How Do We Integrate Nature Conservation with Other Land Uses in the Context of the Western Australian Wheatbelt?

Greg Keighery[1] and David Mitchell[2]
[1]Department of Conservation and Land Management, Woodvale Research Centre, PO Box 51, Wanneroo, WA, 6065
[2]Department of Conservation and Land Management, PO Box 100, Narrogin, WA, 6312

Workshop Group
Penny Hussey, Greg Keighery, Jonathan Majer, David Mitchell and Denis Saunders.

Points from Plenary Session
The following points, raised during a plenary session, stimulated this workshop topic:

- Clearing and values of resultant remnants in the context of land conservation and nature conservation (incremental degradation is occurring, only 10% left, etc.).
- The farmer requires solutions from advisers, not just information or problems (value returns need to be quick).
- Is "fixing" the agricultural system a prerequisite for nature conservation? Is it a prerequisite for sustainable agriculture?
- Is fencing of degraded remnants worthwhile?
- Local versus non-local and exotic species in revegetation — which should be used and when?
- What is the role of economic plants in revegetation?

INTRODUCTION

In the Wheatbelt, we have a matrix of cleared land enclosing scattered remnants of uncleared native vegetation (Crown and private) of varying size and shape. The remnants are the responsibility of numerous different managers. Their management responsibilities are imposed over, rather than aligned with, a mosaic of soil and drainage patterns.

Research indicates that the current system of nature reserves will not sustain the biota of the region within their boundaries, and that degradation of these areas and their biota is occurring at an increasing rate.

Management staff are beset by "day to day" problems and are therefore unable to manage these areas with a long-term conservation goal.

What is required is a sustainable (this implies profitable) system of land use that does not compromise nature conservation values. It was noted that it may be possible to develop a "long-term system" that does not take into account nature conservation; however, many would question the long-term viability of such a system.

The necessity of change is generally accepted, with models having been developed on how such a system would work (see, for example, paper by E.C. Lefroy, R.J. Hobbs and M. Scheltema in *Nature Conservation 3: The Reconstruction of Fragmented Ecosystems*, eds D.A. Saunders, R.J. Hobbs and P.R. Ehrlich, Surrey Beatty and Sons, Chipping Norton, 1993), and there is research aimed at widening the range of agricultural products and systems. However, much of the above is occurring as an uncontrolled experiment, with "bits" being undertaken by individuals, groups and agencies. The timescale of change is more than 20 years, the process is unstructured, methods and results are unrecorded, and information transfer is essentially by osmosis.

How do we assist, hasten and direct this experiment?

PROCESSES

To coordinate and enhance a sustainable system of land use, the following processes are required:

- multilayered education;
- economics (commitment of resources);
- coordination and integration of land management;
- transfer and communication of information.

What actions may participants in this workshop group undertake to increase their effectiveness?

EDUCATION

This topic was dealt with by another workshop group. However, our group highlighted the need for a multilayered effort, including formal education (schools, agricultural colleges, adult education) and informal education (popular media, workshops,

meetings). There is also a need to define what it is we want to teach. Are we raising the general (biological and ecological) knowledge base of land managers so that they can make informed decisions, or at least understand decisions made for them? Or do we require reliable, informative and "user friendly" summaries and "recipes" from research results?

Action

Anyone (scientists, managers, etc.) who is committed to change needs to be able, and perhaps required, to allocate a large proportion (15–30%) of their time to communicating with communities concerning nature conservation issues. This involves talking to both the converted and the unconverted. This commitment should include writing research summaries, media liaison, participation in workshops, talks to landcare groups, etc. Currently, our focus is still too directed to publishing in the scientific literature and talking to the professional land management community. Communication beyond these groups will foster a two-way flow of experience and ideas between all land managers.

Action

Pass on the results of this workshop to decision-makers, by proceedings, media releases, personal contact, and any other available means.

ECONOMICS

A profitable, self-funding system of agricultural land use is a basic requirement. The establishment of such a system will require input from all Australians. It is beyond the scope of this workshop to recommend the allocation of funding to this change; however, the actions recommended will assist in highlighting this need to the public and politicians.

Action

As well as allocation of money, there needs to be a re-allocation of priorities and resources within bureaucracies. All workshop participants are now better placed to enunciate these changes within their groups or organisations.

COORDINATION AND INTEGRATION OF LAND MANAGERS

There is a need to increase effective communication between farmers, shires, Department of Agriculture, Western Australia (DAWA), Department of Conservation and Land Management, Main Roads Department, Westrail, non-government organisations, etc., to ensure that a sustainable land use system is attained.

This and other actions will require additional resources in terms of funding. The scale at which action should take place, and the primary body for integration are difficult to determine. The Environmental Protection Authority and DAWA have defined 84 ecological units in south-western Australia; there are 114 Land Conservation District Committees (LCDCs), and many shires, agencies and individuals (who will do most of the work).

The workshop group felt that the importance of local "ownership" made LCDCs (or similar "grass-roots" based groups) the best bodies for integration. However, they will require additional resources to hire and select personnel, and to maintain a capability to train others.

Action

A focus on interagency cooperation is required. It is essential to speed this with a commitment of additional funding, including recruitment of new staff. These extra jobs cannot simply be "dumped" onto any existing person's or group's current workload. Workshop participants must assist in ensuring that people outside the region (cities and Eastern Australia) realise that funding these changes is a "whole community" responsibility. This will eventuate in the establishment of a self-funding network in the Wheatbelt in the future.

TRANSFER AND COMMUNICATION OF INFORMATION

There is a need for a system that encourages and records the current unplanned experiments. Currently, there exists a growing knowledge base — not enough, but enough to warrant more action than at present. There are several useful models and experiments to build upon. However, managers cannot spend all their time attending open days and workshops.

It would appear that the best action workshop participants can undertake is the first listed above — namely, to spend more time in communicating their research and management results in a wide variety of formats such as local papers, radio, television, meetings, etc. This should ensure that the "message" will reach the target audience and be adopted by some of them, who in turn will spread the message to others.

REMNANT NATIVE VEGETATION
TEN YEARS ON

A DECADE OF RESEARCH
AND MANAGEMENT

PROCEEDINGS OF THE
DRYANDRA WORKSHOP
SEPTEMBER 1993

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT
1995