



# Lion Landcare Grants 2016/2017

## Project Case Study

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<b>Recipient:</b>	Kamay Farming Trust
<b>Project Name:</b>	<b>Refurbishment and Installation of Glycol Chiller and Planting of Trees to improve Biodiversity</b>
<b>Location:</b>	Forbes, New South Wales
<b>Funding Amount:</b>	<b>\$11,000</b>
<b>Objective:</b>	Reducing energy consumption and improving biodiversity

### Background

With a goal to grow their dairy operation Andrew Kath and wife Cassandra moved their dairy herd from Toowoomba to a share farm near Forbes in Central Western New South Wales.

Arriving at the new property in November 2015 Andrew and Cassandra began work with the landowner to return the property to a functioning dairy after 12 years of sheep and cropping. A priority was to refurbish the existing dairy shed with equipment that would allow them to scale up over time.

Like any new business, the couple had to carefully manage cash flow and balance what was needed with what they'd like to invest in to grow the business. They purchased and refurbished a milk vat that included a glycol chiller for use in the dairy shed, but this technology wasn't energy efficient.

After years of cropping and sheep they also wanted to revegetate parts of the property to improve biodiversity and create shelter for the cattle. Dry floodways also crossed the property that would fill during heavy rains creating causeways that eroded the land.

Andrew and Cassandra began planning improvements when they received a Lion newsletter promoting Lion Dairy Pride Landcare grants.

### Lion Dairy Pride Landcare Grant

Talking with their Lion field officer, Andrew and Cassandra decided to apply for a grant so they could kick start their plans.

"We've used the grant to start the work the 1100-acre property needed," said Cassandra.

Adding that the grant process was also useful for identifying work needed, what was a priority and associated costings.



“We selected native trees to create habitat that would encourage native birds and animals back to the property, and that would also have the best chance of survival.”

“We’ll be planting paddock corners and along areas where water flows through the property during heavy rains to protect areas vulnerable to erosion,” Cassandra said.

In the dairy shed they researched energy saving equipment to find out what technology would best suit their operation so they could replace the glycol chiller in the milk vat. The chiller pre-cools the milk through a system of plates before it flows into the milk tank.

Planting and fencing works started in February 2018, but due to the ongoing dry conditions planting has been restricted to areas they can water.

## **Outcome**

Cassandra indicated it was too early to see the full benefits of the revegetation works, and with the pump yet to be installed, they expect to see the full benefits of the grant to come.

“We’ve had some plant loss due to the ongoing dry conditions, but we expect once the plants have established they’ll provide shade for the cattle, make them less stressed and increase the property’s biodiversity, said Cassandra.

“With the refurbished chiller system, we anticipated milk cooling times will decrease by 40 per cent and energy usage will decrease proportionately,” adds Cassandra.

They expect this will be further realised over time as the herd grows and more milk is produced.