

Nature Conservation

A growing land use in the Lockyer Valley

Private land: for wildlife and the environment

4000 hectares of privately owned land held by nearly 100 landholders is registered as part of the voluntary Land for Wildlife scheme in the Lockyer catchment. A smaller area is covered by Nature Refuge covenants which are attached to the title of the land. Beyond this there are many more properties that are managed by individuals with wildlife in mind.

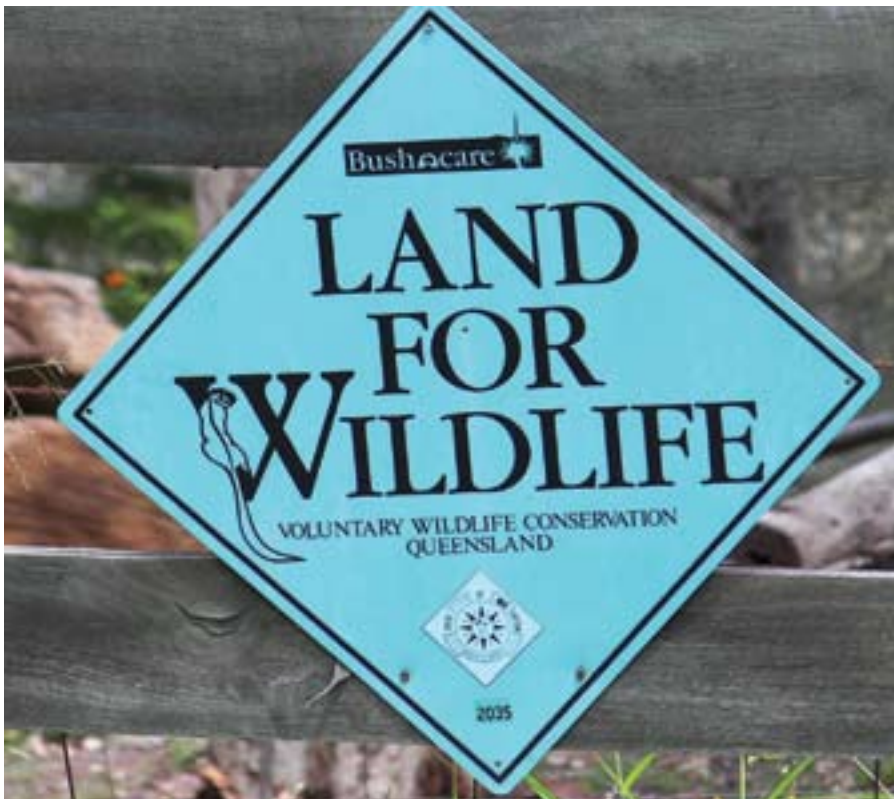
The correct management of properties for wildlife can have very positive impacts on the wider environment, in particular providing catchment protection.

Managing and using private land for the provision of wildlife habitats is not generally a recognised land use alongside profitable enterprises such as grazing and cultivation. However, some people are not hesitating to make it their preferred land use.

The management of private land for nature conservation is primarily driven by the owner's respect for wildlife. However, managing an area for nature conservation may well save funds being expended on fencing, watering points and animal husbandry. Numerous smallholder rural enterprises can cost owners more than they earn from them.

Principles for nature conservation

1. The bigger the patch the better it is for wildlife (plants and animals) – but small patches are better than none. Where possible aim for a minimum patch size of five to ten hectares. Enlarge small patches by allowing regrowth to establish and remain around them.
2. Well connected patches assist in wildlife movement and ensure long-term survival. Providing corridors and stepping stone patches of indigenous vegetation improve connectivity between isolated patches of vegetation
3. Maintain, enhance or re-establish areas of complex habitat. Apply the K.I.M.M. principle – Keep It Messy Mate and resist the urge to 'tidy up'.
4. Retain hollow and dead trees in stands of vegetation. Aim for a mixture of age classes in patches of vegetation. Keep hollow logs and fallen woody debris as they provide important habitat for ground dwelling wildlife.
5. Manage grazing and fire to manage impacts on native pastures and woodlands. Fence off remnant and regenerating areas to manage grazing pressure.
6. Control introduced animal predators– (this includes domestic pets). Implement a pest management program for environmental weeds (e.g. lantana) and animals such as foxes and feral cats.



