

# Ecological Sustainability - Outback Style

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Ecological sustainability: it is the ultimate challenge facing Australian agriculture. These days, everyone is demanding that producers become ecologically sustainable - the government, industry and even consumers. In fact many of the main advocates of ecological sustainability are producers. Whilst there can be no doubt that it is a necessary challenge, is it an achievable one?

A farm or pastoral lease is a business, and like any other business it has financial obligations that must be fulfilled. Unless ecological sustainability can make a meaningful financial contribution, it will have to take a backseat to these more pressing concerns. Or will it? With support from the Gascoyne-Murchison Strategy and Natural Heritage Trust, several West Australian pastoralists are challenging this idea. They are in pursuit of ecological sustainability, not only to secure their long-term future on the land, but also to keep a smile on the face of their bank manager. Their secret? EMU and EMS.

## **EMU - a means of achieving ecological sustainability**

The Ecosystem Management Unit, or EMU as it is better known, is providing pastoralists in the Gascoyne-Murchison region with a means of achieving ecological sustainability. Developed by pastoralists and ecologists, EMU is a mapping and monitoring process that helps pastoralists to manage the landscapes and ecosystems within their station boundaries.

Over the course of a two-day workshop, pastoralists pool their years of local knowledge with the expertise of the EMU ecologists. Each workshop begins with pastoralists recording key landscape and ecological information on maps of their stations. This information includes the location of waters, breakaways, drainage systems, areas of erosion, and ecojunctions. Ecojunctions are a particularly important part of EMU. As areas where many land types come together, ecojunctions represent local biodiversity 'hotspots'.

Once all key features have been noted, pastoralists and the EMU ecologists use the information recorded on the station maps to determine management priorities and options. For many stations, an immediate action is to include a number of these priority areas within their existing monitoring system.

The simplicity and effectiveness of EMU is proving popular. So far, close to six million hectares of rangeland in the Gascoyne-Murchison region have been volunteered for the EMU treatment, and the environment is benefiting. Fragile country is being protected, new grazing programs are in operation, steps are being taken to conserve rare plant species and monitoring is becoming more strategic. EMU is certainly taking pastoralists down the path to ecological sustainability, but how will this keep their bank managers happy?

## Tapping into 'clean, green' markets - EMS in the rangelands

Early last year, Challa, Minilya and Winderie - three stations in the Gascoyne-Murchison region - completed the EMU process. Enthused by the results and aware of growing interest in safe and sustainably produced goods, the stations decided to look at ways of promoting their 'clean, green' image. To make sure the markets would accept this image, they set about having their claims independently verified.

Whilst EMU had helped the stations with their management of the environment, it could not verify their 'clean, green' image in a way that the markets would recognise. The experience of other industries already involved in 'clean, green' initiatives suggested that an environmental management system (EMS) might be the answer. An EMS is a management tool used by businesses to continually improve their environmental performance. An independent audit of the system can also help a business to demonstrate and promote a commitment to responsible environmental management.

Supported by staff from the Gascoyne-Murchison Strategy and with funding from the Natural Heritage Trust, the stations decided to test two systems in an attempt to find the best EMS for pastoral producers. ISO 14001 and the SQF 1000<sup>CM</sup> quality code were selected for trial.

ISO 14001 is an internationally recognised standard for EMS. The standard sets out the generic EMS components that can be used by any business to achieve a continual improvement in environmental management. To be eligible for ISO 14001 certification, a business must identify and begin managing any significant environmental issues caused by their production activities. They must also ensure that they are complying with all relevant legal obligations.

The SQF quality assurance codes offer food and fibre businesses a means of verifying the safety and quality of their products (SQF means Safe Quality Food). There are two SQF codes: SQF 2000<sup>CM</sup> and SQF 1000<sup>CM</sup>. SQF 2000<sup>CM</sup> can be used by any food and fibre business including horticulturalists, smallgoods manufacturers, animal feed producers, and transport and storage businesses. Producers of products that have minimal safety and quality risks, or that require further processing, can use the SQF 1000<sup>CM</sup> code to demonstrate compliance with food safety standards and customer quality requirements. The code is particularly suited to grain, livestock, and wool producers.

