



# A guide to planting for bees



Heart-leaved silver gum growing in a shelterbelt, flowering in August.

Honey bees across the globe are under stress from food shortages, chemicals and diseases. In New Zealand this is impacting on agricultural production due to reduced pollination and seed set.

Southland is particularly affected due to increased land development that uses more chemicals and has removed plants that provide pollen. This is especially true of those plants like broom and gorse that provide pollen in the crucial weeks leading up to the main flowering season. Pollen is the bee's only source of protein and without the 25kg consumed by a hive in the spring, the bee population cannot increase enough to take advantage of sources of pollen from pasture plants like clover.

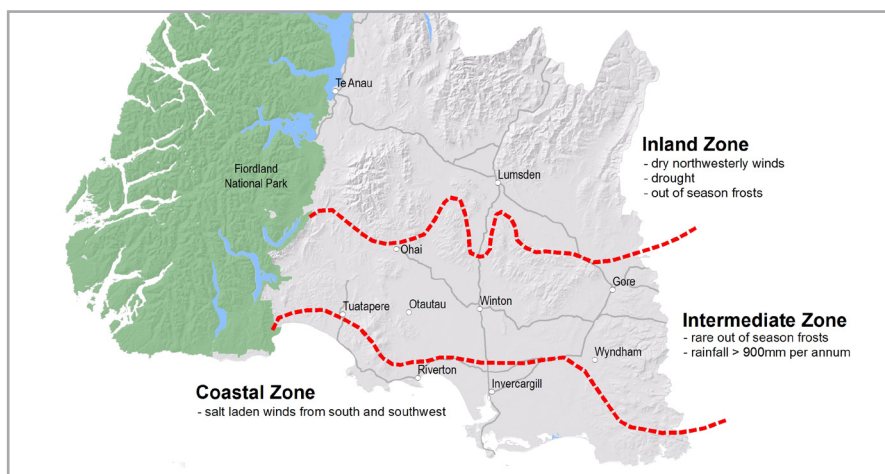
We can improve this by incorporating plants that provide bee food throughout the year in our shelterbelts, riparian zones, native remnants and gardens. New Zealand has many plants that supply pollen, with over 100 native and exotic tree, shrub and grass species suitable for the farm.

Southland's climate can be harsh making it challenging to establish bee food plants, but by picking the ones that suit your climate zone, soil types and local conditions, good success can be achieved. The key to improving bee survival and production is to have plants that flower at different stages of the year. The list on the follow page will get you started.

In addition, there are eucalyptus, poplar, oak, fruit and willow trees that grow well in Southland and feed bees. Also many of the plants we consider weeds, like gorse, broom, matagouri, blackberry and hawthorn, provide excellent bee food which, with appropriate management, can be managed to minimise problems and take advantage of the benefits from increased bee numbers and pollination of agricultural plants.

While some species of willow can be problematic, there are specially bred clone varieties that provide ease of establishment, early flowering, and low cost shelter and stock food, without the management issues, as well as providing food for bees. These species come in a variety of heights, shapes and bark colours.

The Southland Bee Society also grows 18 varieties of willow to specifically supply food for bees throughout the year. The bare root cuttings are sold for only \$3 per tree.



Southland's climatic zones

PLANT	CLIMATE ZONE*	FLOWERING SEASON			
		SPRING	SUMMER	AUTUMN	WINTER
Kowhai	1, 2, 3	✓			✓
Cabbage tree	1, 2, 3	✓	✓		
Kohuhu		✓	✓		
Lace bark	1, 2			✓	✓
Tree fuchsia			✓	✓	✓
Five finger	1, 2				✓
Ake ake	1, 2	✓	✓	✓	
Broadleaf	1, 2, 3	✓	✓		
Flax	1, 2, 3	✓	✓		
Koromiko	1, 2	✓	✓		
Lemonwood	1, 2	✓	✓	✓	
Lancewood	1, 2			✓	✓
Olearia	1, 2, 3			✓	✓
Ribbonwood	1, 2, 3			✓	✓
Bottle brush	1, 2	✓	✓		
Maple	2, 3	✓	✓		
Alpine ash	2, 3			✓	✓
Heart-leaved silver gum	1, 2	✓			✓
Winter flowering pink gum	1, 2, 3	✓	✓	✓	✓
Red flowering gum	1, 2	✓	✓		✓
Glenmark shrub willow	1, 2, 3	✓			✓
Pohangina shrub willow	1, 2, 3	✓			✓

\* 1: Coastal Zone 2: Intermediate Zone 3: Inland Zone

## More information

Environment Southland's website has information on climate zones, planting tips and management – [www.es.govt.nz](http://www.es.govt.nz)

Also check out:

- Poplar and Willow Research Trust website – [www.poplarandwillow.org.nz/library/topic/bee-nutrition](http://www.poplarandwillow.org.nz/library/topic/bee-nutrition)
- NZ Trees for Bees Research Trust – [www.treesforbeesnz.org](http://www.treesforbeesnz.org)

- Southland Bee Society [www.southlandbeesociety.co.nz/](http://www.southlandbeesociety.co.nz/)
- DairyNZ – [www.dairynz.co.nz](http://www.dairynz.co.nz)
- Beef + Lamb – [www.beeflambnz.com](http://www.beeflambnz.com).

## Further assistance

For advice and planting plans, incorporating bee food, designed to suit your specific needs, call us to arrange a free visit by Environment Southland's land sustainability team on 0800 76 88 45.