



CASE STUDY

Embracing sustainable farming – the way of the future

At Toulon, an 800-hectare property near Bathurst in the NSW Central West, superfine wool producers Michael and Therese Inwood in partnership with Michael's parents Jim and Elizabeth, are learning how to work with nature to improve farm management and remain productive, profitable and environmentally sustainable.

Although it may sound obvious for a farmer to embrace nature, Michael is quick to point out that the pressures of a changing climate make it challenging to maintain traditional land management practices.

"There's no doubt farmers are at the front-line when it comes to the impacts of climate change. The drought has devastated many farmers and those who are still farming know that for their economic future as well as the future of our environment and local communities, they need to embrace sustainable business practices," he says.

Michael believes the sustainable management of his farm will improve its resilience to cope with the pressures of a changing climate.

Owners:

Michael and Therese Inwood

Business:

Superfine wool production

Property area:

800Ha

Goals:

To use sustainable land management to improve productivity and sustainability

Address:

Toulon, Glanmire, Bathurst NSW 2795



Native tree plantings

While it's true the Inwoods have had to rethink many of their traditional farming practices, they acknowledge that a sustainable rural economy and healthy environment go hand in hand.

What's helped them get there is green skills training.

Initially Michael undertook a NSW Department of Primary Industries ProGraze® course to gain new skills and greater knowledge in the interaction between pastures and grazing livestock.

Where once sheep grazed in large paddocks for long periods, Michael now embraces rotational grazing which entails moving livestock through smaller paddocks every couple of days to give pastures extended rest periods. It has also involved building electric fencing and alternative watering points.

Michael matches his stock numbers to the available feed and rests paddocks for around 80 days, depending on the time of year and the pasture growth rate.

He says it has definite benefits for the soil, plant biodiversity and reduces inputs such as feed, fertiliser, herbicide and pesticide.



Swamp creek pool

“Rotational grazing means you always have 100 per cent ground cover which is important in preventing soil erosion, allowing perennial grasses to flourish and adding biodiversity to the land. There’s no doubt I have better control over the farm all year round.”

An Advanced Pasture Cropping Course run by the Advanced Pasture Cropping Company helped Michael learn more about pasture cropping and no kill cropping, which has reduced the use of chemicals and fertilisers on the farm.

As participants in the Farming Systems course run by the Central West Catchment Management Authority (CWCMA), the Inwoods have been able to tackle several land management issues on their property including developing a pasture and livestock management plan.

“The formal training I have done has definitely helped me to look more closely at the interaction between the land and grazing, which allows me to plan ahead.”

Crucial to their success is building sustainable practices into the day-to-day running of the farm. That means undertaking remedial work where erosion problems exist by building tiered rock structures that slowly allow water to seep through into the pasture creating new environments.

It means rethinking the control of pests and weeds and adopting efficient water use practices.

Elsewhere on the property, a 1.6 kilometre corridor of native flowering shrubs, grasses and larger trees is providing a wind break, shelter for livestock and adding biodiversity by encouraging native birdlife.

“We’ve learned that preserving remnant native vegetation and planting trees is an important part of land management.”

As well, Toulon’s bore pump is powered by solar energy providing a constant flow of water to a tank, which feeds into troughs – and it’s free.

The Inwoods also actively encourage conservation farming practices through field days in conjunction with organisations such as the Catchment Management Authority (CMA).

“The formal training I have done has definitely helped me to look more closely at the interaction between the land and grazing, which allows me to plan ahead.”

Sometimes the sustainability challenge opens up unexpected opportunities as well.

Bathurst Energy Cooperative is in discussion with local landholders such as the Inwoods to lease farm land to use it to generate more than a third of the town’s energy requirements from solar power.

“The energy generated on Toulon will be fed back into the grid, which is one way of giving something back to the community,” says Michael.

But perhaps the most innovative project Michael has undertaken at Toulon is the conversion of a four-wheel drive donated by Mitsubishi to an electric motor. Driven by a 32kW lithium battery



Tiered rock structure



Rotating solar panels

pack, the vehicle is able to undertake normal farm operations including towing a specially modified AgrowPlow disc seeder to sow crops. All farm electricity and vehicle charging run on countrygreen®, Country Energy's 100 per cent certified renewable energy.

The next step is to install solar panels on their sheds to charge the vehicle.

"This will supply us with free vehicle power from the sun. As far as I know, sowing a commercial crop using no energy and generating no emissions is a world first."

Experiencing the benefits of sustainability

When it comes to changing generations of farming practices, Michael is pragmatic.

"The benefits are there to see. There's no doubt we have significantly reduced costs of production, reduced the need for supplementary feeding, improved soil quality and reduced erosion, increased feed diversity and availability and remained profitable."

"But," says Michael, "the biggest carrot is that we have a very low carbon footprint."

In order to share his new found skills, Michael is working on a project with Landcare NSW, Woolworths and Country Energy to develop a website called www.engagingnature.com, which will allow him to share his experiences with other farmers.

A strong case for going green

Michael believes that an increased focus on costs and risk management, a changing marketplace and the opportunity to access new markets are just some of the drivers for sustainable practice in rural production.

He points out that consumer demand for clean and green agricultural products is also something that can't be ignored.

"There's no doubt that our journey on Toulon towards sustainability will change as our knowledge and skills develop over time but we're certainly focused on adopting innovative farming practices to improve and protect our environment.

"I believe that wool is the world's most environmentally friendly fibre and we're showing why that is."

Training and a commitment to protecting our fragile natural resources has built Toulon into an industry leader in tackling land management issues. You could say a 'Carbon Neutral Cocky'.

STORY LINKS

NSW Department of Primary Industries:
<http://www.dpi.nsw.gov.au>

Advanced Pasture Cropping Company:
<http://www.evergreen.asn.au>

Central West Catchment Management Authority (CWCMA):
<http://www.cw.cma.nsw.gov.au>

Catchment Management Authority (CMA):
<http://www.cma.nsw.gov.au>

Landcare NSW:
<http://www.landcarensw.org>

Country Energy:
<http://www.countryenergy.com.au>

AgrowPlow:
<http://www.agrowplow.com>

Engaging Nature:
<http://www.engagingnature.com>