

## SWIFFT Video conference notes 25 July 2013

### Community Conservation of threatened species and biodiversity in Victoria

*SWIFFT meeting notes are a summary of the video conference and not intended to be a definitive record of presentations made and issues discussed.*

#### *Speaker topics*

- Driving Community Action - Community Conservation at Zoos Victoria pg. 2
- NatureWatch - Catlin Griffith, Victorian National Parks Association pg. 7
- Southern Brown Bandicoots in South West Victoria pg. 10
- Reef Watch pg.12

#### KEY POINTS SUMMARY

Zoos Victoria's primary conservation goal is to save animals in the wild - fighting extinction. This is achieved through the Wildlife Conservation initiatives, e.g. species recovery programs and Community Conservation with campaigns for the community to take action for wildlife.

More than 30 km of discarded fishing line has been placed into Seal the Loop bins since 2010.

NatureWatch is aimed at providing knowledge and co-ordination to assist the community to develop and carry out monitoring of nature.

The Basalt to Bay Landcare Network has been instrumental in monitoring and protecting Southern Brown Bandicoots in a small reserve in south west Victoria.

About 85% of marine species are endemic in our Victorian marine waters but we still know very little about marine biodiversity.

Reef Watch was set up to assist divers to collect data using a standard monitoring kit which could be used to contribute towards our understanding of the marine environment.

A total of 77 participants were connected across 12 locations; Hamilton, Warrnambool, Heywood, Horsham, Wodonga, Ballarat, Bendigo, Geelong, Orbost, Traralgon, Arthur Rylah Institute, Heidelberg, and Nicholson Street Melbourne.

Those attending included participants from;

**\*Educational:** Gordon TAFE (Geelong), Bendigo TAFE.

**\*Local Government:** Moorabool Shire.

**\*Field Naturalist Clubs:** Ballarat, Geelong, Hamilton, Portland.

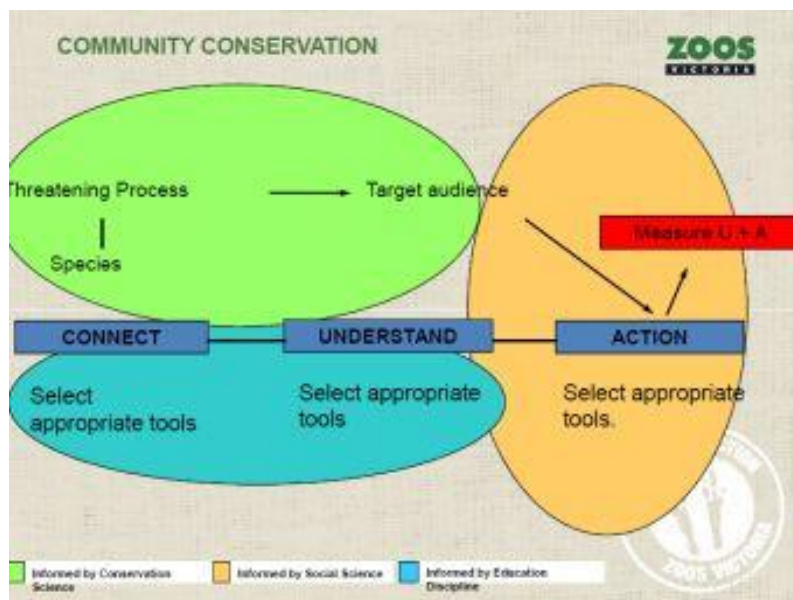
**\*Community Conservation Groups:** Barwon Coast Committee, Friends of Eastern Otways, ANGAI, Geelong Environment Council, Friends of Brisbane Ranges, Garibaldi Environment Group, Wombat Forestcare, Ballarat Environment Network, Baranduda Landcare, Windamara Aboriginal Corp.

**\*Conservation Organisations:** Zoos Victoria, Victorian National Parks Association, Museum Victoria, Greening Australia, Western Coastal Board, Corangamite Catchment Management Authority Water Watch, Coastcare, Parks Victoria, Conservation Volunteers Australia, Dept. of Environment and Primary Industries staff across 12 locations, inc. Nicholson Street Melbourne and Arthur Rylah Institute, Heidelberg.

## SPEAKER SUMMARIES

### Driving Community Action - Community Conservation at Zoos Victoria Emily Dunstan, General Manager, Community Conservation - Zoos Victoria.

