



Protected Area Networks, why they are important and what we have learnt in the past 20 years ⁺

Nathan Wong

Trust for Nature, Victoria

Abstract: Protected areas are an important factor in building success into grassland management programs. These networks are often overlooked in the rush to halt the decline in condition of grasslands, which are often under imminent threat, across some areas of private land. Since the mid 1990s Trust for Nature, Victoria, in partnership with the Victorian Department of Environment and Primary Industries and Parks Victoria, has had a targeted program of increasing these areas in the Victorian Riverina on both public and private land. This talk will discuss how these gains have been achieved and the tools that are available to build successful Protected Area Networks which allow for the implementation of adaptive management regimes across landscapes.

This talk addresses the broad scale rather than small remnants. It is true that small remnants are worth a lot of effort, and when we lose them we tend to feel as if we have lost a part of ourselves. The same kind of effort and care can also be put into conserving remnants at landscape scale.

At landscape scales, Trust for Nature works to establish 'protected areas'. Protected Area Networks are discussed in the grasslands book *Land of Sweeping Plains* [published in 2015]. Although Protected Area Networks are sometimes criticised as being just like Conservation Management Networks, that is not so.

Protected areas are public or private lands under various forms of protection. There are conservation reserves such as National Parks and Nature Conservation Reserves. There are also areas of private land that are protected by Conservation Covenants. These are agreements in perpetuity; they protect the natural values of the area. A very important feature is that a protected area is defined and its boundary or edge can be marked on a map. An example is the corridor Tony Adams speaks about in this forum, in West Belconnen (Adams, this proceedings).

The following statements help to clarify the concept of a protected area:

- It is *not* an area with a fence around it. Putting a fence around it removes a threat; it does not protect the land and make it a protected area.
- It is *not* a short-term agreement; such an agreement only removes a threat temporarily.
- It does *not* involve someone sitting there with a shotgun to make sure no-one walks on it; that is removing a threat; it is not protecting it.
- It is *not* a network of people or managers.
- It is *not* about doing something physically; it is about establishing legal protection.

A protected area is a defined site that can be worked with, and that will be there in the future. Protected land is secure – though I would argue that some of the reserves in the ACT are probably not secure because you can put roads through them. It is permanent. It is manageable. It protects what you do. So if you improve a grassland, put a threatened species back out there, put up wonderful cues to care and get people engaged with the grassland, as Adrian Marshall advocated in his presentation (Marshall, this proceedings), that will have a lasting impact.

We (Trust for Nature, Victoria) find a lot of landholders and other people put a lifetime of work into restoring a landscape and its function. They are protecting their heritage through that landscape. However, the work they are putting in to manage that area and make it better could itself be protected by creating 'protected areas'.



In Canada, the Canadian Land Conservancy says that conservation starts with protection. We need to protect and restore or maintain or manage whatever is in the grasslands. What we have been doing in Victoria – and I assume it is the same in Canberra and New South Wales and everywhere else – is a fantastic job of managing, and doing everything we need to do in restoration. But we have not necessarily put the agreements in place and created the National Parks and Nature Conservation Reserves that would make sure that we are actually starting conservation.

Creating protected areas

To go about creating a protected area we first need to come up with a plan. It need not be complicated. Some of the plans that have been produced for the Northern Plains of Victoria were composed by a single person at his computer at night-time in the dark. He came to see us later and talked about them and we said: 'That's a fantastic idea; let's go and actually try to do this.' The plan gave us a vision, agreed between the agencies and the authorities and the people, setting out what we needed to actually do.

Then when someone asked the Department of Primary Industries how they would go about cropping 2000 acres of grassland to make it 'better', the department did not give their usual response – such as: 'Well you have to get rid of the biomass first, then you need to put on some gypsum and probably a bit of superphosphate and get the soil chemistry and everything right for whatever you want to grow.' Instead they said: 'Don't do it. Go and talk to the Department of Sustainability and Environment. They will buy it from you.'

This was possible because we had an agreed vision in place. The Department communicated it so that people understood it.

It is most important to know what tools are available to protect things. Much of that information is included in a document called *Conservation and Protection of Northern Plains Grasslands: A Strategic Direction* (2010). It is also very important, as part of the planning, to know the characteristics of the asset you are dealing with: that is, the grassland and all the threatened species in it, as well as the species that are critically endangered and on the edge of extinction. That is what we are trying to work with.

We have to acknowledge that it is not all good. We have heard today about fragmentation of grasslands, with one piece here, another piece 100 m away, and the problem is how to manage them. The ideal answer would be to buy land in between, thus removing the fragmentation that is the biggest threat to these systems, because for good condition in grasslands there needs to be physical connectivity. Roads across them can be bad. Having paddocks in between patches of grassland can be bad, especially for small invertebrates and reptiles that have limited ranges.

