poorly studied because of short flowering season and flowers may not open at all if weather is cold and wet.'

Enid Mayfield in Flora of the Otway Plain & Ranges (Vol. 1) says 'Flowers are self-pollinating and can do so without opening'.

The flowers are greenish-yellow with bronze tips and the outside is covered in dense purple hairs.

All the records on the Victorian Biodiversity Atlas for this orchid are east of Melbourne, so this is a significant find. However, as it features in Flora of the Otway Plain & Ranges (Vol. 1) it is obviously found west of Melbourne.



Eastern Bronze Stegostyla *Stegostyla transitoria*. Photography © Teresa Castley

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Two Bob for the Wombat? Beyond Ecosystem Services

Words and images by Alison Pouliot

Dawn breaks in the Wombat in a chorus of bird song. It is early summer and the forest is flooded with scents of wet earth following an overnight storm. A Blue-winged Parrot (*Neophema chrysostoma*) whizzes past in a spectacular flash of yellow and blue. An echidna snuffles through the leaf litter probing for breakfast. The comical umbrellashaped reproductive structures of the liverwort, *Marchantia berteroana*, adorn the forest floor. The forest is alive, dynamic, sensuous. Something perturbing, however, lurks in the thinking of those deemed responsible for its so-called management – the concept of ecosystem services.

The idea of ecosystems services is not new, stemming back to Plato (427-348 BC). The term came into vogue with the publication of the *Millenium Ecosystem Assessment* in 2006 and refers to the multiple benefits humans derive from functioning ecosystems.¹ Although a vaguely defined catchall phrase, ecosystem services includes notions such as the supply of clean water or air, the regulation of climate, pollination or the cycling of nutrients.

My first issue with the concept is that the word *services*, demands a particular way of regarding nature. *Services* suggest we no longer *derive* benefits from nature, but nature is expected to *provide* services to humans. This almost biblical metaphor of servitude – of nature serving humans – entrenches nature-culture binaries that separate humans from the rest of the nature. Not a good start.

Ecosystem services are now an accepted measure of the value of biodiversity in global initiatives in science, conservation and governance.² Governments and 'experts' have adopted ecosystem services as the raison d'être for understanding the environment and nature-society relationships. *Australia's Biodiversity Conservation Strategy 2010-2030*, for example, is premised on the concept. But what happens to the Wombat when it is reduced to ecosystem services? What happens to the forest when economic logic demands that in order to save its biodiversity, a common currency of monetary values and systems of exchange must be imposed? Where does the sensuous world of the Wombat fit in?

How can the great diversity of ways in which the forest is understood and valued be adequately *accounted* for in a valuation process that is inherently reductionist and tied to normative frameworks (utilitarian exchange values)? Could the concept backfire and perpetuate the exploitation of biodiversity, if the *price* of an ecosystem service plunges below a designated threshold? I suggest we carefully scrutinise the underlying assumptions in the monetising and trading of biodiversity.



Time to relax or too busy performing ecosystem services? Photography © Alison Pouliot

Arguing against the ecosystem services concept is challenging. A common response is to be denigrated as out-of-touch with the *real world*, unrealistic or a tree-hugger. The real world, it seems, is defined by the economic models that assume the forest can be fragmented into countable units. Apparently, it is not the forest I smelt and felt and touched this morning. There is little place for intrinsic values or biocentric arguments. It is, of course, much easier to build an argument around measurable economic justifications, than to advocate for the sublime pleasure of my morning forest stroll, none of which can be squeezed easily into ecosystem services models.

Ecosystem services concepts are well intentioned. They attempt to make explicit the multitudinous benefits ecosystems provide to humans, with the aim of improving decision-making around environmental issues. At first glance, assigning a price to an ecosystem service seems like a logical and benign approach to conservation. However, it comes with costs not always apparent. As conservation researcher Esther Turnhout and colleagues note, 'when biodiversity is translated into a singular measure or currency that becomes the bearer of value, it may thereby enter into systems of banking and exchange and become the credit for the ongoing



Still a waterfall or just water supply? Photography © Alison Pouliot

creation of debits, which simply put, are acts of biodiversity destruction or loss'.³ Assigning a value to a species, ecosystem or process is no easy business particularly when it carries symbolic, aesthetic or other incommensurable cultural significances. How effectively, for example, are the less tangible values of indigenous cosmologies, brought into being through praxis and story, accounted for in ecosystem services concepts? While ecosystem services often incorporate multiple measures to determine values ascribed to biodiversity, the question remains as to whether they are enough. Can such an approach truly incorporate the complexities and convolutions of natural-social-cultural relationships of the forest or are they reduced just to market transactions? Are forms of understanding, such as long-term intimate observation from those living in the vicinity of the forest or indigenous ways of knowing, considered as legitimate knowledge in decision processes?