Emily spoke about the enormity of environmental issues facing the planet and the concern people have about feeling powerless to change things. Zoos Victoria is using a model called 'Connect - Understand - Up' as a means of helping people to engage in the conservation process.



*Green sphere - informed by Conservation Science, blue sphere - informed by Education Discipline and orange sphere- informed by Social Science*

Zoos Victoria's primary conservation goal is to save animals in the wild - **Fighting Extinction**. This is done through two main initiatives;

Wildlife Conservation initiatives; e.g. species recovery programs including 20 local threatened species and 6 global projects.

Community Conservation initiative; aiming to reduce human threats to species. This program involves 6 campaigns for the community to take action for wildlife.

Both programs are underpinned by research and are undertaken in collaboration with other organisations in Australia and overseas.

### Conservation Campaigns



Emily spoke about Community Conservation campaigns which are based on one or more threatening processes which fit into the following categories;

- \*Climate change
- \*Disease
- \*Pollution
- \*Habitat loss
- \*Human wildlife conflict
- \*Introduced species

The Community Conservation model combines information from scientists regarding threats to species, their ecology and status. This is considered along with marketing strategies and social science to help people connect and understand what they can do to contribute.

Campaigns are selected on the prospect of being able to make a tangible difference taking into account access to the target audience which has to fit within the zoos visitation audience. The Zoo has six campaigns, with three currently running.

Don't palm us off - giving a voice to 153,000 Australians to have unsustainable use of Palm Oil labelled on products.

Beads for Wildlife - reducing the competition between livestock and wildlife in Kenya by providing an additional means of income through marketing handmade beadwork products in Australia and re-investing back to local communities in Kenya.

They're calling on you - recycling old mobile phones to raise money for anti-poaching controls in the Democratic Republic of Congo.

Wipe for Wildlife and Wash for Wildlife - these two campaigns relate to sustainable toilet paper and reducing phosphates in waterways.

Seal the Loop - aimed at reducing wildlife entanglements from discarded fishing line along Victoria's coastline.

### **Seal the Loop**

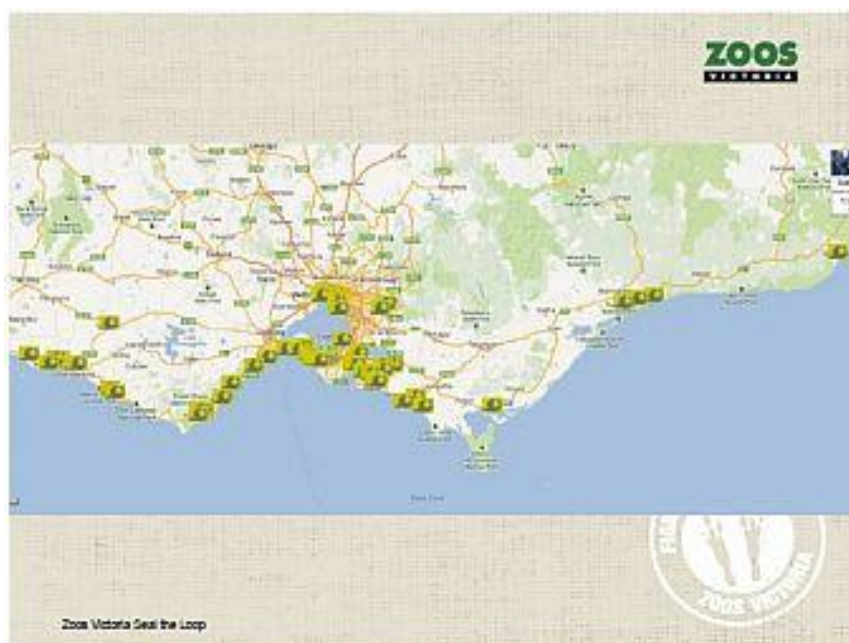


This campaign commenced in 2010 with a trial of 20 bins specifically used for discarded line. The trial was successful and has now grown to 140 bins along much of the coastline. Bins are monitored by volunteers and data collected on the fishing gear deposited, e.g. fishing line, sinkers, hooks, bait bags etc. It is estimated that more than 30 km of fishing line has been placed into the bins since 2010 which is a significant amount of old line that has been removed from the environment thus reducing entanglements.

