

Sustainability in the southern rangelands

Pastoralists in the Gascoyne-Murchison region are progressing toward sustainable production. Pastoralists have been assisted by the Gascoyne-Murchison Strategy (GMS) in formulating and coordinating a number of sustainability initiatives.

The GMS is a regional program, launched in 1998 to reinvigorate the social, economic and environmental aspects of the pastoral industry in the Gascoyne-Murchison region. The Strategy operates as a partnership between industry, government and stakeholders: the Department of Agriculture acts as lead agency.

The GMS is comprised of four core programs, one of which is the Regional Environmental Management Program (REMP). The aim of this program is to improve natural resource management across the region and promote sustainable pastoral production.

Through REMP, a number of initiatives have been developed to facilitate pastoral sustainability. The achievements of pastoralists involved in two of these initiatives - the Ecosystem Management Unit and Rangelands Accreditation Project - demonstrate significant progress toward sustainable rangeland management.

Identifying critical ecological issues – The Ecosystem Management Unit

The Ecosystem Management Unit (EMU) is a mapping and monitoring process designed by pastoralists and ecologists to help station managers conserve the landscapes and ecosystems within their station boundaries.

Over the course of a two-day workshop, pastoralists record key landscape and ecological information on maps of their stations. This information includes the location of waters, breakaways, drainage systems, areas of erosion, and eco-junctions. Eco-junctions are a particularly important part of EMU. As areas where many land types come together, eco-junctions represent local biodiversity 'hotspots'.

The initial EMU workshop helps pastoralists to capture their knowledge of the land on reference maps. Mapping provides an understanding of critical management issues from an ecological and production perspective. Once these issues are documented, pastoralists can strategically monitor the condition of significant areas and instigate management controls where necessary. The mapping workshop represents the first step in a process of ongoing learning.

The simplicity and effectiveness of EMU is popular with the pastoral community. Participants have indicated that through ecological management they can improve their use of the land and care for specific ecological values at the same time.

So far, close to six million hectares of the Gascoyne-Murchison region have been volunteered for the EMU treatment. Real environmental improvements are already apparent: rare plants species have been identified and management plans developed. Plans are also under way to protect fragile land systems and areas of regional biodiversity value.

Station-level monitoring, based on EMU, is complemented at a strategic level by the Western Australian Rangelands Monitoring System (WARMS). WARMS is a regional monitoring program that enables assessments to be made of overall range condition.

Connecting to 'clean, green' markets – Rangelands Accreditation

There are widespread consumer demands for safe food and fibre products. Increasingly these demands are broadening; many consumers are now seeking food and fibre products that also come with an assurance of low environmental impact. By virtue of their free-range, low-chemical production techniques, well-managed pastoral properties are in an ideal position to satisfy demands for safe and sustainably produced – “clean, green” - products.

Whilst EMU is assisting pastoralists to improve their management of the rangeland, the process cannot verify a clean, green image: an independently audited management system that focuses on product quality, safety and environmental management can.

At the beginning of 2001, the managers from three stations – Challa, Minilya and Winderie - began trialing various management systems in an attempt to find the most suitable means of assuring product safety and environmental responsibility in the rangelands. Each of the stations had already completed the EMU process. Of the systems trialed, an integrated SQF 1000^{CM} system, which combines environmental issues with product safety and quality hazards, has proved to be most suitable.

SQF 1000^{CM} is a quality assurance code that offers food and fibre businesses a means of verifying the safety and quality of their products (SQF means Safe Quality Food). Whilst the code does not deal with environmental issues specifically, the risk assessment and management processes used for safety and quality hazards can be applied to environmental issues to develop an Environmental Management System (EMS). An EMS is a management tool that a business can use to continually improve its environmental performance.

To develop their management systems the managers:

1. *Conducted a safety and quality risk assessment and an environmental review*
 - Product specifications were determined
 - Product safety and quality hazards were identified using HACCP
 - Legal obligations to manage the environment were identified
 - Environmental hazards were identified and the level of risk associated with each hazard was assessed to determine management priorities.
2. *Developed management plans for each priority issue.*
 - Critical limits, objectives and targets were determined for each priority issue
 - Control methods were documented
 - Monitoring requirements were identified and recorded
 - Responsibilities were assigned
3. *Developed supporting documentation and records, including:*
 - A business policy statement
 - Standard operating procedures
 - Chemical treatment records
 - Range condition assessments

By June 2002, each of the stations will have had their management system independently audited, after which time they will have a foundation for launching a credible 'clean, green' marketing program. EMU has helped the managers to work towards ecological sustainability and ensures they are producing 'green' products. SQF ensures they are controlling critical product safety and quality hazards and producing 'clean' products. It also enables their 'clean, green' claims to be independently verified.

The EMU and Accreditation initiatives are helping the pastoral industry to prepare for future change. It is inevitable that pastoralists will one day be held accountable for their use of public resources. Whilst demands for 'environmentally-friendly' goods are just beginning to emerge, current trends suggest that environmental credentials will also become important in product marketing. Having some form of environmental management and accreditation system will help to demonstrate responsible management, whomever the audience.

The Australian Conservation Foundation, Conservation Council of Western Australia and Worldwide Fund for Nature have given informal support to the process currently being pursued in the rangelands; it is anticipated that formal support will be granted once commitment to progressive environmental management has been demonstrated.