



Whitehorse Gardens for Wildlife Mistletoe Project

with support from Bungalook and Greenlink Nurseries

Why mistletoes? Many Gardens for Wildlife participants tell us of the lack of small birds in their gardens. Birds like Eastern Spinebills and Silver Eyes seem to be less common than they used to be. Often we are asked what gardeners can do to support small birds. We hope that introducing mistletoes to gardens might be a part of the solution.



But don't mistletoes cause harm to trees? Mistletoes rely on their host plant for water and nutrients but they do photosynthesise and make their own energy. They attract so many insects and birds to the host tree that they can locally increase the levels of nutrients in the soil. It is true that they add to the weight of their host limb but this takes a very long time.



Why are mistletoes such great habitat plants?

Mistletoes produce flowers for longer periods throughout the year than many host plants and the flowers produce nectar for insects and birds. They also produce berries which are appreciated by birds. Leaves are eaten by caterpillars and other herbivorous insects.

What's the catch? The mistletoe seeds may germinate well but not survive. They are also very slow to grow to a point where they will flower. The role of mistletoes in urban areas is not extensively studied so we would appreciate your observations. We also recommend that you participate in citizen science programs such as the City and Nature Challenge, the Aussie Backyard Bird Count and the Wild Pollinator Counts and become familiar with the iNaturalist app as a means of sharing your observations more broadly.

How do I participate?

1. Register your interest by emailing gardensforwildlife@whitehorse.vic.gov.au
2. Choose your host tree or trees. Apply any possum deterrents as appropriate (see below).
3. When ripe berries become available, you will be notified and arrangements made for collection
4. Apply the seed by smushing the berry gently to the underside of a branch approximately the width of a pencil that gets plenty of sun. When the skin of the berry breaks, a sticky substance will adhere the seed to the branch. Do not place the seed too far out on the branch.
5. Mark the location by tying coloured string or similar near the berry.
6. Make a note of germination or other observations after 6 months and let us know what happened.



Mistletoe berry shortly after germinating on a Cherry Plum. The green 'foot' that has emerged is called a haustorium.

How do I choose a good host tree? It seems that mistletoes are quite happy to grow on a range of tree types but there are still gaps in our understanding. In the wild they grow on Eucalypts and Acacias but you might not have one of these in your garden. It is known that they do grow well on Cherry Plum (*Prunus cerisifera*) which is very common in Whitehorse. It is therefore reasonable to suspect that they will grow on other plants in the Prunus genus. If you use a deciduous tree, you are more likely to have success if the seed is attached in spring or summer. Choose a tree that has branches you can access at head height without the need for a ladder. Choose a branch that is about the width of a pencil that comes off the trunk or a strong limb. Bend it to see if it can take some weight without snapping. Avoid using a small or young tree which could be weakened by the mistletoe. Consider how you can restrict

access by possums. This might involve choosing a tree that is clear of common possum highways such as a fence or powerline or one that you can add a collar to, either to the trunk or along the branch. If you have wildlife friendly netting or chook wire you could create a cover to protect the seed as it establishes.



Possum guard on an established tree. You may be able to get creative to thwart your resident possums.

What else can I do to support small birds? Keep doing what you are doing. Avoid insecticides, continue to plant indigenous shrubs and trees and create dense thickets for small birds to hide in. Leave spiders and their webs in place and encourage your neighbours to participate in Gardens for Wildlife too. We don't have all the answers but if we continue to share knowledge and work collaboratively, we will have a better chance of succeeding.

Happy Planting!

Further Reading:

- Anne Griebel, et al, 2017, Mistletoe, friend and foe: synthesizing ecosystem implications of mistletoe infection, [Open Access](#)
- David Watson, 2019, Mistletoes of Southern Australia, CSIRO publishing
- John Moss and Ross Kendall, 2016, The Mistletoes of Subtropical Queensland, New South Wales and Victoria (links butterfly and moth species to hosts)

Drooping Mistletoe seedling on a Yellow Gum. Many Whitehorse gardens feature these smaller gum trees that may prove to be good hosts.



Mistletoe Species of Whitehorse

While there are hundreds of Mistletoe Species around Australia and the world, there are 3 found in Whitehorse.

- Grey Mistletoe - *Amyema quandang* var. *quandang*
- Drooping Mistletoe - *Amyema pendula* subsp. *pendula*
- Creeping Mistletoe - *Muellerina eucalyptoides*

Grey Mistletoe *Amyema quandang*

Likely to be found on Wattles (Acacia species) in particular the *Acacia dealbata*. Jezebel and Azure butterflies lay eggs on this Mistletoe. It flowers for most of the year. Identify it by the grey leaves and the way the flowers are held upright.



Drooping Mistletoe *Amyema pendula*

Likely to be found on Eucalypts and occasionally Wattles. Flowers for most of the year, particularly in summer. Leaves look a bit like gum leaves and flowers are angled down. Plants will have one attachment point to the host.



Creeping Mistletoe *Muellerina eucalyptoides*

Multiple attachment points are formed onto the host plant and attachment can be made to thicker branches. This species is known to grow on deciduous plants. The City of Melbourne has had success with this species on Plane Trees.



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