

Selecting species for shelterbelts on dairy farms

Shelterbelts Fact Sheet 4

This Fact Sheet 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.

This project is supported by funding from Dairy Australia and the Australian Government.

Species selection

When selecting species for planting in your dairy farm shelterbelts consider the purpose of your shelterbelt and think through the following points.

Local species

- > Locally native species generally have higher survival and establishment rates
- > Locally native species will provide valuable habitat for birds and wildlife
- > Look at what grows well locally in similar soils to that of your farm.

Growing characteristics

- > Choose species with an appropriate foliage density to offer wind and sun protection
- > Choose tall species to offer height for shade and shelter and lower understorey species to offer protection closer to ground level
- > Where the effects of shelterbelts are required quickly, the growth rate of species should be taken into consideration
- > Consider longevity of species and how long you would like your shelterbelts to last into the future.

Drought and bushfire tolerance

- > Ability to tolerate drought, waterlogging, frost
- > Ability to regenerate after a fire.

Production value

- > Timber value if you wish to cut selected logs for on farm needs or agroforestry opportunities.

Advice on suitable species can be obtained from farmers in your region, local Landcare networks, state agencies or nursery staff in your area.

It makes sense to use plants that are indigenous to the native area as they are well adapted to the local climate and soil types. Many of the mammals, birds and insects that live in the regions have evolved with these local plants.

Species that are exotic to the area may also be useful. There are no hard and fast rules as to what species you plant.

What about deciduous trees?

If the sole purpose for trees in a given location is to provide shade in summer, then deciduous trees are an option.



Locations where having deciduous trees may be appropriate are:

- > Laneways – where you want to avoid waterlogging and muddiness in winter
- > Western side of dairy holding yard
- > In the middle of paddocks.

Deciduous trees obviously offer no shelter from winds in winter and have very little habitat value. Deciduous species that may be considered include poplars, maples and chestnuts.

Consult your local nursery for advice on plant species suitable for your area and your specific purpose.

Our changing climate

As the climate changes and conditions shift in our regions we should be open minded about the best trees for our future. Planting a diversity of local species now is encouraged. By planting a small range of species you may risk losing those less resilient in extreme conditions. Observe what works in your area and be open to selecting different species over time.

For more information

[Basalt to Bay \(2014\) Economic Benefits of Native Shelter Belts](#)

[Agriculture Victoria – Shelterbelt design](#)

[Murrumbidgee Landcare Incorporated guide – Establishing shelterbelts on your farm](#)

[Dairy Climate Toolkit](#)

Acknowledgments

*Photos – supplied by Gillian Hayman



Photo: Ensure taller species are planted towards the middle of shelterbelts*



Photo: Choose species that will provide a dense shelterbelt. A mix of tall trees, shrubs and understorey species should be planted*

Published by Dairy Australia Limited.

Whilst all reasonable efforts have been taken to ensure the accuracy of the **Profitable Dairying Fact Sheet: Species selection for shelterbelts on dairy farms**, use of the information contained herein is at one's own risk. To the fullest extent permitted by Australian law, Dairy Australia disclaims all liability for any losses, costs, damages and the like sustained or incurred as a result of the use of or reliance upon the information contained herein, including, without limitation, liability stemming from reliance upon any part which may contain inadvertent errors, whether typographical or otherwise, or omissions of any kind.

© Dairy Australia Limited 2017. All rights reserved.

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
dairyaustralia.com.au

