Setting the Scene–Remnant Management during the Past Decade

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INTRODUCTION

In this short paper, I summarise ways in which management of native vegetation remnants has changed over the decade 1983–93. My aim is to sketch the more significant changes and thus provide a context for later papers that will necessarily have a narrower focus.

At Busselton in 1985, I outlined (Wallace and Moore 1987) five elements crucial for effective management:

- an adequate research database;
- an adequate technical database;
- an informed and sympathetic public;
- adequate staff and financial resources;
- an accepted philosophy/methodology for drawing together the above and implementing management.

These provide a useful framework for examining the changes over the decade; however, the term "knowledge" is more appropriate than "database", and the inadequacy of the third point will be discussed below.

Of the five points listed, the first is discussed in detail within other workshop papers, and is therefore not considered further here. Also, no attempt is made to comprehensively describe changes; rather, the aim is to sketch the major shifts and issues.

CHANGE AND THE ELEMENTS OF EFFECTIVE MANAGEMENT

Technical Knowledge

The technical information and knowledge among, and available to, managers has improved over the decade. The many advances have included: the more effective field use of herbicides, better techniques for fox control, improved availability and use of computers, and refinements concerning the safe use of fire, particularly in coastal and near coastal ecosystems of the South West. Also, the quality of vehicles and other equipment has generally improved.

However, the value of new technologies has not always been realised, or been accessible to managers. For example, the promise of Geographical Information Systems and remote sensing has not been generally realised (Burbidge and Wallace 1995), and the outlay of resources in these areas should be justified in relation to alternative projects.

Despite these concerns, managers have mostly gained from changes in technical knowledge and equipment. Computers, in particular, have been an important factor in counterbalancing some resource constraints, especially with regard to clerical aspects of management.

An Informed and Sympathetic Public

Since 1983, growing concern due to land degradation has resulted in greater support for management of remnant vegetation. This change is paralleled by increasing public concern for the environment, at least in the United States (Dunlap 1987, 1991). Dunlap's work is of particular interest as it shows that although public support for environmental issues has increased, this is not necessarily reflected in electoral voting patterns. While I know of no Australian equivalent to Dunlap's work, surveys by the Australian Bureau of Statistics (Castles 1993) show significant community concern about environmental issues. Furthermore, although 75% of people sampled were concerned about environmental problems, only 10% had acted to register their concern during the preceding 12 months. Translating concern into effective action is an important and challenging issue.

Despite changing attitudes, uncertainty among key groups as to the value of remnants in landscape functions, together with the rural recession, has countered the positive social changes and detrimentally affected the translation of community concern into action. Specifically, we have failed to convince the public that conservation of remnants is crucial to a satisfactory lifestyle for each human. In my view, nothing less will allow us to achieve our nature conservation goals with remnant vegetation.

Therefore, as a management goal, the heading for this section does not go far enough. The community must not only be informed and sympathetic; it must be personally committed to acting in ways that conserve remnants.

If conserving remnants of native vegetation is not crucial to a satisfactory lifestyle, then we must review our goals. Although there have been some attempts to describe the values of remnants for a wider audience (for example, Hobbs and Wallace 1991), the community has not been convinced.

Furthermore, while aspects of communication and education have greatly improved over the last decade — for example, some of the educational materials and publications produced by the Department of Agriculture, Western Australia (DAWA), and the Department of Conservation and Land Management (CALM) — there have been notable failures. In particular, our inability to effectively educate the community about the complexity of land management issues and the personal values of remnants has been a blow to their protection. Organisational constraints (Wallace 1992; Burbidge and Wallace 1995), political constraints, and the lack of a coherent philosophy (see below) are some of the many factors contributing to this failure.

At the same time, the economic recession, with its attendant cultural change including increased illegal activities and a more fundamentalist approach to economic and political issues, has not helped land managers. While essential, social changes involving Aboriginal issues are also complicating management.

