



# TASMANIAN | Land | CONSERVANCY



Photo: Paul Borg

## Issue 23 Summer 09

### 'Garden of Eden'

TLC vision for the future

Drivers of landscape change

Meet the Board - Roderic O'Connor

Photography at the Vale

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**Property owners Paul and Helen Borg recently established a new private reserve by registering a conservation covenant over their magnificent property in the foothills of the Dip Range in north-west Tasmania. The covenant is an ongoing commitment to protect the plants and animal species that live on the property.**

Since 2003 the TLC and the state government have worked together to deliver the Protected Areas on Private Land Program (PAPL). The program offers a service for land owners who want to establish their own conservation reserves and be part of the National Reserve System – Australia's primary initiative for establishing a comprehensive reserve system.

So far 147 landowners have joined their properties to the National Reserve System through the PAPL program, a combined area covering over 5,000 hectares. These private reserves are critical in the quest to protect habitat for our native wildlife and plants and are an important addition to the network of public reserves.

Paul and Helen Borg's new covenant is a wonderful addition to the reserve system. Paul describes their motivation, "In 2000 we bought this 'Garden of Eden' as I call

Paul, Shannon and Helen Borg in their new private reserve it. In the nine years we have lived here the place has become very special to us – its abundant ferns, tall blackwood trees, the oxygen you can smell and virtually taste, the stillness where you can hear your heart beat, the smells, the little creatures that roam the property, even the sounds of the Tassie devil at night have made this oasis special to us. This is what we value, this is what needs to be conserved."

Paul and Helen's property is 27 hectares of primarily blackwood swamp forest. This type of forest on rich damp soils was historically targeted for high value timbers and now less than 100 hectares remain in the Northern Slopes Bioregion.

The Borg's property also contains fascinating geological features and is part of a recognised site of geoconservation significance. A unique feature of the property is a large 'solution' cave formed in quartzite as a result of the rock dissolving over long periods of time. It is believed to be the first recorded feature of this type in Tasmania and is occupied by albino burrowing crayfish (*Engaeus fessor*).

Congratulations Paul and Helen on the establishment of your reserve.

'protecting Tasmanian land for biodiversity'



Photo: Andy Townsend

Vale of Belvoir - stream in spate

# Vision for the future

## Beginnings

In 2001 we started the TLC with \$50 in the bank and a small committee. With amazing support from the community much has already been achieved. Over 144 areas have been protected through our permanent TLC reserves programme and revolving fund programme, and by working with other dedicated private landowners.

With funding through donations from the public and the commonwealth and state governments, our work has now protected over 16,000 hectares of important habitat around the state. These areas are a significant contribution towards the survival of Tasmania’s biodiversity.

## Our mission

Our organisation’s mission is the conservation of Tasmania’s biodiversity. It is a broad and ambitious goal and, so far, we have been working towards it through the identification of critical areas for conservation and the establishment of protected areas. This work has certainly made a difference, but to the question ‘are our ecosystems and species now safely out of the woods’, the answer unfortunately is no, they are not.

A significant number of our species are still threatened with extinction including iconic animals like the Tasmanian devil and the Tasmanian Wedge-tailed eagle. There is a strong possibility that both of these species will continue their sad march towards extinction. It is difficult ‘protecting Tasmanian land for biodiversity’

to contemplate Tasmania without Wedge-tailed eagles soaring the skies and Tasmanian devils roaming our landscape. They are a large part of our identity. The future

There is, however, cause for great optimism as we have an almost unique opportunity in the world. With some 44 per cent of the state already managed for conservation in protected areas, we are close to a complete reserve system. It is not able to protect all of our species from extinction but goes a long way towards it.

With focused additional work, Tasmania could be known the world over for its leadership in establishing strategic reserve systems and associated conservation strategies. The establishment of a conservation system that truly provides adequate space for our wildlife to live and survive in is within our grasp.

Yet the window of opportunity is closing. We must act swiftly and strategically by charting a course knowing where we want to go; understanding the ideal mix of conservation and productive uses in our landscapes; and understanding the environmental, social and economic factors that will drive the changes to our ecosystems.