The Seal the Loop campaign is incorporated into daily visitor presentation sessions at the Zoo where visitors learn about entanglements and pledge their commitment to using the bins.



*Seal the Loop bin for discarded tackle*



*Seal the Loop sites across Victoria*

The University of South Australia has combined with Zoos Victoria to undertake evaluation of the program and attitudes towards entanglements by surveying people at three of the bins during January 2013. Results indicate that 98% of people surveyed feel very strongly that all marine species have a right to exist in their natural environment and that 92% of people agreed it is humans' responsibility to protect endangered marine animals from extinction.



## Educational initiatives

Emily spoke about education products to engage the community using innovative marketing to target 20 local threatened species.



The use of illustrations highlighting a species natural attributes is a means of engaging and making a connection with people. Illustrations are used on cards and products. 'Love your locals' cards as well as promotional signage on trams, street art and new interpretative exhibits depicting the 20 threatened species have all been part of the program. The Act Wild program is aimed at integrating conservation and education.

More information: [www.zoo.org.au](http://www.zoo.org.au)

### Key points from questions

- \*Education programs can play an important role in raising the profile of species such as Ledbeater's Possum which can in turn influence the public and political perception of management priorities.

- \*Conservation has become a core focus of Zoos Victoria, as old exhibits are being replaced Community Conservation initiatives have been built into new exhibits and programs.

- \*In 2009, Zoos Victoria changed its role from simply keeping animals to one of advocating conservation and engaging people in the process of species conservation.

## NatureWatch - Catlin Griffith, Victorian National Parks Association

Catlin said the VNPA is an independent, not for profit, membership-based group which is involved in protecting nature across Victoria. She pointed out the VNPA is not just about National Parks but encompasses all types of land across the state. The VNPA celebrated its 50 year anniversary in 2012.



*NatureWatch links the community, scientists and land managers.*

### State of our State

Catlin spoke about the degraded state of our environment and the need for action to protect nature in Victoria. She said Victoria is the most cleared states in Australia with 50%-70% of native vegetation (habitat) gone. On private land 80% - 90% of native vegetation has been lost to clearing. In Victoria 44% of native plants and 30% animals are extinct or threatened and 78% of bushland types are threatened. Our waterways and wetland have also declined with 75% of our waterways being degraded and 35% of our wetlands totally lost.

### VNPA overview

Conservation work: Campaigns, research, advocacy e.g. protecting the Prom, cattle out of the high country, creating new National Parks, State Parks, Marine Parks etc.

Community Education & Engagement: NatureWatch, Reef Watch, publications, information, workshops e.g. Park Watch

Activities: Volunteer managed programs such as Bush Walking program, Excursions Group, Walk Talk & Gawk, Restoration projects e.g. Project Hindmarsh etc.

Membership/donation supported organisation: The VNPA is supported by its members and funded through membership and donations.

## Highlights of VNPA campaigns

- \*A 30 year campaign to create an Alpine National Park
- \*Protection of the Grampians
- \*Box-Ironbark parks in central Victoria
- \*Lead the 'Hands Off' the Prom Campaign
- \*Controls on the clearing of native bushlands
- \*The creation of a world first system of Marine National Parks and Sanctuaries
- \*Exclude cattle grazing from the Alpine National Park
- \*Consolidated Point Nepean National Park

## NatureWatch

NatureWatch is aimed at providing knowledge and co-ordination to assist the community to develop and carry out monitoring of nature. Community monitoring is important because it provides the community with a means participating in nature conservation through long term monitoring programs which can run 10 years or more.

NatureWatch brings the community together with scientists and land managers to develop and run the various projects. Each project is carefully planned , backed up by science and supported by the land manager to provide meaningful data that can be used for conservation management.

## Current NatureWatch projects





Grass-tree monitoring; volunteers have been collecting data on grass-trees and Cinnamon Fungus *Phytophthora* in the Brisbane ranges since 2007. The grass-tree monitoring sites were extended to involve Friends of the Prom and Friends of Pt Addis in recent years.

Grassland community monitoring; focused on monitoring grassland species in the Melbourne surrounds area, e.g. Striped Legless Lizard, Plains Yam-daisy, Growling Grass Frog and Golden Sun Moth.

Caught on Camera; monitoring fauna at three locations using motion sensing cameras, Wombat State Forest, Bunyip State Park and Hindmarsh. Cameras are recording fauna over a range of fire histories in forest areas and various revegetation areas at Hindmarsh.



