Getting results in conservation

Martin Taylor

Innovation is important in conservation, to extend the scope of conservation outcomes beyond protected areas to entire landscapes and seascapes, as recognised in the existing strategy for the National Reserve System.

Whatever the innovation, a fundamental question to answer is: are we getting value for money? Conservation funding is typically limited. The Australian Government's entire funding for conservation and the environment is 0.5% of the total budget. Getting value for money is not only about getting the most conservation result out of a limited budget, but also to make a good case for increased investment.

Knowing costs of conservation actions and specified conservation objectives, it is theoretically possible to derive an optimal spatial distribution of investment that achieves the objective for least cost. However such global solutions can be difficult to implement. A given property might be top priority for protection, but what if the land owner does not want to sell or put a covenant over it? Should we still invest in short-term actions? Some areas like state forests are already in government ownership but are also encumbered by many overlapping interests that can take many years to resolve. Climate change makes the task more complex again, since we now have to consider not just current, but future habitats and corridors to connect them.

Different conservation approaches

This chapter does not go into these complexities, but briefly examines several major types of conservation actions and their advantages and disadvantages including cost: (1) direct regulation, (2) government parks and reserves, (3) non-government protected areas, (4) conservation contracts, and (5) certified sustainable resource use.

Bon Bon Station Reserve, South Australia: A private protected area owned and managed by Bush Heritage Australia. ©Photo: Bush Heritage Australia

Direct regulation

The staple of conservation advocacy is to seek legally binding restraints on resource use to reduce negative biodiversity impacts. Examples include land clearing legislation, and the Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999*. Regulation has the advantage of protecting the most habitat at least cost, typically extending some level of protection to specific habitats over entire jurisdictions regardless of tenure.

Evidence suggests that regulation does work. For example, species listed under the United States *Endangered Species Act 1973* which had single-species recovery plans or designated critical habitats, were more likely to be stable than those that did not (Taylor et al. 2005). Equivalent evidence is lacking for recovery plans in Australia, although land clearing laws are linked to stabilised threatened species (Taylor et al. 2011a).

Regulation also has disadvantages, primarily opposition from affected resource users, but also including the following:

- Getting regulation through Parliament often requires political deals to pay for 'structural adjustment' in the wake of changes to resource access. For example, the ban on broadscale land-clearing in Queensland was also accompanied by $150 million in rural assistance
- It is often politically easier for governments to weaken broad vegetation or wildlife legislation than to abolish a specific national park
- Regulation is usually 'negative' in nature, prohibiting certain activities, rather than requiring beneficial (positive) actions to take place
- Most regulation entails some sort of assessment and approval process with many exemptions, loopholes, mitigations and offsets. Apart from individual national parks, broad biodiversity protection laws rarely give any strong guarantee that a particular habitat patch will not be destroyed or degraded.

Government parks and reserves

Government protected areas (herein parks and reserves) are generally protected in perpetuity without the uncertainties of broad regulations mentioned above. Consumptive uses are typically prohibited. Moreover parks and reserves are managed by a publicly accountable and professional corps of rangers.

Parks are usually opened to public access and represent the fundamental asset of an economically important nature-based tourism industry. However this also presents a risk that visitor pressure can become excessive and harmful to protected values.

Evidence suggests that strictly protected areas (that is, in IUCN protected area management categories I to IV) whether state or privately owned, show a strong positive correlation with stabilisation of threatened species (Taylor et al. 2011a).

Despite well-documented value for protecting wildlife and attracting tourism, governments are generally reluctant to invest heavily in strategic growth of parks and reserves. Despite a fivefold increase in the National Reserve System (NRS) Program budget in 2008, it still represents only 8% of the Caring for our Country budget. Queensland in the same year committed to increase the parks estate 50% by 2020, but only delivered a very modest capital budget two years later.

There is a prevalent perception that parks and reserves are a very expensive approach to conservation. Political enthusiasm is often restricted to 'iconic' or scenic parks, despite several decades now of government policy commitments to a more strategic approach to biodiversity conservation. Evidence suggests however, that parks are a very cost-effective conservation option. The NRS Program has only cost the Australian Government $47 per hectare of land purchased, an investment that leveraged four to five times that amount in state or territory government funds both for acquisition and capitalised in-perpetuity management (Taylor et al. 2011b). Buying land for parks is not free of controversy: acquisitions such as Toorale and Yanga Stations in New South Wales have also faced local opposition.

Of concern is the 'shoe-horning' of areas that lack any real change in fundamental land or sea use into the 'protected area' definition under IUCN category VI, perhaps contrary to the IUCN guidelines for that category: for example, the 'general use' zone of marine parks.

Unfortunately there is no independent arbiter to scrutinise protected area designations against agreed standards and guidelines. Perhaps we need one.

Non-government protected areas

Non-government protected areas fall into several groupings:

- Conservancy-owned and run lands
- Conservation covenants on land owned by private individuals
- Indigenous protected areas.

Non-government protected areas should be much more cost-effective than government protected areas (from the government's point of view!), particularly for covenants with an existing landholder.

On Indigenous land, there is no purchase option. The Commonwealth's Indigenous Protected Area Program is an example of government investment in non-government protected areas that also brings very substantial cross-portfolio benefits of employment, health, social and cultural revival for the land owners and managers – the Indigenous communities (see chapter by Rose in this publication).

