

Theatening Species

State and Commonwealth Governments have, over the past decade, implemented legislation designed to identify, categorise and protect native species that are in decline, and that potentially face extinction unless some action is taken. The legislative framework associated with threatened species protection is usually linked with development and planning regulations. The tendency over recent years has been for Governments to make the legislation increasingly restrictive and all-encompassing, and to make it harder and harder for individuals to gain development approval in the event a threatened species is or may be present in the relevant location. Somewhat ironically, the more restrictive threatened species legislation becomes, the more the very species the legislation is designed to protect are threatened.

In what seems to be a flurry of activity, the Scientific Committee that is established under the NSW Threatened Species Conservation Act has recently released determinations covering a broad range of different species, activities and ecological communities in NSW. To many observers, the Committee is doing what it was established to do – that is – to consider the state of various populations of native flora and fauna in NSW. Where those populations or individual species are in danger of becoming extinct, the Committee is able to list them under the Threatened Species Conservation Act as threatened or endangered, thereby triggering a range of processes designed to protect and preserve those species or populations.

Amongst the species or populations listed or proposed for listing were the New England Peppermint Woodland of the New England Bioregion, and Brigalow within the NSW Brigalow belt.¹ In both these cases, the listing referred to an ecological community consisting of between fifty and seventy different plant species, accompanied by a note advising that the list of species included in the determination was not necessarily complete.

¹ NSW Scientific Committee (2002) Notice of determination.

In both cases, the ‘scientific’ information cited in support of the determination was quite limited, in one case a report of the extent of the relevant community within one local Government area, and in the other an un-refereed “personal communication” from an employee of the National Parks and Wildlife Service (NPWS), the Government agency which supports the Scientific Committee, and which is charged with protecting species or communities, once they are listed under the legislation.

The new determinations released by the Scientific Committee will be added to what is an already extensive list of species, communities and processes listed under threatened species legislation in NSW.

Table 1: Listings under the NSW Threatened Species Conservation Act.

	Vulnerable	Endangered		Presumed Extinct
		Species	Populations	
Amphibians	14	10	1	0
Reptiles	24	7	0	1
Birds	84	27	3	12
Mammals	41	13	7	27
Marine Mammals	9	2	0	0
Invertebrates	0	10	1	0
Plants	218	290	11	37
TOTAL	390	359	23	77
Endangered ecological communities				50
Key Threatening processes				12

Source: NPSW NSW www.npws.nsw.gov.au

The consequences of listing under the legislation are threefold. Firstly, once a species or population has been listed, the Act requires the NPWS to draw up a recovery plan that is designed to return the species or population to a point where their survival is viable in nature. Secondly, any Government authority charged with approving a development or activity that may have a significant impact on the species or population is required to seek the approval of the NPWS or the Minister before allowing the development or activity to proceed. Thirdly, it becomes a punishable offence to harm or take a listed species, except under licence or as a consequence of routine agricultural activity.

As a consequence of these listings, the NPWS is required to prepare recovery or threat-abatement plans. At present, 35 of these have been completed, and a further 21 are in draft form or currently being prepared. These statistics indicate that less than 10% of those species listed under the Act have had recovery plans developed.

Unfortunately, the extent to which these processes are actually having an impact on the survival of species is largely unknown.

There is no significant reference to threatened species lists and species recovery in the NPWS Annual Reports, nor is there any apparent process to analyse and review the success or otherwise of the policies established under the legislation, based on the publications list provided by the NPWS. The impression gained is that listing a species or community is a process accompanied by a largely cursory collation of so-called 'scientific' information, and that the main objectives of the legislation is to compile extensive lists of species, without any real consideration of effective measures to assist the survival of those species, and to progress to a stage where listing is no longer required. In fact, there is no available evidence to indicate that even one species listed under the legislation has ever been de-listed.

It is hard to escape the conclusion that while-ever the actions associated with the protection of a species are relatively cost-neutral to Government (such as listing), they proceed apace. However, actions that may require real Government resources (such as developing and implementing recovery plans) either do not occur, or are severely constrained.

Implications for farmers

The fact that recovery plans and actions have not been implemented or even prepared may minimise the costs of threatened species protection for Government, but for private landholders, the implications of listing a species or community under this legislation are very significant.

If that species or community happens to be present on private land (as is the situation for most species listed) then any future development of that land that requires a development consent (such as the removal of native vegetation to allow sowing of improved pastures or cultivation) will trigger a requirement to formally consider the impact of that development on the species, and require the approval of the NPWS before it can proceed. This is despite the fact that the cultivation of land or the sowing of an improved pasture species would normally be considered to be a routine agricultural practice, which is supposedly exempt from the provisions of the Threatened Species Conservation Act.

But it is not just the actual presence of a listed species on an area of land that triggers potential restrictions on the use to which that land can be put. As noted earlier, the listing of an ecological community consisting of perhaps fifty or more different species potentially means the presence of just a small number of those species on land will trigger

restrictions. In addition, many landholders who have sought development approval have been refused, with the reason given being that the area in question "may" contain habitat relevant to a particular listed species, or that the listed species may be present in the locality, even if there is no evidence of it being present on the actual area where the development is proposed.