*Long-nosed Bandicoot image taken with remote camera*



Team leadership; training of VNPA volunteers to become team leaders and support new volunteers in project planning, logistics, data collection, data entry and analysis.

A report on the first year of monitoring in the Wombat Forest has been produced. The NatureWatch, Caught on Camera program discovered Southern Brown Bandicoots at Bunyip

State Park which has resulted in Parks Victoria funding habitat protection works. Catlin said the NatureWatch projects have formed great partnerships between scientists, conservation groups and land managers. Catlin acknowledged the efforts of people involved with NatureWatch. Project are uploaded to the VNPA facebook page  
<https://www.facebook.com/pages/Victorian-National-Parks-Association/121782438413>

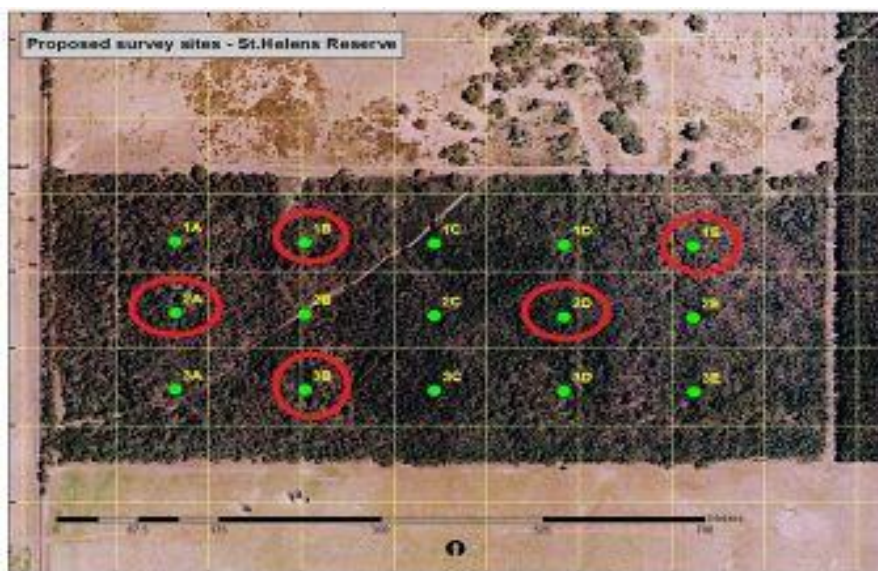
### Key points from questions

\* It would be beneficial if a standardised model / protocol for community data collection could be developed. This could specify standards for monitoring, methods, data handling etc. This would ensure data collected by various groups at different location over different time periods could be used as a reliable source of data for analysis.

\*Organisations such as DEPI or Museum Victoria could play a major role in developing a protocol for data collection.

### Southern Brown Bandicoots in South West Victoria - Lisette Mills, co-ordinator, Basalt to Bay Landcare Network

The Basalt to Bay Landcare Network started in 2008 to support Landcare groups in Moyne Shire and City of Warrnambool. Lisette spoke about the need to consider wildlife in context with other users in the landscape such as farming. She highlighted the need for people to see what's in it for them if they are going to engage in the conservation of a species.



*St Helens reserve, red circles indicate remote camera survey points in 2012.*

St Helens Flora Reserve is 32 hectares managed by Parks Victoria from Mt Eccles. It is a remnant bushland area comprising a forest canopy with a rich understory of grasses, shrubs and grass-trees. It is classified as Damp Sands Herb Rich Woodland, which is an endangered

EVC. The reserve was once a racecourse and been Crown Land since the 1860's. A Blue Gum plantation borders the reserves western boundary and some isolated remnant trees are located on private land to the north. Land to the south is farmland. In essence the reserve is isolated island of habitat surrounded by commercial land use.

In response to local Landcare reports of Southern Brown Bandicoots in the reserve local Landcare looked to find a way to prove or disprove this claim as the last confirmed capture was in 2003. Lisette spoke about how Bandicoots are a minority landholder in an agricultural landscape and the importance of finding a means of attaining local interest in them.

Because the Southern Brown Bandicoot is listed as Endangered there is more opportunity to attract funding to protect them and their habitat. She said people consider Bandicoots to be cute, nocturnal, and don't bother dairy cattle, fine wool sheep, buffalo, or blue gums. This is important.