The SQF codes are not industry-specific, which means they can be used by either single enterprise properties or properties with multiple enterprises: a farm producing both grain and livestock can develop an SQF system that enables both enterprises to be covered in a single third-party audit. The requirements of other quality assurance systems, such as Cattlecare and Flockcare, can also be incorporated within an SQF system and covered under a single audit.

Whilst the codes do 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 EMS. The SQF codes were developed in Australia, but are now used and recognised internationally.

## Testing the options - ISO 14001 and SQF 1000<sup>CM</sup> on trial

ISO 14001 systems were trialed by the Dowden family on Challa Station and by Carpenter Agriculture on Minilya Station. The SQF 1000<sup>CM</sup> system was trialed on Challa and Minilya, and also by the Kempton family on Winderie Station. EMU provided the systems with a foundation for landscape and biodiversity monitoring.

Developing the systems was not always easy: there were the normal activities of mustering, shearing and livestock management to work around, and being pioneers of EMS in the rangelands added a set of unique challenges. However, with some assistance from appropriately skilled consultants, the systems for each station are essentially complete; independently verified 'clean, green' claims are now only an audit away.

For the stations involved, the trials have been a real learning experience. Before the trials began, the station managers had only heard about EMS and quality assurance systems. They now have first hand experience of such systems and their impression is favourable, particularly when it comes to SQF 1000<sup>CM</sup>.

SQF 1000<sup>CM</sup> has provided the stations with a simple but recognised approach to quality assurance. Including environmental issues into the system, as an EMS, has made it even better. For the managers of Challa and Winderie, the strength of their SQF system comes from the fact that it addresses both quality and environmental issues, enabling them to take full advantage of all their natural assets. For the managers of Minilya, it is the simplicity of the system that has been most attractive. Paperwork is not popular with many pastoralists, but with SQF time in the office is usually kept to a minimum.

Whilst the stations were also positive about their ISO 14001 experience, they are not looking to implement their systems at this stage. The managers of both Challa and Minilya felt that the standard exceeded their current requirements. If markets start to demand the use of ISO 14001, then the stations may consider implementing and certifying their systems.

Now that the systems have been developed, the stations have a foundation from which to launch a credible 'clean, green' marketing program. SQF 1000<sup>CM</sup> commits them to managing critical product safety and quality hazards and enables them to promote the fact that their products are 'clean'. By including an EMS within this system, the stations have committed to continually improving their management of the rangelands and have verified that they are managing the significant environmental issues on their leases. Developing an EMS has helped the stations prove that they are committed to producing 'green' products.

With these foundations in place, the managers of Challa, Minilya and Winderie are planning their next steps, the first of which will be to have their SQF systems - including the EMS component - audited and certified. They feel that certification will give them a strong foundation from which to begin promoting their 'clean, green' image. Then there are neighbours to be encouraged and markets to contact. There is even talk of developing a rangelands environmental label. If all goes according to plan the bank manager should be smiling any day now...

## Recognition for a job well-done

The Dowden family has been managing Challa Station for more than a century: working hard to produce quality merino wool and maintain the station's natural resources. With growing community interest in the environment, the Dowdens feel it is time that the family's commitment to the rangelands was recognised.

John Dowden, who manages Challa with his wife Fran and son Ashley, wants to use quality assurance and EMS to differentiate his products, proving to the world that rangeland goods are 'clean and green'.

"We have to take advantage of all the natural advantages we have, like our management of the environment. This is where our market edge is. We don't use any herbicides, pesticides or fertilisers on our pasture, this is basically a natural production system." John said.