## 2050 year vision

We intend to develop a 2050 year vision for our contribution to conservation in Tasmania. As a supporter of the TLC and a partner in the conservation of Tasmanian nature we would very much

like you to work with us to develop this vision. This newsletter provides a first key opportunity to provide your input via the strategic planning supporter survey overleaf; we also plan to host a variety of discussion sessions during the coming year to bring supporters, volunteers, staff and board together for further work on a long-term strategy for the TLC.

**I invite you to participate as much as you can.**

Nathan Males (CEO)



Photo: Claire Needham

Blue metallic flea beetle at the Vale of Belvoir

A special thank you to the artist Philip Wolfhagen and the Dominik Mersch Gallery for the donation of monies raised from the sale of Philip’s beautiful painting “Approaching Snow: Vale of Belvoir 2009”.

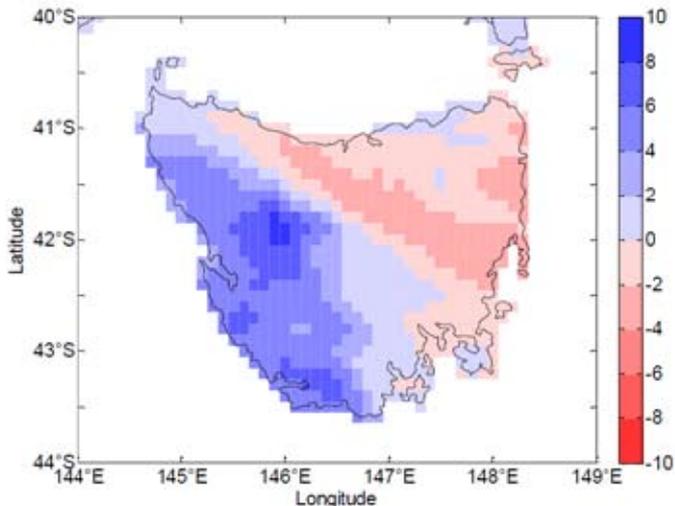


Figure 2: Annual rainfall trend (mm/year) for 2006-2040. Blue areas denote an increase in rainfall (source CSIRO)

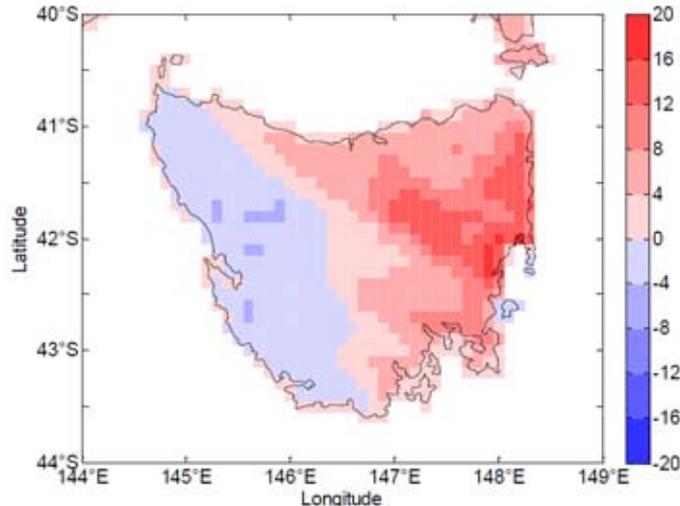


Figure 3: The trend in annual potential evaporation (mm/year) for the period 2006-2040. Blue areas denote an decrease in evaporation (source CSIRO)

## Drivers of landscape change

The amount, quality and connectedness of habitat for biodiversity are key factors in the ongoing survival of our native species. When attempting to plan for future conservation work it is important to have an understanding of the requirements for biodiversity to persist at a landscape scale, and the current and likely drivers of landscape change.