Cultural geographer, Sian Sullivan, reminds us: 'markets do not in and of themselves embody or produce moral behaviour. Markets do no care if rainforest fall, if glaciers shrink, or if the value of indigenous cultures are displaced or captured in the service of capitalism; and it seems to be mad to think that it is only their correct construction, for instance, through pricing mechanisms, that will prevent the manifestation of these losses'.⁴ Economic tools, models, lists and other ways of quantifying nature provide a means to track and enumerate changes in populations and species loss. I am no expert on the ecosystem services concept and perhaps I have not explored it thoroughly enough in perceiving it as inherently anthropocentric, promoting of an exploitative human-nature relationship and commodifying of nature, as well as being at odds with biodiversity conservation objectives. I recognise its potential benefits in providing another means to understand the myriad ways in which humans value biodiversity and how this in turn can supplement decision processes. However, once it becomes the *dominant* discourse, where nature is quantifiable and commodifiable and only defined by its utilitarian value to humans, something much greater is lost. Something that is again often intangible and cannot be modelled, but relates to the reverence with which the forest is regarded and valued. Such values are difficult to articulate and characterise, let alone measure. How the Wombat is perceived and understood inevitably affects the way it is valued. Language matters greatly. We have all witnessed the ease with which a match is lit when vital understory and leaf litter habitats are reduced to *fuel*. Perhaps we also need to remember that the same economic logic applied through ecosystems services concepts as a means to conserve biodiversity, also causes biodiversity loss.

The ecosystem services concept can provide common ground and a transdisciplinary platform to bring different views together for debate. How can the science underpinning it be enriched with other ways of understanding nature that incorporate a spectrum of ethical questions? Can it be radically reconfigured in ways that extend beyond pricing to embrace an ethic of care and responsibility? Can we move beyond the mathematical convenience of reducing the Wombat to discrete numerical statistics and a tradable commodity, to fully allow for the creative potential of real life? As environmental historian Libby Robin posits: 'If we measure environments using countable phenomena, and fail to notice subjective human factors in environmental change, we are blind to the numenon of places. We forget what drives what we notice and measure'. ⁵

There is no one simple solution to conserving the Wombat. I simply aim to provoke a reflective re-consideration of a concept that could do the Wombat a great *disservice*.

References:

1. Millenium Ecosystem Assessment. *Ecosystems and Human Well-Being: Synthesis*. Island Press: Washington, 2005.

2. Turnhout, Esther, Claire Waterton, Katja Neves and Marleen Buizer. "Rethinking Biodiversity: From Goods and Services to 'Living With." *Conservation Letters* vol. 6 (3) (2013): 154-161.

3. Ibid.

4. Sullivan, Sian. "Ecosystem Service Commodities: A New Imperial Ecology? Implications for Animist Immanent Ecologies, with Deleuze and Guattari." *New Formations*, 69: 111-128.

5. Robin, Libby. "Counting our Blessings." Unpublished paper at 'Landscape, Environment, Emotion' Conference, Pori, Finland 25 September 2013.

New Biodiversity Strategy for Victoria

By Gayle Osborne

The Victorian Government is developing a new Biodiversity Strategy as well as a review of the Flora and Fauna Guarantee Act 1988, and the Native Vegetation Regulations in Victoria. The strategy needs to encompass priority actions to prevent further extinctions, actions for endangered species, protection of existing vegetation on private and public land, protection of waterways and wetlands, threats to existing biodiversity such

of Victoria. It is also time to increase legislative protections

to encourage more active commitment to conservation.

as introduced flora and fauna and planned burn regimes.

that incorporate both better incentives and stronger penalties

Wonderful, after years of destruction of legal protections for biodiversity by the previous government, these processes are to be saluted. However, there is a sense of unease; chatting to people involved and attending some events it is possible that the changes may not be substantial.

Victoria is the most cleared state in Australia, having lost some 52% of its native vegetation since European settlement and having lost 35% of its wetlands.



Orange Threadtail Damselfly *Nososticta solida* An indicator of healthy freshwater habitats. Photography © Gayle Osborne

There is a strong case for biodiversity education, for the public and in schools, and this should be included in the strategy. However, it could take a very long time for this to have an effect on biodiversity. This fits well within a twentyyear vision as proposed by the government for the strategy, but there are other urgent priorities.