The issue of 'shoe-horning' is also evident in private protected areas, but it does not need to be. For example, in Queensland, Nature Refuges are generally classified as protected areas, even if they allow activities such as commercial cattle grazing, which ordinarily would not be considered appropriate in a protected area. A more flexible approach would see the Nature Refuge internally zoned to define areas primarily for conservation (which would be considered protected areas) and those that allow grazing (which would still be Nature Refuges, but not protected areas).

Private investment, goodwill, energy and knowledge are put to work in private protected areas free of many of the pressures of public ownership and access that are faced by government protected areas (Figgis 2004).

The major drawback of non-government protected areas is that under most state legislation, mining is not prevented, unless, like Arkaroola in South Australia, they have their own Act (see chapter by Irving in this publication). It should be remembered though that most states have protected area types other than national parks, which likewise are open to mining.

Like some government protected areas, some non-government protected areas – Nature Refuges in Queensland in particular – may be commercially grazed as well, raising a question of their fit to IUCN category VI guidelines.

It is not yet possible to form a coherent picture of this sector, with diverse programs operating and differing objectives without a coordinated approach to reporting on effectiveness (Fitzsimons and Carr 2007). However this shortcoming is also shared to some extent by the government protected area sector, despite the advances made with the adoption of the National Reserve System Strategy by the Commonwealth, states and territories in 2009.

Conservation contracts

A great deal of conservation investment goes toward short-term conservation agreements or contracts in the absence of any covenant, or even simply management actions in the absence of any contract. Under the stewardship concept the funder pays landholders to do certain works to improve habitat condition or abate threats. A covenant is not mandatory.

Such approaches make it easier to engage landholders, precisely because no enduring encumbrance is put on the land title. Such approaches may be justified when no other option is available as landholders may be unwilling either to sell or to enter into covenants (see chapter by Males in this publication).

Covenants may be less needed where prevailing legislative protections of habitats is already strong and the priority is simply to improve or maintain habitat condition.

The critical question with this approach is the low level of security: to what extent will gains achieved in habitat recovery or condition be reversed without penalty when payments stop, contracts end, the property changes hands, or profitability goes down?

A second critical question is to do with value for money: at what point is it cheaper to covenant – or buy and hold – or buy, covenant and resell a property – than persist with open-ended stewardship payments? One conservation tender program has cost more per hectare for short-term agreements with no covenant, than the average asking prices of similar properties in the area. It is difficult to establish relative cost-effectiveness in such cases.

There is as yet no national scale evidence of outcomes from this approach despite much investment (Taylor et al. 2011a), nor any national effort to show that the conservation agreement approach is having a net positive, and enduring, biodiversity effect. Perhaps we need one.

Certified sustainable resource use

A certified sustainable resource use approach does not attempt to directly protect or conserve species or habitat, although this may be an outcome of meeting a performance standard.

The general approach involves the formation of a supply chain roundtable, including industry, conservation and consumer sectors. The roundtable then develops and agrees on environmental performance standards and sets up a framework for certifying resource users as meeting the standard. Once a product can be identified to consumers or retailers as certified to be compliant with the standard, consumers can choose to prefer that product or indeed, retailers can decide to only source those suppliers. These kinds of decisions provide a so-called 'market driver' for widespread uptake of the improved practices needed to meet the standard.

Such an approach can be truly win-win as long as retailers and consumers prefer to buy products that are certified, without the need for any public investment. Fortunately, consumer expectations for food safety, environmental safety and animal welfare do not regress very readily.

Any process of development of a certified standard needs to include a plan and process to collect the evidence to show that it is producing measurable biodiversity outcomes. Evidence to date is scanty.

Conclusions

Highly protected areas and regulation work to protect biodiversity and there is little evidence that much else works as yet. Obviously there is an urgent need to fill that knowledge gap and acquire appropriate data to do so.

The big surprise is that highly protected areas even involving purchase of land may be cheaper per hectare than short-term approaches.

Highly protected areas on private land do not enjoy the same protections as national parks. Despite best intentions of the owners, they may not be able to keep mining out. A category of private protected area which precludes commercial consumptive uses including mining would be a valuable reform.

There is a need for clearer standards and a trusted umpire for what should be designated a protected area and what IUCN category is appropriate. In particular, areas with commercial resource use, particularly livestock, need to be reviewed for conformance with IUCN guidelines.

It is legitimate and valuable to promote standards and practices for low impact production as part of a whole of landscape approach. But this can be done without trying to 'shoe-horn' such areas into the protected estate.

Much conservation funding has gone to short-term actions without a secure and enduring change in primary land use. A critical question to answer is if all this good work could be reversed without enduring agreements and covenants.

Commonwealth funding should perhaps go primarily toward supporting existing or new covenants and protected areas, or driving uptake of certified sustainable resource use standards.

At the very least, funding decisions must be underpinned by rigorous analysis of enduring biodiversity outcomes achieved for money invested, and a process of comparing alternative approaches using the same metrics.

Eubenangee Swamp National Park in North Queensland with Bartle Frere. The swamp's water was secured through an addition purchased with NRS funding.
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Biography

Martin Taylor completed a BSc Hons in Environmental Studies at Griffith University and a PhD at University of Queensland before pursuing an academic career in the United States. He is now back in Australia as conservation scientist with WWF and has published analyses of the Endangered Species Act in the US, threats to international whale habitats, and the effectiveness of conservation actions in Australia including protected areas for threatened species. He has served on the Scientific Committee of the International Whaling Commission and as a NGO observer at CITES. He is a member of the IUCN World Commission on Protected Areas.