

# Land management practices

## Case study



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### Case study: Richards properties

We met Lionel through the Land Management Training workshops Healthy Land & Water has organised over the years.

Lionel has been involved in several Land Management training activities organised by Healthy Land & Water including workshops on weed and pasture management and Grazing Best Management Practice.

*"The training events are great for reinforcing my knowledge, generating new avenues of management, keeping me up to date on all aspects of farming and the interaction with other attendees can provide ideas and methodology that I would otherwise not come across."*

Lionel and his family own three properties near Kilcoy in the Stanley catchment. He is motivated to work his properties because he loves the land and the cattle he cares for.

Lionel's home property, 'Athlone', is around 470 acres and is adjacent to Sandy creek, a tributary of the Stanley river.

Athlone comprises fertile flats with loamy and sandy soils to lower slopes and steep hills supporting dry eucalypt woodlands and open forest.

The family also operates their beef cattle operation across other nearby holdings including a small former dairy farm on the alluvial flats along the Stanley River at Stony Creek. The third property at Woolmar is around 518 acres, located between Kamerigo and Oaky Creeks, with majority of the land undulating country with ironbark and gum on clay soils.

### Property management

Lionel started working on the properties 14 years ago after retiring from working as a veterinarian. At the time, the 'Athlone' property had only three paddocks and was rundown with plenty of weeds including Lantana throughout, and Ragweed near Sandy Creek.

Over the years, Lionel has attempted to improve the condition of land and its carrying capacity by building additional paddocks, fencing the waterways, controlling weeds and building dams and additional watering points.

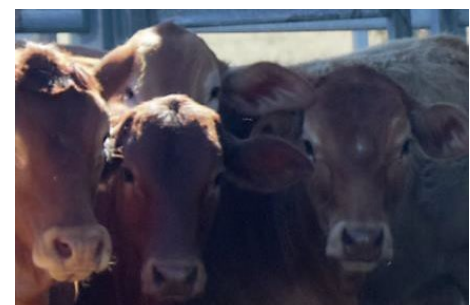
Making sure water was available across the property was an early priority for Lionel: "Within the first six months I built four dams".

### Key facts

**Farm industry:** Beef cattle

**Location:** Kilcoy, South East Queensland

**Case study focus:** Pasture improvement, weed management



Today cattle are rotational grazed through 13 main paddocks each with its own water system.

Lionel has also spent considerable time improving the property with some frontage country successfully sown to perennial pastures. He has also managed grazing pressure to encourage a dominance of desirable native pasture species like Black speargrass, Kangaroo grass and Bluegrass. While visiting his properties, we noted diverse healthy pastures in good condition with high levels of legumes including Wynn cassia and Stylos.

## Fireweed management

Weeds are a major concern for Lionel who, despite his efforts, is constantly battling to control incursions of Giant rats tail (GRT) grass and Fireweed, which are common priority weeds having a significant impact on production in the local area.

On his 'Athlone' property, the exotic Fireweed started to appear five years ago: "In the growing season I usually spend at least one day a week controlling fireweed, as it is consistently coming in with the wind"

## Rat's tail management

On his Stanley River property, the spread of GRT grass is a continuous battle. To avoid spreading the weeds to other places, Lionel is very diligent with biosecurity. When we arrived at the property, we were taken into a separate vehicle which is only used on this property.

Over the years Lionel's has tried different techniques to control GRT. A wick-wiper was used for many years without success at significantly reducing GRT grass population.

In recent time, Lionel has been moving to the recommended best practice for his land type: spraying, ploughing, applying residual herbicide and replanting with perennial pasture including Rhodes, Creeping Bluegrass and Setaria.

This second approach is more time consuming and expensive however, it is achieving the desirable result. Using this technique Lionel has managed to reduce the extend of GRT on trials paddocks from 90% to 20%.

## Riparian management

To better manage stock access along the Stanley River, riparian vegetation including significant riparian gallery forest along the often-steep banks was fenced off some years ago.

After initial treatment, Healthy Land & Water coordinated follow up Cat's claw creeper control along the Stanley River in 2017 as part of Seqwater's broader Riparian Weed Control program in SEQ.

The treatment works have been successful with only minor regrowth visible during our visit.

Lionel has also trialled pasture cropping in the past and has undertaken soil testing to determine soil nutrient levels and needs prior to pasture and crop establishment.



Fireweed closeup  
(Source: Queensland Government)



Observing recovering pastures.



Before treatment (2017)



A few months after treatment (July 2018)