



Planting for Bees

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Renovation & Outdoor Living Show
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Ministry for Primary Industries
Manatū Ahu Matua



Sustainable Farming Fund

Loss of Habitat

- Loss of native bush
- Removal of riverside willows
- Clearing of gorse
- Loss of farm biodiversity
- Loss of urban & rural flower diversity in gardens



Pollinators

- Honey bees
- Bumble bees
- Native bees
- Butterflies
- Moths
- Flies
- Birds & lizards

Hover fly on a lemon flower



Native bee on *Malaleuca styphelioides*



Bumble bee on *Lathyrus sp.*



Pollen rewards

- provides protein, lipids, vitamins, minerals
- for brood and emerging young bees
- older adult bees live on nectar

**Anthers
hold
pollen**

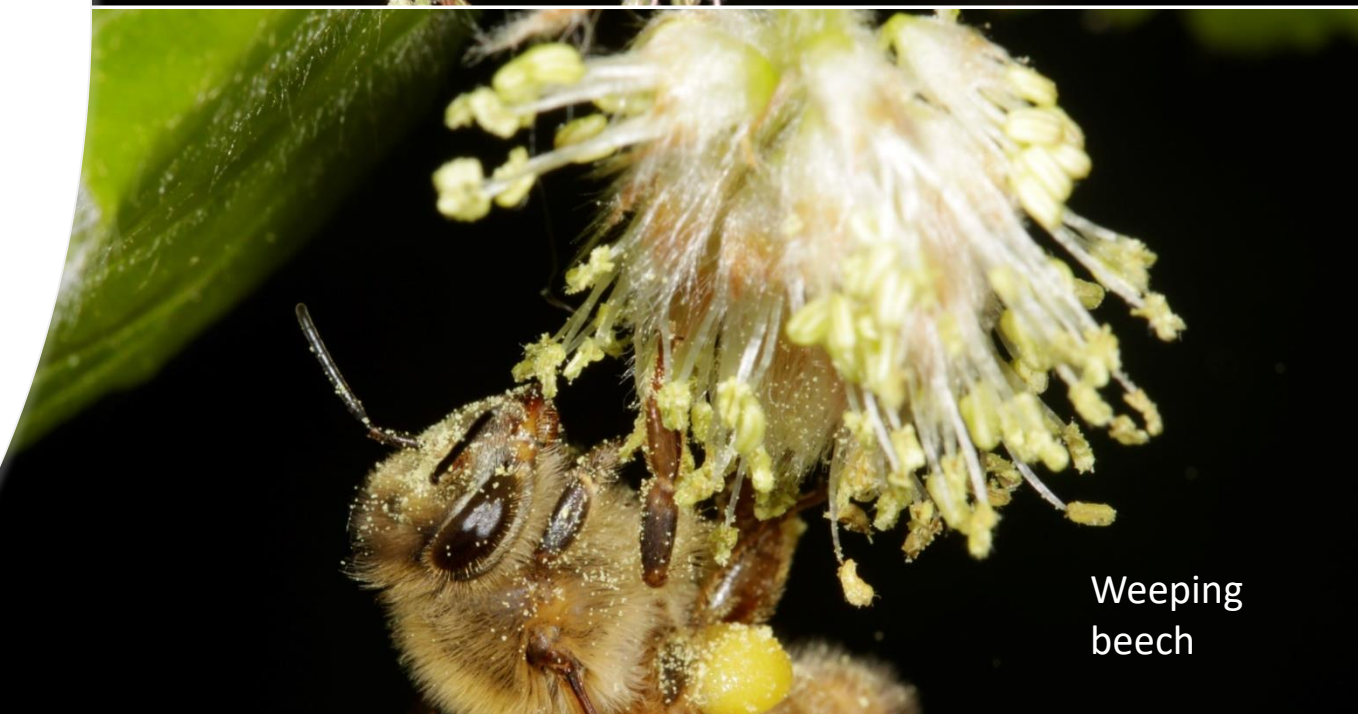


Native masked
bee collecting
pollen in NZ Flax
flower

Wind-pollinated trees
produce copious pollen



Box elder
maple



Weeping
beech



Collecting pollen

Honey bee “scrabbling” to pack pollen baskets from a rose flower



Nectar rewards

- Provides carbohydrates, mainly sugar for energy
- Contains some amino acids and other nutrients
- Honey bees mix nectar with pollen to pack it in basket
- Honey bee takes nectar back to the hive in their crop to make honey



Pohutukawa



Taking nectar

Bee head down - “tongue” extended into the nectar



What makes a Buzz Plant?

- You can hear the noise of the buzzing
- Easy access to nectar &/or pollen
- Large amount of nectar or pollen
- Quantity of flowers on plant
- High sugar in nectar



Camellia

Rose Family Buzz Plants

Apples
Pears
Cherries
Plums
Peaches
Quince

Malus sieboldii – Apple



Native Buzz Plants

Cabbage Tree
Five finger
Flax
Hoheria
Hebe/Veronica
Pittosporum
Rengarenga
Parsonsia



Hoheria



Five finger



Cabbage tree



Super Bowl Buzz Plants

Tree & Herbaceous

Peonies

Camellias with simple
flowers

Magnolias



Peony



Magnolia



Camellia



Herb Buzz Plants

Thyme
Rosemary
Lavender

Most Mediterranean herb
plants have excellent
nectar



Mixing Your Plants

Michelia yunnanensis as part of a hedgerow

Manna ash (*Fraxinus ornus*) underplanted with Lavender

Many gardens already have spring and summer flowers –if so, focus on autumn-flowering species to fill the gap

e.g. Camellia, Lavender, Michelia, Oregano, Phacelia, Rosemary, Salvia, Solidago; Akiraho, Hoheria, Koromiko.

See www.treesforbeesnz.org