Tools available

Several tools are available to achieve our objectives.

- (i) We can *buy* land. In the past the state and the federal governments had the funds to give us money, but that is not so now. However, we can purchase land privately because Trust for Nature, Victoria, has a pool of money that we can use. Likewise the Nature Conservation Trust in New South Wales, and other Land Trusts, hold money in revolving funds so they can buy land and resell it after adding covenants and other restrictions on the title.
- (ii) Private landholders can decide to put *covenants* on their land, either voluntarily or with incentive payments or assistance through, for example, offsets. A covenant can do more than just *protect* native vegetation; it could also be a way of removing threats to the native vegetation. If I have a covenant on my property, it restricts the number of animals I can have. It states what the carrying capacity of that land is allowed to be; whether I can have dogs, or cats; how many chickens I can have on the property. A whole range of different things can be restricted. On private land, if cats are a threat to your grassland and the fauna that you want to conserve, covenants can protect them.



The most important thing, as far as protection and creating protected areas is concerned, is the Land Title and the conditions listed on it to make sure that area is protected – whether that land is owned by the Queen or Crown, or whether it is under a conservation covenant and is listed as being protected.

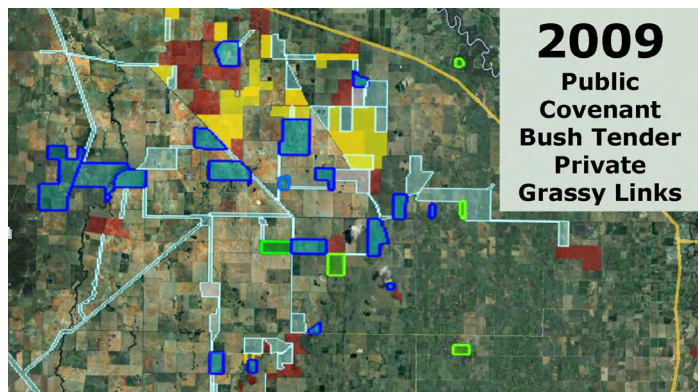
Some examples

As examples I will outline two of the areas that we have built up within the Northern Plains of Victoria and how we have gone about that.

One is on the Patho Plains, an area of northern Victoria, between Echuca and Terrick Terrick. The Google map at right (~50 km across) shows the area (Echuca is approximately half-way along the righthand edge of the map). None of this was conserved in 1999. Thanks to some funding, Trust for Nature was able to purchase the blocks coloured blue, now Terrick Terrick National Park – that is, the Davies homestead or Davies home block – back in the mid-90s. Trust for Nature decided that rather than maintain the block ourselves we would transfer it to the Crown on the condition that it became a National Park. So Terrick Terrick became Victoria's first grassland National Park; 1300 ha were conserved to protect the grasslands and species such as the Plains-wanderer *Pedionomus torquatus*.



Until 2009 the Department of Sustainability & Environment/ Environment & Primary Industries ran a program of buying grasslands to protect them, supported by the Australian Government. Trust for Nature gave non-financial assistance to the program, identifying a number of remnants which the Department purchased (additional blue blocks in the Google map at right). As a result, over 3000 ha in total became protected within Nature Conservation Reserves, which have since been transferred to be part of the Terrick Terrick National Park.



Trust for Nature also purchased an adjoining property, and a number of landholders put covenants on other blocks in the area, and a couple of revolving-fund properties were purchased and then resold with covenants (the green blocks in the 2009 map above). On top of that, the Department has 5-year bush tender agreements over another ~4000 ha (yellow blocks in the map above). A considerable area (red blocks on the map) is currently outside agreements, in private hands, and needs to be protected. We have also identified areas (pale grey on the map) that are the least disturbed areas in the landscape and therefore have the potential to create linkages between these systems. Linkages will allow the flora and fauna to move around the landscape.

There is now a plan for this landscape that sets out the characteristics this place needs to have and what it needs to look like. Most importantly, the plan lets us know when a paddock



'Grass half full or grass half empty? Valuing native grassy landscapes'

Friends of Grasslands' forum 30 October – 1 November 2014

Friends of Grasslands Inc. (www.fog.org.au) supporting native grassy landscapes

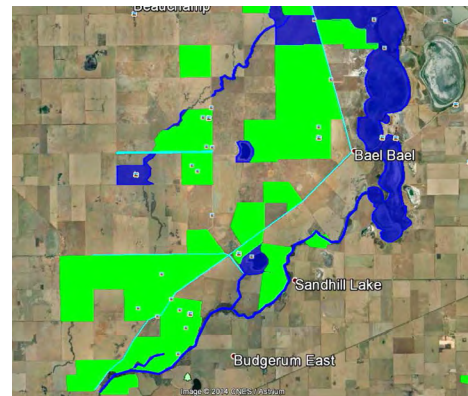
that is covered in native grass gets planted out. If we know it is reasonable but not fantastic habitat, we do not agonise over it. But if a paddock is going to have a tonne of gypsum dropped on it ready for ploughing, we can do something about it. We know the areas we want to protect. We know what we want to do and how we want to do it to create some of these bigger-scale landscapes.