### Surveys

In May 2012 the Wettenhall Foundation funded a trapping survey. No Southern Brown Bandicoots were caught but there were tantalising signs. In August 2012 Pacific Hydro funded the Basalt to Bay Landcare Network \$10k to purchase four fauna cameras, conduct a camera survey and hold a camera workshop. Further surveys were carried out in November and December 2012 by Landtech, Warrnambool, in which Southern Brown Bandicoots were detected. Lisette spoke about the fact that the temperature was around 12 degrees when they were most active.



*Southern Brown Bandicoot image taken with remote camera at St Helens Reserve*

## Management

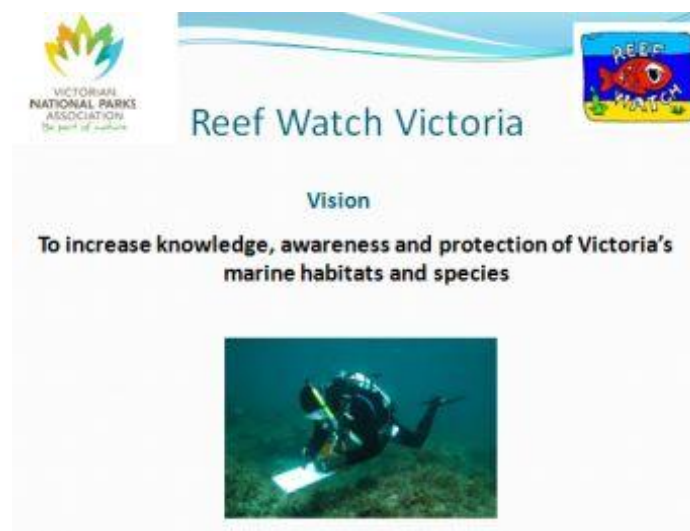
The community has supported fox baiting in and around the reserve, including the blue gums. The St Helens Shelterbelts Group will hold an AGM where the survey details will be shown and expressions of interest requested for future programs. The Landcare Network will re applying to Pacific Hydro for additional funds to survey again but this time with a video camera as well, so behaviour can be filmed day and night. Basalt to Bay are building an application to Landcare grants to create a wildlife corridor between the reserve and other reserves in the landscape.

Lisette questioned the automatic management perception in some people's minds that any native vegetation is a fire threat and should be burnt.

### Key points from questions

\* There is no guarantee that fire needs to be used in the reserve because surveys show that where the Bandicoots existed was in the most dense areas of understory.

## Reef Watch - Wendy Roberts, Museum Victoria and the Victorian National Parks Association



Wendy spoke about the fact that about 85% of marine species are endemic in our Victorian marine waters but we still know very little about marine biodiversity. Reef Watch was set up to assist divers to collect data using a standard monitoring kit which could be used to contribute towards our understanding of the marine environment. Wendy said over 100 divers have monitoring kits which enables quality data to be sent to a central point for processing.



Wendy said one of the features of the monitoring has been to encourage divers to monitor their favourite dive locations over several years. Reef Watch has enabled divers to report threats to the marine environment e.g. introduced species. It also provides a means of reporting unusual sightings of species or changes in the marine environment e.g. species occurring beyond their normal range. Reef Watch also assists diver to become literate in marine nomenclature by holding workshops at the Museum and seminars at the Melbourne Aquarium.



Reef Watch is based at Museum Victoria and is supported by marine scientists who can assist with species identification, data analysis and providing the latest information on species. A good example is the [<http://portphillipmarinelife.net.au/> Taxonomic Toolkit for Marine Life in Port Phillip]. Reef Watch connects divers observations with science and through training, workshops and newsletters, the program helps to build marine scientific literacy (Citizen Scientists).

### **Great Victorian Fish Count 2005-2012**

This once a year co-ordinated fish count across Victoria began in 2005. The count focuses on 25 reef fish species in Victorian waters, divers also record information about habitats and habitat preference. In 2012, 350 divers participated. School groups are now participating at 22 sites including 7 marine protected areas.





Wendy spoke about the Harlequin Fish which was last recorded in Victoria at Hobsons Bay in 1898. This species has disappeared from Victoria and is now only found at a few sites in South Australia. It is a good example of why we need to monitor our marine environment and to detect changes before they are too late. Reef Watch played a role in collecting data about the Western Blue Groper and the Eastern Blue Groper which are now protected.



