Sustainable Wildlife Enterprises

Can the commercial value of wildlife act as an incentive for landholders to restore on-farm habitat?

This brochure describes how organisations and individuals are taking part in pioneering sustainable wildlife trials and aims to inspire new participants.

Rural Industries Research and Development Corporation
SWE is an initiative of the Rural Industry Research and Development Corporations (RIRDC) Rangelands and Wildlife Programme. The initiative seeks to trial new ways of managing native species to provide profitable and sustainable income generating options for landholders.

**Commercial enterprises using native resources**

A Sustainable Wildlife Enterprise (SWE) is a commercial business based on the sustainable use of native plants, animals and/or landscapes which evolved in Australia’s unique environment. Enterprises are based on the growing markets in ecotourism, bushfood products and farm forestry, and may also provide the foundation to access existing and future markets in conservation credits such as carbon and biodiversity.

A SWE can be a component of a mixed farming system, operating along side conventional farm enterprises such as

**Why native resources?**

Conventional agriculture typically utilises foreign species of plants and animals, many of which require significant resource inputs (pesticides and fertilisers) to achieve production levels competitive with world markets. In combination with Australia’s fragile soils and variable climatic conditions, some conventional farming techniques have led to broad scale environmental degradation, particularly in Australia’s rangelands where low soil fertility and rainfall limit natural production capacity.

Native species are well adapted to these conditions, allowing them to survive our climatic extremes and thrive in our soils. They, and the natural landscapes that support them, perform many key functions that maintain soil health, water and air resources, and provide the foundation of our landscape productivity.

Attaching a value to native resources through commercial development has the potential to provide alternative sources of income in areas where conventional farming may no longer be sustainable or profitable. The SWE initiative seeks to determine whether commercial recognition of these values and different ways of regarding ownership can also provide environmental benefits. Allowing landholders to capture this value has worked well in southern Africa, Europe and North America.
Regional trials focused on regional outcomes

RIRDC with the support of the Department of Agriculture, Fisheries and Forestry (DAFF) National Landcare Program (NLP) has established two regional trials known as Wildlife Management Conservancies (WMCs), one at the junction of the Murray and Darling rivers, New South Wales, and the other in the Maranoa Catchment, Queensland.

The trials are aiming for broad scale improvements in resource condition across regions. Each conservancy is comprised of landholders working collaboratively with regional land management bodies and support agencies including Aboriginal land managers to address collective natural resource management concerns and priorities.

Mapping is a key aspect of the process and innovative software is being trialled that enables scaling up and down of information from property level to regional priorities and incorporate Environmental Management Systems and accreditation for achieving standards are a feature.

RIRDC is also supporting SWE trials by the Barrier Area Rangecare Group and the Future of Australia’s Threatened Ecosystems (FATE) program of the University of NSW, and on Bullo River Station in the Northern Territory.

The importance of biodiversity

Biodiversity is the foundation of landscape health. In conventional agricultural production systems and in sustainable wildlife enterprises it maintains and re-generates the lands resources so that they can meet current and future needs. Biodiversity covers the wide variety of plants and animals, their interactions, and the physical environment in which they exist. When in balance a stable system exists which helps moderate the impact of environmental extremes and maintain the productive capacity of the land.
Maranoa Wildlife Management Conservancy

Located in the Booringa Shire, at Mitchell, Queensland, the MWMC is predominantly cattle country. However, it also supports grain production, small-scale sheep and goat production and forestry. The Conservancy is growing, with a core of 22 members from two established Landcare groups covering 300,000 hectares.

Involvement in SWE is seen as an opportunity to develop commercial enterprises and diversify farm incomes, whilst addressing joint land management concerns including:
- total grazing pressure
- soil fertility and productive capacity
- water resource management
- native vegetation management including regrowth, forestry resources and remnant vegetation
- pest management including parthenium, macropods, dogs, pigs, and possibly cats and foxes.

Feasibility studies, conducted as part of the SWE project, indicated potential opportunities for greater landholder involvement in the kangaroo industry and native forestry including cypress and native lime production.

Since its establishment in 2005, the group has completed detailed land use and vegetation mapping, as part of regional sub-catchment planning. The data collected is currently being integrated into a GIS system incorporating information on land use, and will provide the foundation for monitoring programs to assess the success of trial enterprises in achieving commercial and land management objectives.

An operational team consisting of key landholders and staff members from collaborating organisations, including the Mitchell and District Landcare Association and Queensland Murray Darling Committee, provide key support to the project with on-ground and scientific expertise, in addition to the facilitation of industry partnerships.

Barrier Area Rangecare Group (BARG)

The BARG, consisting of 27 pastoral properties north of Broken Hill in NSW’s semi-arid rangelands, is supported by the FATE Program based in the Faculty of Science at the University of New South Wales (UNSW). BARG includes UNSW’s Fowlers Gap Arid Zone Research Station.