The second example is 'Wanderers Plain' south of Swan Hill (photo at right and top map below). There are about 5000 ha of wonderful land out there, and we wanted to protect it. We knew we could buy; we knew we could use revolving funds; we knew the areas where people had put on covenants; we knew we could apply all our tools to it at once ... so we did. And by the time about three years had elapsed, all the areas marked in red in the map (below) were either owned by Trust for Nature, or under covenant or within the National Reserve System as public land – that is, Nature Conservation Reserve. Also two other blocks have now got covenants on them or a covenant is being negotiated at the moment.



This means that, within three or four years, we have gone from having almost nothing protected in that landscape to now having most of it done.

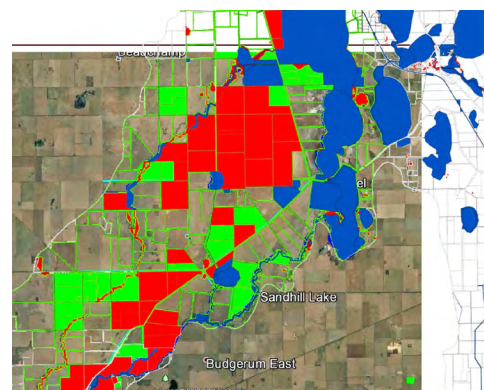
If you know what you want to protect and you have the plan in place, you or the Trust can inspire donors by saying: 'This is what we want to do, and we know what it is going to cost.' I think this project cost probably about \$5 million.



Managing the land

Of course the land has to be well managed. Some of the land that has been purchased and protected is managed by Parks Victoria which is currently using grazing to a large extent, and burning to a smaller extent. On some of the land owned by the Trust, we are managing it with burning rather than grazing. Areas that are under private conservation covenants are being managed with grazing.

In these grasslands in northern Victoria, we know what *not* to do, but we do not know what *to* do. We are watching 10,000 ha, observing what is being done by private landholders who have areas under covenant. We are monitoring and observing what they are doing right and what they might be doing wrong.



There has been an enormous crash in the Plains-wanderer population. It is on the edge of extinction now, down to about 200 to 300 birds from more than 5000. The red areas on the lower map are ideal Plains-wanderer habitat. They are on private land that has been managed with grazing. Parks land, the green area, is the worst for the Plains-wanderer. We are finding that much of the public land is densely vegetated. The vegetation on Trust-owned land is a bit



more dense than would be ideal for Plains-wanderers, and the private land in the background is maintaining the habitat.

Knowing the situation on the private land and in the privately protected areas we can see that there is plenty of habitat there for Plains-wanderers, so the species' collapse is not necessarily because of the lack of habitat. There is something else going on, and we are going to have to find out what it is if we want to stop this species from becoming extinct.

Summary

In summary, we are using public purchase, private purchase, revolving funds and covenants to protect large areas of grassland within agricultural landscapes. Our aim is to establish two areas of 20,000 ha in both of those landscapes I have used as examples, and we are about half-way there.

To make it happen, you must have:

- willing agency staff (people who are really keen),
- vision, and
- a full toolkit.

Money is not a limiting factor although we often think it is. Money is only limiting if you let it be. With something on the edge of extinction, lack of money is not an option. If you go to someone and say: 'It's going to cost \$10 million to save the Grassland Earless Dragon in Canberra; that is the only population of it and its almost gone', I know three or four people who would be likely to say they would not let that happen. Most importantly, we should spend money now while it is available from the government.

References

- Dept Sustainability & Environment (2010). *Conservation and Protection of Northern Plains Grasslands: A Strategic Direction*. Available at State Library of Victoria, and at the National Library in Canberra. <http://trove.nla.gov.au/version/50564127>
- Williams N.S.G., Marshall A. & Morgan J.W. (Eds) (2015) *Land of Sweeping Plains: Managing and Restoring the Native Grasslands of South-eastern Australia*. CSIRO Publishing, Melbourne.

Dr Nathan Wong is a grassland ecologist, with a PhD in grassland ecology and management and over a decade's experience in both the Riverina and the Volcanic Plains. Through his work as Grassy Ecosystems Coordinator for Trust for Nature, grassland permanently protected on private land has increased by 4000 ha. His goal is to put grassland conservation at the forefront of conservation thinking and take grassland conservation from a small-area pastime to a landscape-scale concern.

+ This record of the talk given at the forum has been checked by the presenter, but not peer-reviewed. To find out more, contact the presenter, via their institution or by email to: info@fog.org.au.