

Session 5: Views from Other Regions (II): Vision and Experience of the Mid-north Region South Australia

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In the past

In general the native grassy ecosystems throughout South Australia have been very little understood and have had an extremely low profile at all levels of government and the community over many decades. They seemed to become 'the invisible habitats'.

As an illustration of this, although the Native Vegetation Management Act 1983 had stopped broad-acre clearing in the 1980s and about 1000 Heritage Agreements (private land set aside and managed for conservation) were negotiated during this period throughout the State, not one of these was, to our knowledge, for an area of grassland and very few were for grassy woodlands.

Until very recently, there has been:

- Inadequate mapping and knowledge of types and locations of grasslands. For example, government biological surveys were all based on choosing sites that showed up on aerial photographs, which did not pick up grasslands at all. Most planning and policy documents did not mention grassy ecosystems for conservation or management.
- Little information about grassland management and conservation available to the general public and agencies.
- Almost no research in South Australia about grasslands and their management for sustainability and very little research in South Australia about managing grassland biodiversity.
- Little understanding of grasslands in the community and little sensitive management of grassy ecosystems. No community groups with its main objective to manage and conserve grasslands existed in SA. For example, a Friends of Parks group gave up interest and disbanded 10 years ago because, as they saw it, even though the (grassy woodland) park had been set aside for 30 years, none of the shrubs had come back. Tree planting and perennial shrubs were still the dominant management option in many community groups. The Mid-north in particular was an area that most people drove through quickly to get somewhere 'interesting'. This used to be the area about which city people used to say, in lowered voices, "Of course the Burra area was cleared of all its trees for the mines, you know."
- Little management of reserves and roadsides under the care and control of local government for biodiversity conservation in the Mid-north.
- Almost no National Parks and Wildlife SA or Department of Environment presence in the area.
- No state NPWS reserves protecting native grasslands despite managing over 300 reserves. In addition, there are almost no Heritage Agreements (HA) on private land with conservation grassland.
- Limited distribution data for grassland plant and animal species and few programs for rare and endangered species of grasslands.
- Very little money for conservation and management of grasslands for biodiversity.

This is despite small pockets of interest and a few committed individuals making a stand or a start.

More recent events

In the early 1990s the World Wide Fund for Nature (WWF) undertook a study of the composition and conservation status of temperate grasslands of SA, with Michael Hyde (1995). This report made a start to strategically identify the areas of grassland left in South Australia.

In 1996, Vicki-Jo Russell of the Threatened Species Network, through the WWF, undertook probably the first systematic approach to raising the profile of grassy ecosystems through lobbying and establishing a Grasslands Reference Group of community representatives and some government agencies.

In 1997 Millie Nicholls and Ann Prescott, two women who had never met each other, found ourselves job-sharing a part-time job for WWF to raise awareness of native grasslands and to increase the protection and management of them, in the Mid-north of South Australia. Ann was a botanist hoping to improve her grass identification skills and Millie was a fifth generation farmer wanting to learn how to manage her native grass pastures.

The vision

The major objective of the program for the WWF Grassland Extension Officers was to make native grasslands a consideration in most land management decisions in the Mid-North by the end of the grant period. The land managers are farmers on private land while groups and Local Councils manage public land. Over 99% of the grasslands (estimated at some 3-400,000 ha) are on private land and 99% of these are grazed. The remaining 1% on public land has a disproportionate high conservation value because past management decisions, particularly limited grazing regimes and low fertiliser applications in these areas has retained species richness and diversity and has allowed for the retention of species with high conservation value.

If we were to achieve a reasonable biodiversity outcome in the region at both a landscape level and a 'small jewel' level we needed to:

- Achieve a change in grazing regimes that provides an improved biodiversity outcome without a significant drop in economic return to the landholder,
- Encourage some farmers to retire land from production by purchase or by HAs, land management agreements with incentives or personal land management decisions, and
- Improve native vegetation management on public lands and conserve areas under HAs.

There was a very low recognition of native grasslands as part of the local landscape and as the base of most grazing paddocks. The program highlighted native grasslands to as many individuals, groups and agencies as could be reached through the media, field days, talks, discussions and meetings. Local Councils and "greening groups" were the focus to improve management on public land.