Regional natural resource statutory planning instruments such as vegetation and water management plans are also required to incorporate full consideration of threatened species, triggering a further layer of restrictions on the use to which land may be put, even if the use involves routine agricultural activities. And while the development and implementation of species recovery plans has been very slow to occur, those plans being prepared invariably only incorporate regulatory restrictions on landholders, rather than providing any incentives to encourage actions by landholders that might assist species recovery.

For an individual landholder, and for agricultural industries more generally, the implications are significant. Australian farmers are acutely aware of the need to improve productivity and respond to market signals. However, their ability to implement more productive and efficient technologies (such as the use of centre-pivot or underground drip irrigation systems) is often constrained directly or indirectly by threatened species legislation. Even ecologically positive management technologies such as long-rotation cropping and grazing systems and cell-grazing are unable to be utilised in some situations, because of the restrictions imposed by this legislation.

For agriculture more generally, the progressive restriction on the ability of farmers to diversify land use will become an increasingly significant limiting factor on rates of future productivity and innovation, and result in a progressive decline in international competitiveness. This impacts not just on farmers, but on the economy more generally as resource allocation efficiency declines, new investments in regionally-based industries disappear, and regional economies are locked into a dependency on the production of a limited number of commodities. Given that agriculture accounts for more than 25% of Australian merchandise exports, the economy-wide impacts will be increasingly significant.

As a consequence, the overall impact of threatened species legislation on landholders is strongly adverse, a conclusion reinforced by the fact that lawyers and Real Estate agents involved in sales of farm land now require vendors to disclose prior to sale whether the land is subject to threatened species or wilderness declarations or nominations.

Implications for species

The negative impact of threatened species legislation on individual farmers and agriculture should be sufficient to trigger changes to the legislation. However when combined with the fact that these policies have a negative impact on the survival of the very species they are designed to protect, the need to re-design them is compelling.

The negative impacts on species arise as a result of serious flaws in the way the legislation operates. The first of these is the failure to recognise any difference between public and privately-owned land, in either the listing or the subsequent recovery planning process (in the limited number of cases where that has occurred). The reality is that the bulk of species and communities listed are found on private rather than public land. For a landholder, the consequences of the presence of a listed species are entirely negative, resulting in either a limit on future development, or a limit on the flexibility of land use.

Consequently, there is a significant disadvantage created for any landholders who either identify relevant species or ecological communities on their land, or who take actions or utilise management practices that may in fact be favourable to the relevant species. The only potential outcome for a landholder taking these actions (such as maintaining an area of native vegetation, replanting areas to trees, or actively managing predators) is further restrictions on potential future land use, particularly if the presence of the species is revealed to the NPWS. The more regulatory and broad-reaching the Threatened Species Act Conservation becomes, the greater this disincentive, and the less likely it is farmers will take these species-assisting actions.

The second serious flaw is a failure to adequately recognise that species decline can occur as a result of the combined effect of a range of different factors, many of which may have occurred some time in the past. In such situations, simply listing a species will have little impact on the future survival of that species. For example, if the main reason a ground-dwelling bird species is declining is the introduction many decades ago of predators such as foxes, then the act of listing that species will have little or no impact on its survival. In such situations, listing the species becomes a Canute-like exercise in futility that may placate some interest groups, but will do nothing for the species.

Even in situations where current and historical factors working in combination have resulted in species decline, the act of listing a species may be insufficient to reverse population decline. It may actually hasten the decline of the species, as the listing creates a false complacency that “something” is being done, and therefore removes pressure to consider whether additional actions are required to reverse the population trend of the species.

Endangered Species legislation in the USA

Endangered Species legislation was first enacted in the USA in 1966, and has been a source of contention since that time, as witnessed by the many amendments to the legislation that have occurred since the initial legislation was enacted.

A key overarching difference between the USA and Australia is that the property rights of owners of private land are considerably stronger under USA law. As a consequence, US Government agencies are required to find cost-effective mechanisms to encourage voluntary actions by landholders to preserve species, rather than relying on regulatory action as is the case in Australia at both a Commonwealth and State level.

The US legislation works in a similar manner to the NSW Threatened Species Act, but the legislation and policies implemented by the US Fish and Wildlife Service (USFWS) have some significant differences. Amongst these are:

- An extensive process to consider whether or not a particular species should be listed, including a formal peer review process of the available scientific information, and an extended period of public comment on proposals.
- Specific policies recognising the differences inherent in conserving species on private land. These include voluntary incentive programs, and a range of measures (The No Surprises Policy and the Conservation Agreements with Assurances Policy) to ensure private landholders engaging in voluntary conservation of species cannot subsequently have additional regulatory controls imposed.
- Strict timelines for actions subsequent to listing a species, which include a requirement to develop a recovery outline within 60 days of listing, and a target of 2.5 years for the completed development of fully-funded recovery plans. In its 1996 report, the USFWS reported that 73% of listed species had final approved recovery plans in place, and 26% had draft plans.
- A strong focus on species recovery, which includes a requirement to report to Congress every two years on the number of listed species that have recovering populations. In its 1996 report, USFWS reported that over 37% of listed species had populations that were stabilised or improving, and identified 34 species that would be de-listed due to their recovered status.