Committed to conservation: A Land for Wildlife sign in the Flagstone Creek area

Lockyer Valley farmer establishes first nature refuge in Queensland

Case study 1

Land Owner:	Property Size:
Dick Scanlan	65ha



A range of native grasses exist in a forest of yellow box (*Eucalyptus melliodora*), forest red gum (*Eucalyptus tereticornis*) and ironbarks (*Eucalyptus crebra*) on Graeme Burkett's Land for Wildlife property in the Helidon Hills.

In 1994, 'Berlin Scrub', a forty-one hectare patch of scrub on Dick Scanlan's property became the first Nature Refuge in Queensland. Nature Refuges are a covenant system administered by the Environmental Protection Agency where the protection of the vegetation is attached to the title deed and the area is considered by the State to be a protected area, as are National Parks.

"I set aside the scrub as an example", Dick explained at the refuge's tenth anniversary. "I felled a lot of timber with an axe when I was younger, but now soil erosion is a big problem in the Lockyer Valley."

In 1945, Dick commenced dairying in partnership with his father-in-law on the family farm of sixty-five hectares. At that time he helped clear the scrublands, as was common in those days.

Dick said in 1996, "With the benefit of hindsight, a lot of steep hills should not have been cleared and we would have avoided

the major landslips that occurred from 1950 to 1974. This, in turn, would have benefited wildlife, maintained water quality and prevented soil erosion".

Dick has his own story of the impact of land clearing and soil erosion. In his memoirs he writes: "The dam I built on my big scrub property in 1962 was to be the answer to my problem of not having sufficient water for cattle. However, during the wet periods land slips occurred some hundreds of metres further up the gully. This was the result of the subsoil becoming totally saturated from the continuous wet weather. The soil then broke out and flowed down the gully in one great sloppy mess. The final result was that the dam became completely filled with mud and was rendered useless."

Dick's other claim to fame in conservation is as a foundation member of the Landcare movement in the Lockyer Valley in the early 1980s.

Nature Refuges

A nature refuge is a class of protected area under the *Nature Conservation Act 1992*. A nature refuge agreement is perpetual on freehold land, attached to the land title, and binds successive owners of the land. A perpetual agreement is the best means for landholders to ensure that the good land management practices and restoration work that they have initiated will be continued when future generations or new owners take over.

Nature refuge agreements

A nature refuge agreement is negotiated between the Queensland Government's Environmental Protection Agency (EPA) and the landholder to conserve an area.

Landholders can negotiate a nature refuge agreement incorporating activities ranging from grazing to recreation, so long as those activities are managed sustainably and are appropriate for the perpetuation of the values they wish to protect.

A nature refuge agreement can apply to the whole property or only to certain areas, depending upon the values and the future intended use of the land.

Source: www.epa.qld.gov.au/nature_conservation/nature_refuges/information_sheets/nature_refuge_information_sheet/#gen0..

Scrub fever

Land Owner:	Location:	Property Size:	Landuse:
Kate and Mick Drews	Tallegala	8ha	Conservation

Case study 2

Kate and Mick Drews are members of a growing group of people who own land with the principal intention of enjoying it and managing it to enhance natural values. Four years ago while rushing for a return flight to Sydney, Kate and Mick purchased an 8 hectare block at Tallegala.

The block is comprised of good alluvial, scrub and cracking black clays soils and would have originally supported a dry rainforest community.

With the good quality soils, the property has the potential to carry three or four head of cattle but the Drews would rather not use the land for this purpose. Their satisfaction is derived from allowing natural regeneration of native plant species to occur and improving wildlife habitat values. The property is registered with the Land for Wildlife programme (involvement in this program does not require a 'no grazing' approach).

As part of their commitment to the land they have put considerable effort into replanting areas near their house along an existing flowline. Using a core of old trees such as whitewood (*Atalaya sp.*), whalebone tree (*Streblus brunonianus*) and hoop pine (*Araucaria cunninghamii*) they are establishing a garden which then merges into the paddock plantings.

One of the challenges in replanting trees on the property is the occasional but very damaging frost that occurs in the region. A large number of the planted scrub species have been damaged by frost and some have died.