Two significant measurements of native vegetation cover have been suggested as signalling a change from healthy landscapes to gradually more compromised ones. Where 60 per cent or more of native vegetation remains, most species can survive and prosper, whilst below 30 per cent of native vegetation the less mobile species increasingly drop out of the system.

As you would expect, large areas of Tasmania such as the South-West World Heritage Area retain well over 60 per cent of native vegetation (Figure 1 - green and yellow areas). However, a 'T' through the more fertile lowlands and north coast has dropped below this threshold, and is close to the critical 30 per cent cover below which local extinctions begin to be common. Some landscapes have already dropped below the dangerous threshold of 10 per cent native vegetation cover in which the diversity of species severely plummets.

Some key factors that have impacted and are likely to continue impacting on the Tasmanian landscape are climate change, clearance and conversion of native vegetation, and infrastructure development. Climate change

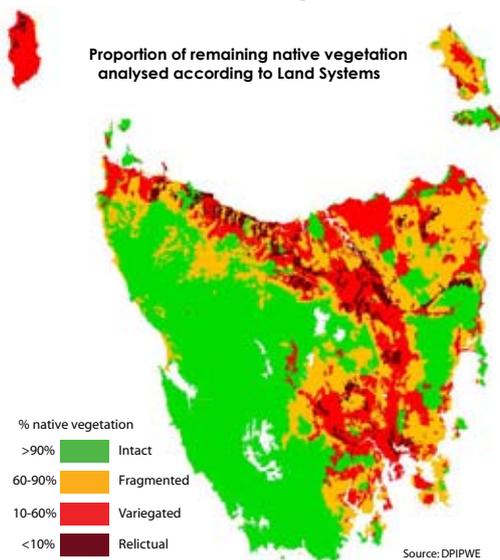


Figure 1: Proportions of remaining native vegetation in Tasmanian land systems (source DPI/PWE)

Climate change is arguably the most critical challenge the world will be facing in the coming century. Interestingly, Tasmania has been identified as a potential climate haven in a warming world, with the predicted changes still lying within our 'comfort zone'.

If this is the case, Tasmania may become more important as a living space and as a food producer – both exerting greater pressure to clear and convert native ecosystems.

Detailed modeling for Tasmania shows both a decrease in rainfall and an increase in evaporation in the northern and eastern parts of the state (Figures 2 and 3).

We know that, in the past, whole ecosystems have moved up and down mountains and towards and away from

the poles as the world has warmed and cooled. This movement actually occurs on a species by species basis, and we can already see it happening in Tasmania. On the land, we have seen rural tree decline in the midlands over the last thirty years; and in the sea, species more commonly found off the coast of NSW twenty years ago are now becoming more common off the coast of Maria Island. Clearing

Since Europeans settled the Tasmanian landscape native ecosystems have been cleared and converted for farms, plantations and homes. The ongoing conversion has occurred at a steady rate of about 10,000 ha per year – a rate barely changed since European settlement, but actually higher in the last decade (Figure 4). This clearance is currently predominantly on private land for plantations, intensification of agriculture, and a variety of infrastructure developments and networks, including housing.

Plantation development is strategically driven at a national level to replace wood product imports. In Tasmania, development is targeted towards the most productive sites with high rainfall and reasonable drainage in both native forests and already cleared land. Current policy direction promotes the phasing out of conversion of native forests to plantations by 2015. As a result, it is likely that this driver of native vegetation loss will become less significant during the next decade.

'protecting Tasmanian land for biodiversity'



Photo: Wolfgang Glowacki

The Vale River

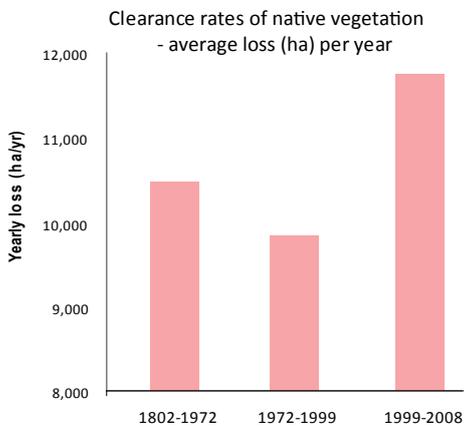


Figure 4: Clearance and conversion of native vegetation in Tasmania. (Sources ABS, Forest Practices Authority and Kirkpatrick, J.B.)