This trial is exploring ways in which BARG members can work together to manage kangaroo harvesting activities across property boundaries in a way that generates economic returns for landholders as well as delivering more flexible management of total grazing pressure.
By managing free-ranging kangaroos as a common pool resource, collaborating properties are hoping to add value to the existing kangaroo industry and gain returns through improved supply chain control, improved harvest efficiency, increased collective bargaining power and unique marketing opportunities.

The project is complemented by a kangaroo marketing project being undertaken jointly by FATE and the University of Technology Sydney (UTS) with the support of RIRDC’s New Animal Industries program. Kangaroo meat is increasing in exposure and availability in Australia’s supermarkets and restaurants, but there has been little uptake of kangaroo in the small goods and meat manufacturing sector. This is in contrast to export markets such as Russia, which have found kangaroo to be a valuable low-fat component for smallgoods.

Murray Darling Rangeland Conservancy

The Murray Darling region is renown for the grand rivers that have been its lifeblood since early settlement. Located on the south west border of New South Wales and Victoria, the Conservancy is made up of eight initial landholdings, many with Murray River, Darling River or Annabранch frontages.

All properties suffered severe degradation in the late 1800s and early 1900s, particularly along the river corridor where watering points were subject to heavy localised stocking. Riparian management and total grazing pressure remain key land management concerns, with dryland salinity and localised extinction of native species also seen to impact on landscape health and commercial viability.

The Conservancy grew from the Barkindji Biosphere and includes members with an ongoing interest in sheep grazing in addition to SWE, as well as those interested in destocking and pursuing enterprises based solely the use of native wildlife resources.

Enterprise options being developed include:
• eco-tourism and agricultural tourism
• bushfood production
• macropod harvesting, and
• markets in ecosystem services including biodiversity and carbon credits.

A key member is the Trust for Nature, who in 2002 purchased Neds Corner, Victoria’s largest privately owned property. The Trust is firmly focused on the conservation and restoration of the sites ecosystems and has also undertaken significant restoration projects on the historic homestead and shearers’ quarters to maintain the cultural heritage of the site.

Landscape Function Analysis, a monitoring framework developed by CSIRO, is being implemented across the Conservancy to assess current landscape health, and to provide a baseline against which changes in landscape function can be measured against changes in land use and land management practices as a result of SWE.
Supporting landholders in making change

The SWE trials support participating landholders by providing access to administrative and scientific expertise in planning, establishing and marketing enterprises and in evaluating commercial, natural resource and wildlife management outcomes.

Landholders gain feedback and access to up-to-date research through a framework of adaptive management, a process aimed at achieving ongoing review and improvement of management practices.

Best Practice – a pathway to enhanced sustainability and profitability

The trials promote best practice in land management and enterprise operation. By identifying inefficiencies and streamlining production systems, best practice guidelines reduce direct and indirect costs and lead to lower inputs and higher quality outputs.

The development and application of best practice is not limited to native wildlife enterprises, but includes conventional land uses. This way, the SWE initiative provides landholders with the opportunity to explore new and innovative industries based on the use of native species and landscapes, whilst maintaining and enhancing the profitability and sustainability of existing farm activities.

Achieving premium prices for premium product

Effective marketing and product differentiation is essential in ensuring market demand and premium prices are achieved for produce.

The trials will determine whether accreditation as a sustainable production system will enable the WMCs to obtain premium prices for their products. It is envisaged that WMC members will gain access to higher valued markets through the development of collective marketing strategies highlighting the environmental credentials of WMC products, including those derived from conventional enterprises.

Accreditation will be informed through assessment of wildlife management plans, which will include provisions for animal welfare to applicable activities. Produce will be marketed as having conservation benefit, with regional WMC branding applied to all WMC products.

RIRDC is examining farm management software systems that assist landholders comply with the requirements of an Environmental Management System and define the attributes of a Wildlife Stewardship Scheme using the Marine and Forestry Stewardship Schemes as a model.
Implementation Cycle
The four-stage implementation cycle is running over a five-year trial period

1. Wildlife Conservancies
Regional wildlife plans integrate habitat management, sustainability and property management plans

2. Production Income
Landholders initiate commercial utilisation of their resources to generate income
- Bush tucker
- Meat & Skins
- Plant Products and Medicines
- Tourism, Wildlife Spotting, Accommodation
- Ecosystem Service, Water Quality, Carbon Credits
- Seeds, Live Plants & Animals for conservation restocking

3. Marketing
Net conservation gain

4. Adaptive Management
Monitoring and evaluation of collected information is fed back into the wildlife and property management plans adding value

Marketing
Retailers handling WMC products label them as having come from land and production systems demonstrating a net conservation gain.

Tourism
The WMCs are commercial partners in ecotourism.

Bush Tucker
Native species of both plant and animals adapted to the Australian environment are used in production.
Further Information:

To register your interest in these trials and receive more information visit the SWE website at www.rirdc.gov.au/swe and complete the form.

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