Therefore, although there have been modest gains in education and communication over the past decade, these have not achieved the social change necessary to ensure conservation of remnant vegetation. Additionally, social issues complicate the managers' task and present new challenges for which they are generally ill equipped. Some of these issues and their solution are discussed in Burbidge and Wallace (1995).

Resources

General

Over the decade, resources allocated to management of remnants have increased through a number of sources including:

- increased allocation and better distribution of resources with the establishment of CALM;
- increased interest in remnant vegetation by DAWA, reflected most significantly in the Remnant Vegetation Protection Scheme and its management;
- operation for six years of the State's Remnant Vegetation Protection Scheme;
- allocation of Federal resources to protection of remnant vegetation — for example, through Save the Bush, the States Cooperative Assistance Scheme, funding for threatened communities and species programs, the National Estate Program, parts of both the National Landcare Program and the One Billion Trees Program;
- growing interest in, and assistance with, remnant vegetation protection through the activities of groups such as Greening Western Australia;
- greater protection of remnants by freehold land-holders themselves, independent of any external funds;
- involvement of the Water Authority of Western Australia in remnant protection within higher rainfall areas;
- greater research by CSIRO and tertiary institutions on nature conservation issues in agricultural areas;
- the advent of the landcare movement and the formation of land conservation district committees.

While these increased resources have helped, they are not sufficient to prevent further losses of biodiversity from remnant vegetation in agricultural areas. The need for public and community support is again apparent.

Management Expertise

A second, often forgotten, aspect of resources lies in the quality of managers. Well-trained, enthusiastic

managers achieve much more than untrained or unenthusiastic managers.

As a manager, I cannot claim objectivity in discussing this issue. However, in my estimation, our current managers are on average more technically competent and better informed than they were 10 years ago. This is counterbalanced in part by increased community expectations of managers, and the overwhelming amount of important information that is poorly integrated and largely inaccessible to managers.

Also, a major concern is the difficulty of attracting professional people inland. This has always been so, and affects all government agency managers with whom I have discussed the topic. Given the economic and biotic importance of inland agricultural areas to the State, resolution of this matter is vital. The issues concerned are well beyond the scope of this paper. However, conservation goals will be achieved more often if a larger group of effective professional officers is attracted to rural communities to work and participate as community members. Perhaps it is time to examine the incentives used to encourage people to move to the north of Western Australia. The same techniques may be relevant to southern rural areas.

Finally, the lack of a clear management philosophy to guide managers and help them integrate complex issues into effective management strategies is of concern.

Management Philosophy and Effective Decision-making

One of the needs for successful management I defined in 1985 was an effective management philosophy. While there have been papers that have considered some of the relevant issues (for example, Fairweather 1993; Lefroy and Hobbs 1993; Burbidge and Wallace 1995), they represent work on the foundations of a philosophy rather than a completed structure.

If management is to be coherent, driven by a vital vision, and characterised by effective setting of priorities and decision-making, then the development of an explicit management philosophy is very important. To fully achieve such a philosophy, which ideally should reflect community ethics and cosmology, will be a challenging task in such a young nation with so many divergent, cultural strands.

CONCLUSIONS

Management of remnant vegetation is undoubtedly more effective and better resourced than it was in 1983. However, management is neither sufficiently effective nor well enough resourced to conserve the existing biodiversity at a district or regional level. Furthermore, resourcing is likely to go into decline given the current economic climate and the associated re-ordering of social, cultural and political priorities. An important means of countering these trends is to show people that vegetation remnants and their biodiversity are crucial to them as individuals.

I am not sure if it is increasing age or increasing understanding, but more and more I perceive conservation problems as requiring socio-cultural changes as much as, if not more than, biological research and operational management. Biological researchers and land managers are not equipped to deal with social issues. It is time that we sought the help of social scientists and related workers.

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TEN YEARS ON

A DECADE OF RESEARCH
AND MANAGEMENT

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