The strategy needs to examine the role of public land in the protection of biodiversity; throughout the state we have

The loss of native vegetation is a significant threat to biodiversity conservation. In 2008, it was estimated that Victoria was annually losing approximately 4,000 hectares of native vegetation from private land.

In October, Adam Muir, Manager of Biodiversity Strategy, Department of Environment, Land, Water & Planning addressed a video conference for the State Wide Integrated Flora & Fauna Teams regarding the Biodiversity Strategy. He said that 'The strategy needs to create the case for "biodiversity" that places it in the mainstream for Victoria and identifies the most important steps for everyone to take so we have a healthy world to live in.'

He said that 'the more people connect with biodiversity, the more they will want to protect the environment.' I found this anthropocentric position concerning. Do we have to wait until most of the population think biodiversity is as important as hospitals and schools. Surely there is a moral imperative to do all we can to protect all species.

It is the role of a government to lead; did we wait for the majority of the population to think seat belts were a good idea before making it a mandatory condition of driving?

This is a great opportunity for this government to detail how we should redress the loss of our natural heritage. No more wishy-washy statements that look good on paper and mean little. No more bowing to lobbying by property developers and miners. It is time to clearly articulate a vision that provides for long-term protection of the environment and the biodiversity many state forests that are primarily managed for their resources with biodiversity coming second place. These existing natural habitats are critical for the conservation of biodiversity and the strategy should detail actions that cover all public land.

Building connectivity in the landscape is imperative. Connectivity creates an opportunity for fauna to move as the climate changes. The continued commitment to Landcare is important, however the strategy should consider whether other approaches should augment this successful program.

The strategy needs to also address funding and resourcing, monitoring, the significant gaps in biodiversity knowledge and the incomplete flora and fauna data records.

It is a big task, but without setting specific and measurable goals, our rapidly declining biodiversity will continue to decline and species will be lost.

Australia's Biodiversity Conservation Strategy 2010 – 2030 states "Individually and collectively we can, and must, find ways of living sustainably and without destroying the biodiversity around us." Hopefully the new Victoria Biodiversity Strategy will clearly articulate how this can be achieved.

To register for Biodiversity Strategy updates: <u>http://delwp.vic.gov.au/environment-and-wildlife/biodiversity/</u> <u>biodiversity-strategy#sthash.B1Kus0QO.dpuf</u>

Do Frogs Bounce? with apologies to Mac Nally et al.

Words and images by John Walter

It seems that the answer to this question is "Yes". At least some species appear to bounce, but it is also clear that they do not bounce anywhere near enough!

Now before you rush off to email Gayle about animal cruelty in the newsletter or think about what many northern Australians might wish upon their Cane Toads *Rhinella marina*, consider the future of our local frog species and their ability to recover from extended periods of drought. The changes already locked into our future climate will prove very tough for frogs and it will be their ability to recover or "bounce" in wet years that will determine their long term survival.

My research indicates that I could find up to twelve frog species in the Goldfields, Spa and Wombat Forest regions of Victoria and to date, I have found six of these on my own property. I have also sound recorded but not sighted another two species, but have not been able to match their calls to any of the species on the list for Victoria. Some frogs are known to have more than one call and while the aroused male calls to females are most commonly heard, there are also male on male aggressive calls and other warning calls such as the frighteningly loud shriek emitted by a Brown Tree Frog *Litoria ewingii* when I picked it up to rescue it from a large black plastic tub. Fortunately I held my nerve and safely relocated the frog to some more suitable habitat.

I have heard another two species in the upper reaches of the Coliban River in the Wombat Forest, one of which, the Victorian Smooth Froglet Geocrinia victoriana, is easy to identify. The other is a choice between two very similar sounding members of the same genus and I will need to sight the actual frog to confirm its true identity. One possibility is Bibron's Toadlet Pseudophryne bibronii, a once-common frog in Victoria that is now listed as endangered, and the other, *P. semimarmorata* is generally found a little further south. These Wombat Forest species are late summer breeding so I will have to wait a while for them to commence their calling routines. I have now learned I can make very good quality sound recordings on my mobile phone by using the video function and will be ready this time to capture their calls and compare them to their recognised calls on the Frogs of Australia website.