As of August, 2002, there were 1,260 native plants or animals listed as threatened or endangered under the relevant US legislation, and a further 37 species proposed for listing. In addition, there are 257 candidate species which are currently being evaluated for listing. Of the listed species, 976 have approved recovery plans in place. There are also 411 Habitat Conservation Plans that have been approved.

Further reform of the US legislation has been foreshadowed with recent legislative proposals aiming to strengthen the requirement for “sound science” as a basis for determining the status of a species. These proposals include a requirement that all species population reports must be subject to peer review, and that those involved in the peer review panel not have a conflict-of-interest.

As a consequence of the way the Act operates, there is a very strong focus on listing species, without really having to address the issues associated with species recovery in the way the US endangered species program does. The result is an enormous and quickly growing list of species that are considered threatened or endangered, but few if any apparent resources devoted to developing recovery plans or to taking on-ground action to bring about a recovery in the species population. There are no transparent efforts by

the NPWS to prioritise resource allocation to those species and communities where recovery can be achieved most effectively, or to ensure that scientific resources are devoted to the science of recovery, rather than the questionable science associated with listing. This apparent lack of any effective prioritisation of resources is a situation managers in the corporate world have long recognised as one likely to produce only limited results.

This situation is made worse by the standard of “science” apparently accepted as sufficient to trigger the listing of a species. In the case of many listings, there appears to be few, if any, credible and peer-reviewed studies cited which actually provide details of population trends for the species in question. In the case of the recent determinations by the Scientific Committee on the New England Peppermint gum and Brigalow, no peer-reviewed studies were cited which provided evidence of the current extent of these ecological communities across the landscape. In the case of the former community, no studies were cited to support the inclusion of an extensive list of species as members of that community.

The use of questionable science to support listing proposals creates very real credibility questions amongst landholders and the broader community, especially when it seems that some of the so-called listed species are abundant in many areas. This downgrades the status of a listed species - “isn’t every native species listed?” – meaning that landholders and others whose co-operation may be critical to species recovery do not perceive a listing as credible, and therefore do not believe their co-operation is justified or necessary. Landholders also frequently question why particular, apparently abundant species are listed, yet see no real efforts by the Scientific Committee to revisit the question, and perhaps remove that listing if appropriate.

The contrast between the standard of science deemed acceptable in NSW to justify a listing and the standard required under the USA legislation appears to be quite marked, and is possibly the reason the term “Threatened Species” is used with such derision in NSW by landholders – the very members of the community whose support is most critical to species survival.

Current proposals to introduce a new, lower threshold category of listed communities under this legislation will only serve to make this problem worse.

Whether or not every species that is or was present in Australia can or should be preserved is perhaps a higher-level question that is inherent in establishing threatened species programs, but one which remains unanswered. Human settlement, whether by Europeans in the last two hundred years or by indigenous populations many centuries ago, inevitably resulted in changes in the landscape, increases in some species populations and declines or extinctions in others. A range of ecological and climatic factors have also resulted in significant changes in species populations in past history, and will continue to do so,

despite the best efforts of humans to prevent this. The reality of natural species population changes needs to be recognised as part of threatened species policies.

Farming, by its very nature, involves manipulation of species populations to produce the food and fibre that are essential to human existence. An impact on some species present on farmland is inevitable, and all species are not necessarily essential to ecosystem functions, despite claims frequently made to this effect. Therefore the community as a whole needs to carefully consider its preferred balance between environment conservation and wealth generation, a consideration that will only be rational if all members of the community share both the costs and the benefits of the decisions made. This is not the case with the current legislation, which imposes all the costs on one group in the community, for the benefit of all.

Un-threatening changes are required

Threatened species will start to become “un-threatened” when the very serious flaws evident in current policies are addressed. Farmers need to have legislated security in relation to their continued ability to manage their land, and to be secure in the knowledge that the presence of a threatened species actually creates a potential advantage for them, rather than a significant disadvantage.

The science used to support decisions about whether species populations are declining or increasing needs to be considerably more rigorous, at the very least providing credible evidence of changes in populations over time, and having been subject to independent peer-review.

There needs to be an enforced statutory requirement that fully-funded recovery plans must be developed and implemented within a limited timeframe subsequent to a species being listed, and these plans should be subject to a routine, science-backed review within five years of being implemented. If a plan is not implemented in the required timeframe, the listing should lapse.

The NPWS should also be required to report regularly to Parliament on progress in bringing about species recovery, something that seems to be a sadly lacking component of threatened species policy.

COMMENTS CONTAINED IN THIS DOCUMENT ARE BASED ON INFORMATION AVAILABLE AT TIME OF PUBLICATION.

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