*Reef Watch played a role in collecting data about the Western Blue Groper and the Eastern Blue Groper which are now protected.*

### Species in peril or feral

Reef Watch pays particular attention to ensuring divers report on certain target introduced species as well as native species that are known to be in low numbers e.g. the Southern Sand Flathead has declined by 97% in Port Phillip Bay. Another target species is the Southern Banded Wobbegong shark, listed on the IUCN Red List as Vulnerable. Reef Watch can also assist in the verification of records such as the Leafy Seadragon which was identified at Flinders in 2008 but has not been recorded at that location since then.

## **Buddy up with a Blue Devil**

This part of Reef Watch specifically encourages divers to monitor an individual Blue Devil fish four times per year at a location over time. Blue Devils can live for around 60 years and can be individually identified. Divers will be able to monitor the health of the fish, breeding, habitat and other factors about the fish and its environment.

## **BowerBird**

This web site is aimed at recording and sharing information about Australia's biodiversity. Reef Watch has contributed feral and peril items to BowerBird as well as recording some seasonal events that relate to marine species.

## **Key points from questions**

\* Reef Watch is focused on the sub-tidal zone. Parks Victoria and the Marine Discovery Centre conduct rock pool rambles.

\* Estuary Watch in south west Victoria undertakes data collection from members of the community and has protocols developed that could be applicable to other programs.

### See also:

\* Reef Watch <http://www.reefwatchvic.asn.au/>

\* Taxonomic Toolkit for Marine Life in Port Phillip <http://portphillipmarinelife.net.au/>

\* Red Map <http://www.redmap.org.au/>

\* Bowerbird <http://bowerbird.org.au/>

## **General discussion summary**

\* Community education programs need to provide pathways beyond the computer screen to getting real connections with nature similar to the NatureWatch approach.

\* In many parts of Victoria agriculture forms the prime use of the landscape and the landholder view of nature can be quite different to people with a conservation perspective. It is therefore important consider adapting conservation approaches to involve landholders and encourage their connection and ownership of threatened species projects.

\* There is a massive challenge to formulate ways of building day to-day consideration of the natural environment into people's lives, particularly starting with children.

\* An extension of the Zoos Victoria program to link people with VNPA NatureWatch activities would be a good outcome.

\*The range of programs by Zoos Victoria and the VNPA is excellent. No one program is better than the other as each caters for a wide audience which is a good thing because not everyone's needs are the same.

\*It is important that data collected by community groups can be entered into databases. At present there are a number of options such as BowerBird, Reef Watch, Victorian Biodiversity Atlas etc. so it is a matter of tailoring the data to suit the purpose for which it is intended through a properly planned monitoring program.

#### Other community based citizen science programs

\*The Malleefowl Recovery Group [<http://www.malleefowlvictoria.org.au/>] is a community group which has been monitoring Malleefowl every year for over 10 years with over 1000 nests on their database.

\*The Brolga Recovery Group engages with the broader community through a Brolga calendar in which landholders record observations.

\*Red Map is a community resource for recording marine species across Australia See: [<http://www.redmap.org.au/> Red Map]

\*Marine National Parks and Sanctuaries have a good network of Friends Groups who participate in Citizen Science projects.

\*[<http://reeflifesurvey.com/> Reef Life Surveys] is a program for advanced reef watchers run by Dr Graham Edgar from the University of Tasmania. They undertake scientific based reef survey expeditions around Australian waters.

\*The Friends of Eastern Otways and ANGAIK are involved in a long term orchid monitoring program of *Thelymitra matthewsii* (Spiral Sun-orchid) and *Caladenia maritima* (Angahook Pink-fingers) at Anglesea in conjunction with Dr Mike Duncan at DEPI - Arthur Rylah Institute.

\*There is potential for Land for Wildlife to engage in the Citizen Science concept but resourcing such an initiative is a major problem at present.

\*The Ballarat Environment Network is managing 50 small conservation reserves, although the reserves are small they provide an excellent means of harnessing local community involvement with conservation.

\*Connecting to Country is a community organisation which has reached the community of landholders to do conservation works e.g. nest boxes and monitoring on their properties in the Mt Alexander Shire.

\*A community monitoring program involving about 100 community landholders has been successfully focused on sustained monitoring of the Regent Honeyeater in the Chiltern area of north-east Victoria.