Clearance for agricultural development – a major driver since European settlement – may continue to put pressure on native ecosystems. There are suggestions that global food production will need to rise by 70 per cent to meet demand, and there are currently local policies to further develop agricultural irrigation infrastructure. Dam development for irrigation is targeted in valleys, often the location of threatened vegetation communities, while irrigated agriculture requires gentle slopes and effective drainage, areas that are commonly already cleared.

Infrastructure

Infrastructure development in Tasmania is likely to continue with recent corridors created for optic fibre networks, gas and water delivery, highway bypasses and transport hubs. Ongoing demand for more housing stock causes pressure to release land for subdivision, and a growing interest in recreation in natural surroundings has

resulted in increasing coastal and remote area housing development. Figure 5 shows the drop in the Tasmanian population between 1996 and 2006, but a continued climb in the number of dwellings. This trend in number of dwellings indicates significant clearance, subdivision and impact from road construction on native ecosystems.

While broad-scale clearance could be reduced over the coming decades, the current trends suggest that there will be a continuation of clearance and conversion at a widespread smaller scale. The locations of the smaller scale conversion seem to be scattered, and therefore will contribute to fragmentation and an increasing human presence throughout the landscape. Unfortunately, our track record shows that we bring many impacts with us into natural landscape settings: weeds, pathogens, noise, roads, domestic and feral animals, depletion of resources through such practices as grazing and firewood collection, and changing water flows, all resulting in a gradual dismantling and distortion of the natural systems.

Where to now?

In summarising, pressure on our natural systems will continue to mount. Current trends suggest that, unless we can provide alternative incentives and policy framework, in our lowlands and more productive regions, natural areas are likely to be lost or made smaller, becoming increasingly isolated from other areas and degraded by

weeds, feral animals and human impacts.

Given this, the task for an organisation such as the Tasmanian Land Conservancy over the coming decades is potentially very important. We hope that the process of developing a long-term vision and strategic plan will help to identify the most effective biodiversity conservation strategies for the TLC to pursue.

Please consider the issues that we have presented, and fill in and return the questionnaire overleaf. We appreciate your thoughts and input and look forward to establishing the next phase of the Tasmanian Land Conservancy. Daniel Sprod (Landscape ecologist)

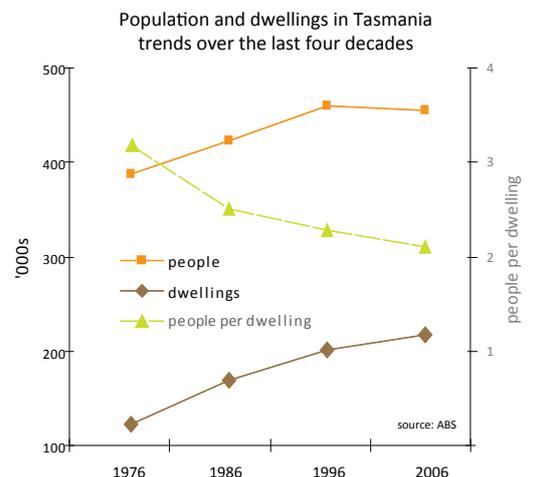


Figure 5: Population and dwellings in Tasmania (source ABS)

# TLC – Strategic Planning Supporter Survey

1. Why is conservation of Tasmania's important natural places, biodiversity, plants and wildlife important to you?
2. What landscapes, places, habitats or species would you like to see conserved and/or protected by 2050.
3. Between now and 2050, what do you think the greatest threats to Tasmania's important natural places and biodiversity are likely to be?
4. What is your vision for the Tasmanian reserve system and associated conservation activities in 2050? How do you think reserves and conservation should be managed and funded in the future?
5. What should the Tasmanian Land Conservancy do to realise your vision for Tasmanian landscapes, reserve system and conservation efforts over the next 40 years?