In the four years since moving to Tallegala, Mick has become passionate about vegetation, in particular the wide diversity to be found in the dry scrubs of the area. Local botanist and vegetation contractor Martin Bennett describes him as having 'scrub fever'. Mick now has a small greenhouse and propagates many of his own trees for planting. Other plants are sourced from local nurseries and fellow 'scrub' enthusiasts.

Approximately two thirds of the block is an old cultivation area which has now returned to grass. The Drews are considering a range of planting options for this area, with a timber plantation in mind.

In the vegetated creek area, the main battle is to control weed outbreaks, with the local environment being conducive to asparagus fern (*Asparagus sp.*) and Madeira vine (*Anredera cordifolia*). Weeds on the property are controlled by either chemical or manual means. Mick points out that if they did graze cattle it would be easier to control the Madeira vine, as it is palatable to stock.

One of the great joys for the Drews is watching the natural regeneration happening on the property.

Natural regeneration of native species is most prolific around the existing vegetation and fence lines, mainly resulting from seeding from existing trees and dispersal by birds.

Over sixty different types of trees and shrubs can now be found on the property.

Some of the main points to note regarding the management of the Drew's property are that they have:

- Avoided the impacts on the land and management challenges that comes with holding cattle,
- Encouraged natural regeneration,
- Enjoyed the wildlife, and created habitats for them,
- Planted trees and shrubs where required.

Land for Wildlife

Land for Wildlife is a voluntary, non-binding program which encourages and supports landholders to provide habitat for native plants and animals on their property. It is a free, voluntary program, and landholders can leave at any time.

The program offers landholders a variety of benefits which include:

- free advice and assistance on managing wildlife habitat with other land uses,
- recognition and support for landholders contribution to nature conservation in Queensland,
- opportunities to share ideas and experiences through the Land for Wildlife network and publications.

<http://live.greeningaustralia.org.au/GA/QLD/OnGroundAction/our-projects/landforwildlife/>

“No need to fell the scrub” – said Dad

Land Owner:	Location:	Property Size:	Landuse:
Neville Walker	Rockmount	160ha	Grazing /horticulture

Case study 3

There are 88 hectares of preserved rainforest on the Walker’s 160 hectare cattle grazing and tomato growing property at Rockmount.

This rainforest is still standing due to the foresight of farmer Alex Walker some decades ago.

Neville, his son, who still operates the farm recalls, “He (Dad) told me there was enough land here to make a living without the need to fell the rainforest. He was very emphatic about it. He said, “Leave it alone so younger generations can see what Australia was like in the old days.”

Neville Walker has worked hard to continue to protect this patch of rainforest. “I have been able to keep it almost 100% intact,” he said.

Planned Conservation

Land Owner:	Location:	Property Size:	Landuse:
Graeme Burkett	Helidon Hills	64ha	Conservation

Case study 4

Since purchasing sixty-four hectares in the Helidon Hills in the early 1980’s, Graeme Burkett’s intention has been to manage the property solely for conservation and provide a location to escape the city.

Graeme’s block is characterised as woodland with a rich diversity of plants – including seventeen different species of eucalypt and four regional ecosystems that are considered to be ‘endangered’ or ‘of concern’.

Owning a block dedicated to native vegetation still requires management. To increase his knowledge in this area Graeme has participated in a series of farm planning workshops. As a result he now uses tools such as maps, overlays and accompanying documents that set out his strategy for managing the property.

Without grazing, Graeme is unencumbered by the need for fencing, but ongoing work is required for weed and fire control. He explains that although there is no heavy burden of weeds on the property, attention has to be given on a regular basis to removing weed seedlings.

At one point, a large bushfire raged through the Helidon Hills, burning close to Graeme’s house. Managing for fire is a major consideration in all aspects of management for the property.

Locating tracks for firebreaks has resulted in track erosion management challenges for Graeme. The block rises in altitude from 350 to 523 metres and in such steep terrain that it is difficult to construct boundary tracks without concentrating water runoff.

One feature of Graeme’s property is the access track to the house which is located along a ridge allowing water to quickly runoff the road and spread onto an adjacent grassed area. The addition of crusher dust to the road surface also helps keep the road trafficable and minimises the movement of fine soil.