Repair versus despair

Hope and reality in ecological management and restoration

By Richard J. Hobbs

It is with great pleasure that I introduce this new journal. It has been developed jointly by the Ecological Society of Australia and the Land and Water Resources Research and Development Corporation, with Blackwell Science Asia as a joint venture partner. The overall purpose of the Journal is to improve long-term management and restoration of ecosystems by providing an effective link between the findings of scientific research and the needs and actions of on-ground managers.

The new Journal appears at a time when the need for effective solutions to important environmental and social issues has never been greater. Globally, the human population has recently passed six billion, the reality of human-induced climate change is widely recognized, and human activities are changing the earth's ecosystems, both terrestrial and aquatic, at a pace unprecedented in history. Locally, this translates into problems of land degradation, urban congestion, loss of production, loss of species, transformation of ecosystems, and changes to the social and economic fabric of entire regions.

It is often tempting to view these changes in a despondent way. How, in the face of the huge and potentially irreversible changes we are forcing on the earth's ecosystems, can we hope to sustain food production, the quality of human life and the variety of non-human life? Although the problems have been known for some time, the extent of the remedial actions being taken is frequently woefully inadequate. While this is sometimes attributed to lack of knowledge or the unavailability of practical and affordable solutions, often we do have sufficient knowledge to make reasonable assessments of what needs to be done. Instead, the block to action stems from an inability or unwillingness of individuals, institutions and society as a whole to change from current behaviours. If we take salinity as an example, we have known for some time that large proportions of the Western Australian wheatbelt are under threat from rising watertables and salinization, and we have broadly recognized the array of treatments necessary to treat, or at least slow down, the process. Part of the solution is broad-scale replacement of perennial vegetation in the landscape, probably to a level of 20% or more in most areas. While the Landcare movement and local community action has greatly increased the numbers of farmers participating in revegetation and other remedial actions, the results of these actions still sum to only approximately one per cent of the farming area, or at least an order of magnitude less than is required (Hobbs & Saunders 1999). Similar analyses could be conducted on most other environmental issues.

In the face of this, despondency and despair are understandable responses. We certainly have to recognize the enormous reality of the problems facing us. We also probably have to recognize that some of the problems we've created are not amenable to simple solutions — and some may not be amenable to any sort of solution that lies within a reasonable budget and can be applied in a reasonable timeframe. For instance, groundwater rise in some areas of Western Australia may be happening at such a rate that there are no effective treatments that can reverse the situation. In such cases, we need to move from the 'fix-it' mindset which always hopes for and seeks a workable solution, and instead figure out what to do for these 'terminally ill' landscapes and the people that depend on them for a living.

Alongside these sombre thoughts, however, should be more positive and hopeful thoughts about what can be done and how things can change for the better. While we seem to be a long way from implementing effective solutions to many problems, the seeds of change are already apparent. Many people are managing ecosystems more effectively and the potential for ecosystem repair is immense. True, we often need more detailed information on particular situations, and we could still develop much more efficient and effective methods and tools. However, we definitely need to learn as we go, rather than waiting for the final answer or ultimate piece of data — after all, the answer keeps changing, and we'll always need more data!

We should also be hopeful that the necessary changes in individual and societal attitudes and behaviour are possible. One need only think of the radical social and political changes that have occurred this century to see the scope for change — for instance, improved rights and conditions for women across the world, the integration of black people in the United States and the fall of the Berlin Wall to name but a few. Of course, much more remains to be done and changes often bring new problems to the surface, but the point is that things can change, and often rapidly.

A key element in change is hope. I referred to this in a recent President's report in the Ecological Society of Australia Bulletin, but I think it bears repeating here. In their recent book, Peter Newman and Jeffrey Kenworthy suggest that a key element of solving environmental problems is 'practicing hope rather than despair' (Newman & Kenworthy 1999). They suggest that 'hope is not blind optimism; it recognizes the depth of the problem and refuses to

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accept defeat. It is not a feeling — it is a choice', and they quote from a person called Jim Wallis, who works with the urban poor in Washington D.C., who discusses hope thus:

> *Hope is not just a feeling or a mood, but the very dynamic of history. It is the energy of transformation and is the door from one reality to another. What seems impossible looking towards it (e.g. the abolition of slavery in the U.S.) was inevitable with hindsight.*
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> *Between the impossible and the inevitable, between the impossible and possible is a door, and that door is hope. The possibility of the transformation of history lies at that door. On one side of the door of hope is nonsense. On the other side of the door is the best news ever heard. Hope not believed is nonsense. Hope that is believed is transformation.*
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> *Victories and transformation always seem impossible to begin with. They only become possible by stepping through the door of hope. To walk through the door of hope you have to first see it and believe that there is something on the other side. It is never easy. It is always hard! This is particularly so for the first few to walk through. Others then find it easier to follow. And that's how historical changes take place.*
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> *Hope is believing in spite of the others, and watching the others change.*
> [Wallis 1994, cited in Newman and Kenworthy (1999)]

If we are to have hope, I think we need three main ingredients; namely vision, strategy and tactics. The dictionary definition of vision is 'statesmanlike foresight', and implies the ability to see a goal towards which efforts should be directed. Strategy and tactics are concepts used in warfare, sport and other endeavours. Broadly stated, strategy in warfare is the planning, coordination, and general direction of military operations to meet overall political and military objectives. Tactics implement strategy by short-term decisions on the movement of troops and employment of weapons on the field of battle. As Carl von Clausewitz put it, 'Tactics is the art of using troops in battle; strategy is the art of using battles to win the war.'

The broad vision thus answers the question 'Where do we want to go?'. The strategy answers the question 'How do we want to get there?' and tactics provide the answer to 'What actions do we need to take?'. I suggest that all three elements are essential for success, and part of the failure to date can be attributed to the lack of one of these elements. I and colleagues have argued elsewhere that a lack of vision has hampered our attempts to develop strategies for effective management in our agricultural landscapes (Saunders 1996; Hobbs & Saunders 1999). Similarly, strategies are useless unless they are backed up with adequately resourced and planned tactical measures.

This new journal will, we hope, provide contributions in all three of the above areas; that is, developing visions of what we want our ecosystems and landscape to be like, presenting strategies for achieving the goals which arise from these visions, and discussing tactical measures for the management and repair of systems. It seems that in today's world we can't count on our political leaders to provide visions for the future to which we can all agree. Thus, we all need to be in the business of helping society to develop its own set of visions and making sure that we have adequate strategies and tactics available to meet future challenges as well as today's challenges. This is something to which everyone can contribute, including scientists, practitioners, policy makers, economists and many others. If we can collectively concentrate on repair rather than despair, then we will have hope for the future. If this journal helps to achieve this, then it will have been successful.

References

Hobbs R. J. and Saunders D. A. (1999) Nature conservation in agricultural landscapes: real progress or rearranging deckchairs? *Nature Conservation 5: Nature Conservation in Production Landscapes* (eds J. Craig, N. Mitchell and D. A. Saunders), pp. 1–12. Surrey Beatty and Sons, Chipping Norton, NSW.

Newman P. and Kenworthy J. (1999) *Sustainability and Cities: Overcoming Automobile Dependence*. Island Press, Washington, D.C.

Saunders D. A. (1996) Does our lack of vision threaten the viability of the reconstruction of disturbed ecosystems? *Pacific Conservation Biology* **2**, 321–326.

Wallis J. (1994) In *Journal of Sojourners*. Washington, D.C.