The TLC will be holding a strategic planning workshop in April 2010 for our supporters. If you are interested in being involved in the workshop please fill out your name and postal address below, or contact the office to register your interest on (03) 6225 1399.

Name:

Postal Address:

Please return this form to us in the enclosed reply-paid envelope by the end of February 2010. Alternatively, please telephone our office to discuss your vision for the TLC's future on (03) 6225 1399.

THANK YOU for taking the time to help the TLC chart its course for the first half of this century!



Photo: Kate O'Connor

Roderic O'Connor



Photo: Matthew Newton

Simon Olding capturing that special image at the Vale of Belvoir

## Meet the Board Vale photography

Roderic O'Connor is a passionate, experienced farmer with a mixed business background. He joined the TLC board in a voluntary capacity in 2007.

His family property in the Tasmanian midlands was settled in 1823 and is a testament to the long family tradition of merino wool production in Tasmania. Roderic has established private protected areas over 2,700 ha of his property through perpetual covenants and is in the process of adding a further 1,650 ha of marginally productive grazing runs. The Tasmanian midlands is recognised as one of Australia's biodiversity hotspots due to the large number of native species that are unique to the area, and because it is a refuge for a number of marsupials that are endangered on the mainland.

He is particularly keen to assist with the establishment of a foundation to ensure the TLC's long-term viability.

As he explains, *"It is crucial to the long-term success of conservation in Tasmania that landholders have access to, and are able to work with, a sound, flexible, and credibly scientific non-government body such as the TLC, that can facilitate funding for conservation on private land. I am a firm believer in assisting landowners to establish covenants and stewardship arrangements in a framework that permits them to access multiple funding sources, whilst remaining on their land and operating a sustainable farming enterprise."*

We are grateful to the following organisations for their support in recent months

Professional photographer and retiring TLC board member Matt Newton recently enticed ten of Tasmania's best wilderness photographers to spend a week at the Vale of Belvoir. Paul Pritchard, adventurer, author and long-time TLC volunteer, captured the spirit of the residency. In Paul's words:

*"Speeding through the breaking dawn to catch sunrise over the Vale of Belvoir were photographers Matt Newton and Andy Townsend. Other photographers were spread out across the TLC's latest acquisition.*

*The group consisted of Rob Blakers, Simon Olding, Hillary Younger, Rich Jupe, Wolfgang Glowacki, Peter Walsh, Claire Needham, Paul Hoelen and Grant Dixon.*

*On this and the following five mornings the sun was unable to penetrate the gloom. Yet this did not prevent a parade of tripods from heading out in darkness each day.*

*The photographers stayed in the Blandfordia Alpine Club hut in Cradle Mountain National Park, where Jane Hutchinson briefed the party on the conservation values of the Vale and the importance of this project.*

*The picture editor of Australian*

*Thank you to the members of Nature Photographers Tasmania and Paul Pritchard for the enormously generous donation of their time and skills.*

*Geographic, Chrissie Goldrick, was present and writing a story on this rare event: so many of the great names in Tasmanian wilderness photography gathered in one place had not been seen since Tarkine was published in 2004.*

*There were thousands of photographs taken during a week that had the feel of a photography workshop. In the evenings the old guard would pass on sage advice to the younger generation, discussing plans and techniques.*

*So the photographers succeeded in capturing the splendour of the Vale with minimal light conditions. Having said that, everyone was eagerly waiting for the perfect sunrise."*

**You can see a selection of these exciting images on our TLC website at [www.tasland.org.au](http://www.tasland.org.au).**

I would like to take this opportunity to announce the retirement of Jane Hutchinson and Matthew Newton from the TLC board and thank them for their dedicated work since 2001. I also take great pleasure in welcoming Stuart Barry, Lyn Maddock and Liz Sharples to the board. Stuart, Lyn and Liz bring many additional professional skills to our diverse and talented board.

Nathan Males (CEO)