I decided to record and identify our local frogs after attending a Landcare meeting in October 2002 with Dr Graeme Watson from the University of Melbourne Zoology Dept and Ray Draper from the Central Highlands



Above: The Spotted Marsh Frog *Limnodynastes tasmaniensis* appears pensive at the prospect of its bouncing. This is an unusual colour form, which lacks the stripe down the back, making it look like the Barking Marsh Frog *Limnodynastes fletcheri*



Above top: The very elegant Brown Tree Frog *Litoria ewingii* **Above:** The larger Eastern Pobblebonk *Limnodynastes dumerilii*



The two local *Crinia* species come in a wide variety of colours and patterns and are impossible to tell apart based on these features. Their calls are quite different and easy to recognise and if you need to identify the species visually, you can always check their tummy. The Eastern Sign-bearing Froglet *Crinia parinsignifera* has the plain or peppered tummy on the left and the Eastern Common Froglet *Crinia signifera* has the darker marbled tummy on the right.

Environmental Consultancy and Growling Grass Frog fame, as speakers. Dr. Watson advised that the Eastern Sign Bearing Froglet *Crinia parinsignifera* was gradually expanding its range south and had reached Castlemaine. A migration that was, in part, explained as being due to warmer conditions in the southern portion of the former range. In 2015, this frog species has the numbers to win the frog chorus further south at my property in Drummond. It was also the species that showed the most bounce in the wet years from 2010-2012 that followed the drought years from 1997-2010 according to the research undertaken by Ralph Mac Nally and others.

Mac Nally's "bounce" study was reported in 2014 and was a follow up to an earlier study reported in 2009 that sought to measure the effects of landscape change on frog populations by comparing populations in the box ironbark forest in Central Victoria with those in the surrounding farmland. While this earlier study (based on field data collected in spring 2006 and 2007) found little difference between the farmland sites and forest areas in relation to species richness and frog density, they recorded less than half the species historically listed for the region and less than one in four of the sites studied showed signs of breeding activity. The research teams returned to the field in the spring of 2011, one year

Frog species found in the district

Eastern Sign-bearing Froglet	Crinia parinsignifera
Eastern Common Froglet	Crinia signifera
Victorian Smooth Froglet	Geocrinia victoriana
Eastern Pobblebonk	Limnodynastes dumerilii
Striped Marsh Frog	Limnodynastes peronii
Spotted Marsh Frog	Limnodynastes tasmaniensis
Brown Tree Frog	Litoria ewingii
Lesueur's Frog	Litoria lesueuri
Growling Grass Frog	Litoria raniformis
Verreaux's Tree Frog	Litoria verreauxii
Common Spadefoot Toad	Neobatrachus sudelli
Bibron's Toadlet	Pseudophryne bibroni

There are several additional species found a little to our north, e.g. the Barking Marsh Frog *Limnodynastes fletcheri* mentioned in the article and then other species found a little to our south e.g. the Southern Toadlet *Pseudophryne semimarmorata* also mentioned in the article

after the drought broke, and again in 2012; the wettest two year period on record. Their aim was to measure the rate of increase in frog numbers to assess the species ability to recover from the dramatic population drop brought on by the long drought.

They saw a significant increase in the reporting rates for the most common species and were also able to record small numbers of some of the historically listed species not found in the 2006/7 study. The number of sites showing signs of breeding also doubled, but was still only half the historical figures.

Most species had shown a modest decrease in reporting rates after the first five years of the 1997-2010 drought, but then dipped sharply by the time of Mac Nally's first study in 2006/7 with reporting rates as much as 80% lower than the pre-drought rate. No data was available for the end of the drought so we do not know how bad it got but the surveys during the wet years of 2011/12 showed an increase of between 12 and 22% of the pre-drought rate, bringing the reporting rate up but still leaving the rate at well below 50% of the rate prior to the drought for all species in the study other than *Crinia parinsignifera*. The percentages I am listing here are approximate only as the actual numbers of the various reporting rates were not always listed in the main paper and I have derived them from the various charts and graphs. The study concluded that given the climate prediction for the region is decade-long droughts with short periods of wetter weather in between, the frog population will continue to reduce, as the rate of population recovery or "bounce" in the wetter years is insufficient. Providing grassy verges around water bodies or placing trees nearby will help provide more suitable habitat, provided of course the water body continues to contain water. With shorter droughts and/or longer wetter periods, the future might not seem so bleak for our frogs. We should also remember that Cane Toads are amphibians too and the key to their ability to rampage across our countryside is adaptability; the very same adaptability that our local frog species will need if they are to bounce like a Cane Toad.

