

# Dairy Farm Shelterbelts – lessons 25 years on...

Daryl & Fay Sinclair, Stony Creek South Gippsland

This Case Study has been developed as part of the *Profitable Dairying in a Carbon Constrained Future* project.

It is one in a series of resources developed to profile practices that profitably reduce greenhouse gas emissions from dairy farm systems, embedded in the context of every-day farm management decisions.

The Australian dairy industry has committed to reducing greenhouse gas emissions intensity.

Shelterbelts can enhance productivity on farm by keeping cows comfortable and allowing them to put their energy into milk production. They also provide opportunity for sequestration of carbon on farm and consequently contribute to the efforts of reducing emissions on dairy farms.

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## Their dairy business

When Daryl & Fay Sinclair began farming on their South Gippsland property at Stony Creek 30 years ago there were several paddock trees and some blocks of remnant vegetation. Today the farm is a picture of productivity with milking cows and wildlife sharing the habitat that the couple have created.

Daryl estimates that together with their four boys they have planted a total of 90 000 trees and shrubs since 1991.

## Planting design and approach

A Whole Farm Plan inspired a vision to redevelop the property - improving pastures, developing paddocks, fencing, watering points, laneways and shelterbelts.

“The plan gave me a vision of how I wanted the place to look, I set out to achieve it in ten years but got pretty excited about it and got there in around eight years,” said Daryl. “A farm plan should be your number one priority to help you build your vision and ensure farm infrastructure and tree plantings go in the right place.”

The plan helped Daryl and Fay develop a section of the property at

a time with paddock layout, careful track placement and thought given to shelterbelt location. The creek which runs through much of the farm was fenced out first to manage stock movement. Any areas where the tractor or bike was unable to travel across safely was fenced and planted down with trees and shrubs.

The couple who are members of the local Landcare group have learnt through trial and error. The first shelterbelt was one row wide with only a small amount of understorey. In high winds the trees with little protection from surrounding plants blew over. Now the couple ensure that shelterbelts are six to ten metres wide with eucalypts in the centre and understorey species on both sides of the plantation.

**“A farm plan should be your number one priority to help you build your vision and ensure farm infrastructure and tree plantings go in the right place.”**



Daryl does not plant in structured rows, instead he spot sprays throughout the belt and plants to achieve a more natural layout still ensuring tall trees are towards the centre.

Weed control is key and the Sinclair's usually spray the areas with herbicide twice before planting.

Tube stock are sourced from local nurseries and a local mix of 30 % eucalypt and 70% understorey is ordered a year in advance to ensure quality stock is planted. Plants are given a good watering just before they are put in the ground and good weed control and fencing ensure success.

### Benefits of shade and shelter

Realising the value of native vegetation on the farm, three remnant vegetation blocks have been fenced off, cattle have been excluded and weeds controlled. These areas provide habitat for birds and wildlife as well as offer shelter and shade to surrounding paddocks.

For their efforts, Daryl and Fay were awarded a State Landcare award in 2003. They have been actively involved in local discussion groups and industry activities over many years. They were inaugural participants in GippsDairy's Focus Farm program and have mentored many young dairy farmers.

"There are so many benefits from the trees, we like shade in the summer and shelter in the winter, and so do the cows. If the cows are comfortable, they actually give you better production," Daryl said.



Photo: Daryl Sinclair is able to put the cows in a sheltered paddock throughout most of his grazing rotation.



Photo: The whole farm plan has been an essential tool in planning the layout of the farm including placement of shelterbelts.

### For more information and case studies

[www.dairyclimatetoolkit.com.au](http://www.dairyclimatetoolkit.com.au)

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\*Photos – supplied by Gillian Hayman

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**Dairy Australia Limited** ABN 60 105 227 987  
Level 5, IBM Centre  
60 City Road, Southbank VIC 3006 Australia  
T + 61 3 9694 3777 F + 61 3 9694 3701  
E [enquiries@dairyaustralia.com.au](mailto:enquiries@dairyaustralia.com.au)  
[dairyaustralia.com.au](http://dairyaustralia.com.au)