Challa is an 87 000-hectare lease, situated 600km north of Perth in the semi-arid shrublands of the Murchison region: traditional merino country. Whilst merino wool is still the station's main enterprise, tradition has not stopped the Dowdens from making the most of new ideas. The Dowdens are keen to take on the challenge of quality assurance and EMS. The way John sees it: "Adding value is what it is all about. If you don't give it a go, you won't know if it works. We want quality assurance and EMS to confirm what we are doing right and to make sure we change where we need to. Hopefully we will benefit with financial returns."

Whilst the Dowdens are pleased with their SQF 1000<sup>CM</sup> management system, they are keen for other producers to start verifying their 'clean green' image. As John says: "With consumers wanting cleaner, greener products, just producing from the rangelands is a start, but more pastoralists need to get involved so that bigger markets can be targeted and a wider production time can be achieved."

## Meeting market demands

Success for Carpenter Agriculture, a West Australian beef-cattle company, is all about producing what the market requires. More than ever, that means providing assurances of product safety and sustainable production practices, as well as meeting required quality specifications. According to Geoff Eliot, the company's Research and Development manager: "The world wants clean, green products from intact-environments."

Sound resource management has always been one of the company's primary objectives, so the decision to investigate 'clean, green' management and marketing options on Minilya Station was easy to make.

Ben Edmunds manages Minilya, a 286 000-hectare beef-cattle lease situated 150 kilometres north of Carnarvon, on behalf of Carpenter Agriculture. Both Ben and Geoff have been instrumental in trialing ISO 14001 and SQF 1000<sup>CM</sup> systems on Minilya. Developing the systems has helped the managers to identify the best way of verifying the station's 'clean, green' image.

Geoff believes that: "The SQF system is currently best for Minilya. It is simple: a good starting point for producers. It can be used to cover product and environmental issues and can give a marketing edge." He says that Carpenter Agriculture may soon look at using the system to "help market our produce within Australia and overseas."

Whilst Geoff feels that ISO 14001 is a good system, he believes that it exceeds the current needs of Minilya, mainly because it requires quite a lot of paperwork. "ISO 14001 would be difficult for most pastoralists to use as a starting point. I think it is better to develop to this over time." Geoff said.

Geoff says pastoralists should choose the approach that best suits their business, but believes that there is no time to waste. "Pastoralists must promote the things that separate them from other producers. It is essential that pastoralists become involved (in quality assurance and EMS). If they don't they will be left behind." he said.

## Preparing for the next challenge

Elaine Kempton loves a challenge and it shows. Since taking over as manager of Winderie Station, Elaine has taken on some impressive challenges - such as her decision to move out of wool and into the goat business.

Winderie has always produced wool. Since the day it was settled, the 86 000-hectare lease has run merinos: a tradition that the Kempton family continued when they acquired Winderie in the late 1940s. However, by the 1990s, continued low wool prices forced Elaine to look for an alternative. The alternative was goats.

Undeterred by her neighbours' consternation, Elaine has gradually established a substantial herd of Boer and domesticated goats. In fact, goats are now the station's main enterprise. The success of her goat venture has encouraged Elaine to embrace other new ideas; the most recent of which has been to tackle environmental management and 'clean, green' marketing.

Elaine believes that, in the long term, many markets will require verified assurances of product quality and environmental management. However in the short term she feels that there may be an opportunity to receive better returns for animals that are verified as being 'clean and green'. Differentiating products along these lines may also be a way of attracting repeat business.

As a first step, Elaine decided to work through the EMU process to get an idea of how she could improve environmental management on Winderie. EMU has helped Elaine to identify 'management hotspots'. Elaine has formalised her management of these areas in her SQF system.

Elaine believes that the EMU process has been excellent for informing her about the landscapes and ecosystems on Winderie. EMU has increased her environmental awareness and helped her set new priorities for the way she operates. Her SQF system should help her to promote the quality of her animals and her commitment to the environment.

Elaine now feels better equipped to tackle her next big challenge - 'clean, green' marketing. "We all need to be aware of market needs and environmental conditions. We will need assurance systems in the near future to market our animals," she said.

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