On private land, emphasis during this program was to foster interest in and encourage a change in grazing regimes to simple rotational systems via provision of information of interstate work and promoting some demonstration grazing sites. In addition, the Extension Officers highlighted existing management techniques which protect grasslands through farm visits and field days. We encouraged interest in farm-scale demonstrations of rotational grazing and other management options which promote biodiversity without a significant drop in farm income.

Options for conservation of grasslands through such instruments as HAs were canvassed where appropriate.

Objectives for the Project were therefore to:

- Increase knowledge and awareness of temperate native grasslands conservation and appropriate grazing management,
- Promote the protection of significant grasslands remnants,
- Build the capacity of regional organisations to conserve grasslands in the longer term, and
- Document and promote the successful methods used to promote grasslands in the Mid-north so that they may be replicated in other regions.

In the past five years

In the past five years, native grassland awareness, activities, and management have changed significantly in the Mid-north and elsewhere in South Australia.

Improved knowledge gathering, planning and policies

Advances include:

- A much more useful predictive map of where native grasslands exist using slope rather than aerial photograph interpretation prepared by DTUPA, GIS unit.
- Preliminary grassland survey work and report by M Hyde (1995).
- More extensive grassy ecosystem survey work and report by M Robertson of grassy ecosystems of the area (1998).
- The recent Draft Regional Biodiversity Plan for the Northern Agricultural District prepared by DEH included sections on grass ecosystems.
- Grassland issues have significantly increased in emphasis in both the revised Hummocks and the West Broughton Soil Conservation Board District Plans.
- Grassland issues increased in emphasis in, for example, the Mount Lofty Ranges (MLR) Regional Revegetation Strategy.

Improved information and extension work

Advances include:

- First set of good basic information sheet set and a teacher education material package established for the Mid-north.
- WWF has had two part-time extension officers working in the Mid-north over the past 4 years. We have visited over 120 private landholder properties, with the landholder in attendance, and other sites, and presented talks at over 50 field days and over 30 workshops. Over 50 articles have been published in newspapers, newsletters and journals.
- The Nature Conservation Society of South Australia (NCSSA), under its NHT Bushcare Support contract is now beginning a similar smaller extension and awareness raising program on Eyre Peninsula, another area with good grassy ecosystems which have been seriously under-rated in the past and where little work has been undertaken.
- The Native Grass Resource Group (NGRG) has been established in the Mount Lofty Ranges for several years. The NGRG has the vision to 'promote and facilitate identification, conservation, and protection of native grasses, to research and develop propagation and management techniques and to act as a focal point for the community and agencies in the Mount Lofty Block.' It is undertaking similar work. It has conducted a series of field excursions over the last 2 or 3 years, prepared grass fact sheets and this year it held grass identification workshops for members.
- The Hart Field Day Committee, which runs the largest annual one-day Field Day in the State, has allocated land for permanent demonstration plots of native grasses on its Field Day site in the Mid-north.

Increased research

Advances include:

- The Mid-north Grasslands Working Group (MNGWG), constituted this year, is sponsoring both demonstration sites and scientific grazing trials on eight properties in the Mid-north. These are testing rotational grazing systems to maintain sustainability and biodiversity. All participating farmers are also undertaking the first Pro-Graze course run in the region.
- The NGRG is managing a grazing trial as part of a larger Murray Darling Basin Commission (MDBC) research program on water use by native grasses, as well as research on collecting and establishing native grasses, and using native grasses in vineyards.
- Dr Jose Facelli at the University of Adelaide is now supervising several research programs at Honours and PhD level on grassland biodiversity and systems in the Mid-north.

- Rick Davies (1997) undertook some primary research on weed management on grassy ecosystems in the MLR.
- The Hummocks Soil Conservation Board is undertaking a 'Gaining Ground In Goyder' program which includes looking at native grass pasture management.
- Primary Industries and Resources SA (PIRSA) is just starting a 'Native Pasture Management' program which includes looking at native grass pasture management on Eyre Peninsula and eastern MLR.