References:

Ralph Mac Nally et al, (2009) Distribution of anuran amphibians in massively altered landscapes in south-eastern Australia: effects of climate change in aridifying region *Global Ecology and Biogeography* 18, 575-585

Ralph Mac Nally et al, (2014) Do frogs bounce, and if so, by how much? Responses to the 'Big Wet' following the 'Big Dry' in south-eastern Australia *Global Ecology and Biogeography* 23, 223-234

Frogs of Victoria, on the Frogs of Australia website accessed at <u>http://frogs.org.au/frogs/of/Victoria/</u>

For frog calls click on the "detailed field guide" link for each species then scroll down to the "Hear it now" link.

Victorian Environment Award for Wombat Forestcare

Wombat Forestcare was honoured to receive a Community Environment Recognition Award from Environment Victoria in October.

'We've awarded Gayle Osborne and Wombat Forestcare Inc. for their years of thoughtful and dedicated advocacy for the flora and fauna of Wombat Forest, and for the recent mobilisation of community opposition to a proposed open-cut gold mine that would have seen parts of the forest bulldozed, and the potential pollution of local waterways,' said Environment Victoria CEO Mark Wakeham at the awards ceremony.

'The 2015 Community Environment Recognition Award recipients are all leaders in their community, and have led gutsy and persistent grassroots campaigns to protect nature and stand up for the places they love, often with very limited resources.'



Wombat Forestcare is proud to be included with the other committed environmentalists who received awards for 2015.

Croydon Conservation Society

Phil Ingamells and the Victorian National Parks Association

Breakthrough, the National Centre for Climate Restoration

John Pettigrew and Terry Court

Earthworker

Stuart Fraser and the Bendigo and District Environment Council

Coal and CSG Free Mirboo North

More about Planarians

By Gayle Osborne

As a follow up to my last article I am happy to report that the two specimens of *Australoplana alba* that we forwarded to Dr Leigh Winsor arrived safely. Dr Winsor informed us that, 'Both specimens have tiny eyes around their anterior tips and along the sides.'

I was having so much fun examining life under decaying logs and the occasional rock that I kept searching. I uncovered another planarian species, bringing the total species count on our property to four. To assist in identifying the species I went to Dr Winsor's page on BowerBird <u>http://www.bowerbird.org.au/users/3943</u>

At first I thought I had found two species, as there were two planarians that differed greatly in colour. I emailed the images to Dr Winsor, who pointed out that both images were the same species and noted that 'As is always the case with land planarians, there can be considerable variation in these markings, especially the depth of the colour.'

The new striped species for our block is the Ada's Flatworm, *Lenkunya adae*. According to Dr Winsor, 'the species was named by Arthur Dendy after his wife Ada "who has greatly



Ada's Flatworm *Lenkunya adae* Photography © Gayle Osborne

assisted me in my search for cryptozoic animals".'

I will resume searching next year in the wetter seasons as Dr Winsor says there is the possibility of finding 'rhynchodeminid planarians under the blackened logs these planarians are coloured dark grey - black, and are hard to spot. Under a hand lens they are readily identified as they have only two eyes'. The species that could occur in our district is '*Rhynchodemus simulans*; it is fairly small - no more than 20 mm long, cylindrical, with a dark grey stippled dorsal surface, and a lightly stippled ventral surface'.

Swamp Bush-pea Pultenaea weindorferi

This splendid yellow pea is listed as 'Rare' in Victoria, and is found in the Wombat Forest. A sizeable population is growing along Campaspe Road, east of Trentham.

The site was visited by John Walter. John emailed to say 'I found an obituary the other day for Gustav Weindorfer for whom *Pultenaea weindorferi* was named after he collected the "type" specimen at Wandin in 1903. An amazing individual who moved to Tasmania and personally constructed the Chalet at Cradle Mountain'.

Expect more details about this pea from John Walter in a future edition.



Swamp Bush-pea *Pultenaea weindorferi* Photography © Gayle Osborne

Wombat Forestcare Membership

research • education • action

Wombat Forestcare Inc. is dedicated to preserving the biodiversity and amenity of the Wombat State Forest by utilising the skills and resources of the community. By becoming a member you will have input into our activities and projects, and give support to caring for our forests.

For memberships and further information contact Gayle Osborne, (03) 5348 7558 or email info@wombatforestcare.org.au **Membership fees are only \$15 single and \$20 family**. **Visit our website -** <u>www.wombatforestcare.org.au</u>