Improved conservation and management of grasslands by community groups

Advances include:

- Much improved understanding of grasslands and more attention to managing grassy ecosystems in several community groups.
- Yacka-Moorundie Landcare Group has fenced some 350 ha of grassy ecosystems on 14 properties throughout the Mid-north under land management agreements.
- Mid-north Grasslands Working Group (MNGWG) has been established to administer the NHT Targeted Investment Program called "Conservation and Sustainable Management of Native Grasslands in the Mid-north". The voting members are all local landholders.
- The NGRG community group established.
- The National Trust of South Australia has over 20 native vegetation reserves, including several with grassy ecosystems, and is now actively managing many of them using Friends volunteer groups. Enid Robertson from the NT was undertaking leading edge minimum disturbance techniques of weed control in a 32 ha grassy woodland reserve 'Watiparinga' from the 1970s, several years before the concept had this name applied to it by the Bradley sisters in Sydney and many years before other community groups in SA understood grassy ecosystems.
- Large sections of grassy ecosystem land had been given up by government agencies and other organizations as 'lost' to weeds such as olives (*Olea europaea*) and boneseed (*Chrysanthemoides monilifera*). However, for example, the Friends of Belair National Park have restored many hectares of grassy woodland through slow persistent careful hand pulling of boneseed over the past 5-10 years. Pat and Peter Clark have similarly restored areas of the SA Water Millbrook reservoir from Gorse (*Ulex europaeus*) infestations. The National Trust has done similar work with olives at 'Watiparinga' and adjacent local government land.

Increased local government involvement

Advances include:

- Northern Areas Council undertaking a roadside survey and roadside marker program of the grasslands under its jurisdiction, using funds obtained under the WWF/NHT Grassy Ecosystems grants. This will serve as a model for other councils.

Increased State government involvement

Advances include:

- NPWSA Ranger office and staff now located in the Mid-north for the first time, at Burra.
- Regional ecologist for the Mount Lofty Block appointed for the first time, with 40% time dedicated to grassy ecosystems.
- Grassy Ecosystems Technical Advisory Group established to provide scientific and policy advice and general support to grasslands conservation issues meeting regularly with clear terms of reference.

Improved conservation of habitats

Advances include:

- Transfer of two Forestry SA reserves with areas of box grassy ecosystems to the NPWS reserve system at Mount Brown Conservation Park and Mount Remarkable National Park.
- First grassland reserve at Mokota Conservation Park, near Burra, 460 ha of Lomandra grassland gazetted and a second parcel of land with Lomandra grassland purchased near Murray Bridge.
- Several small applications for Sanctuaries and/or Heritage Agreements under way.

Improved conservation of rare species

Advances include:

- Spalding Blown Grass (*Agrostis limitanea*), believed extinct, was rediscovered in the 1990s in the Mid-north. Subject to a recovery program.
- Spiny Daisy (*Acanthocladium dockeri*), one of the rarest plants in Australia with only 5 known herbarium collections, believed extinct, was found to be a grassland species in the Mid-north. A farmer taking an interest in plant species after attending grassland workshops in the area rediscovered it in 1999. Only four populations (and probably only four genetic plants) are known. Subject to a recovery program.
- Pygmy Blue-tongue Lizard (*Tiliqua adelaidensis*), considered extinct and rediscovered in 1993 in the Mid-north, was found to be a grassland specialist, not a mallee species as predicted. Recently the known population sites have been increased into new areas. Subject to a recovery program.

Increased funding for conservation and management

Advances include:

- Several groups are receiving WWF Grassy Ecosystems grants under NHT this year and there will be a healthy number of applications this year.
- The MNGWG is managing a small devolved Incentives Grants Program under the NHT project “Conservation and Sustainable Management of Native Grasslands in the Mid-north” for conservation of grasslands in the Mid-north. The first call is in progress.

Work still to be done

James Ross (1999) outlined nine elements of a best practice stewardship model for conservation of temperate native grasslands programs. The WWF Extension Program has many of these elements. The combination of local knowledge, extension expertise, botanical skills, and an extended time period have all contributed to the successes.

There is still a lot of work to be done to ensure that grassland and grassy ecosystems issues are incorporated into conservation policies, programs and priorities at all levels of government and community. This includes obtaining adequate representation of the remaining limited areas of good grassland and grassy ecosystems in long term conservation areas such as reserves, Heritage Agreements or land management agreements.

However, a good start has been made and we think that nothing will ever be the same again in the Mid-north.

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We apologise to any significant people or programs we may have overlooked in this overview of the grassland issues in South Australia, with particular focus on the Mid-north.

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