



Gearys Gap/Wamboin Landcare Group, Inc.

Policy on problematic and potentially problematic native plants in Wamboin, Bywong & district

This version dated 15-Jun-2024

Epigraph

The Golden Wattle *Acacia pycnantha* is the floral emblem of Australia. The Australian Coat of Arms includes a wreath of wattle, taken by many to be *A. pycnantha*. It has been depicted on several Australian stamps. This species is native to parts of south-eastern Australia. Elsewhere in Australia (and abroad) Australia's floral emblem is a problematic invasive plant, correctly characterised as a weed.

Problematic species can also be native; native species are listed as threats for one-fifth of threatened species. (State of the Environment Report DCCEEW 2021)

Purpose

This document outlines the policy and practices of the Geary's Gap/Wamboin Landcare Group regarding problematic and potentially problematic plant species native to Australia. It focuses on the Landcare Group's approach with native plant species that are, or have potential to be, invasive and/or hybridising in Wamboin, Bywong and district.

This policy guides the Landcare Group's executive and members, and through them the wider community, in decision-making regarding native plant propagation, dissemination and management in our area.

Objective

The Geary's Gap/Wamboin Landcare Group seeks to attain and maintain an appropriate balance between the propagation and dissemination of:

1. locally indigenous Australian native plants, on one hand, and
2. non-local Australian natives that have no or low potential for naturalisation or hybridisation, on the other.

Our work excludes exotic plants introduced to Australia and is entirely centered on Australian native plants.

Background

The April 2024 issue of *The Whisper* published an article on Acacias written by Vicki Still, on behalf of our Landcare Group. This article encouraged people in our area to plant acacias, and it presented a range of sound reasons in support of doing so. Vicki encouraged readers to purchase acacias from our forthcoming plant sales.

The May issue of *The Whisper* published an article by Paul Downey in which he gave, to quote his title 'A word of caution—many [Acacia] species are highly invasive'. He referenced two consultancy reports that he and Steve Taylor completed for the ACT Government on the topic; see the list of sources below. Our Group's assessment is that these are highly authoritative, valuable documents. We have used them to inform this policy document.

The June 2024 *Whisper* published an article prepared by our Group supporting both Vicki and Paul's articles. It outlined our long-term policy on potentially problematic native plants, and indicated how Downey & Taylor's reports have informed our decisions regarding the propagation, dissemination, and management of native plants in our region.

The challenges

- Our website states
'Our Group's main activities at present centre around propagating and planting out native plants that grow well in the Geary's Gap/Bywong/Wamboin area. Our focus is on plants native to our area, but we also support the use of natives from other areas that are useful here, and that do not become weeds.'
- The core challenge, however, is that many native plants that have long been propagated and disseminated in our area and beyond have become problematic. They are invasive and/or are hybridising with local native plants, to the detriment of local ecosystems.
 - For example. *Billardiera heterophylla* (formerly *Sollya heterophylla*) is becoming locally invasive in our greenways, and many *Grevillea* species hybridise readily.
- Other native plants, while uncommon here at present, may have the potential to become problematic here.
 - *Crowea exalata* 'Ginninderra Falls' is an example.
- The conundrum is thus:
 - If the problematic and potentially problematic plants were removed without replacement by appropriately selected native plants, we could have bare soil that is readily eroded and/or that facilitates weed growth, and may remove habitat that local fauna and insects is using.
 - Focussing only on local native plants may seem like the solution, but operationalising 'local', 'regional', and 'alien', regarding provenance of plants, is challenging and unrealistic. They could be defined in terms of distance, topography, ecosystems, political or cadastral boundaries and genetics, among others.
 - Furthermore, the acceleration in climate change is already having impacts on the distribution of both native and alien plants. These impacts are difficult to predict, and mitigation and adaptation needs to be rational and flexible. Genetic diversity is needed to support resilient ecosystems as they respond to climate change.

Some obvious options are probably not viable

One simple option to address these challenges is to encourage the community to only grow plants that are locally native to our area. However, this is unrealistic as our members, and members of the public generally, are keen to plant a range of native plants on their properties that are attractive and support native insects and birds. Furthermore, not using native plants from other regions may simply drive people to plant attractive alien species from abroad, a highly undesirable outcome.

Another option is to focus on educating the community to remove naturalising and hybridising native plants from their properties. While many of our Landcare Group's members would be

interested and capable of doing this, it is highly likely the vast majority of the community would not, or could not, maintain their properties to this extent.

Our approach

- The Landcare Group's core objective is to attain and maintain an appropriate balance between the propagation and dissemination of; local native plants, on the one hand, and of Australian native plants that have no or low potential for naturalisation or hybridisation, on the other.
- This means that we continue to propagate and disseminate both local natives and carefully chosen non-local natives, albeit alien to our region.
- We acknowledge that some alien native plants, like most local ones, provide valuable ecosystem services meaning that, on balance, they can be useful introductions to our home gardens, rural properties, and ecosystems.
- We continue to propagate and disseminate pure forms of native plants, both local and alien that may spread by seed and, as a result, may hybridise within particular genera. This hybridisation may potentially lead to ecosystem impacts, and therefore will be monitored and addressed if it is observed.
- We do not define 'local', 'regional', and 'alien', with respect to the provenance of plants, for the purpose of deciding which species to propagate and promote. We note, however, that the naturally occurring ecosystems of Wamboin and Bywong are predominantly classified as Southern Tablelands Dry Sclerophyll Forest.
- We continue to implement our long-standing approach of continually reviewing the list of plants that we propagate to ensure that new information on potentially problematic plants is considered and acted upon.
 - Downey & Taylor's 2023 consultancy reports are a component of this ongoing review process.
- We support our members in developing skills to identify and manage problematic native plants on their properties, and in supporting their friends and neighbours to do the same. This includes the routine monitoring of plant population growth on properties.
- Given that the development of monocultures by transformer native plants, be they local or alien (e.g. sifton bush - *Cassinia sifton*), is particularly problematic in our area, emphasis is placed on preventing and managing these transformers.
- We assist the broader community to do the same through our community education initiatives such as publishing articles in *The Whisper* and the *Regional Independent*, through our website, our Facebook group, our hardcopy handouts at our plant sales, and community briefing sessions such as at the Wamboin Community Association's Spring Talks series. Such information focuses on both good practices and the rationale underpinning them.

Definitions

The following definitions have been applied throughout this document.

Problematic plants: plants that have negative environmental impact, for example by invading or hybridising extensively.

Potentially problematic: plants that could become problematic, for example hybridise readily or easily establish new populations.

Locally indigenous plant (or 'local native'): A plant that occurs naturally in a local geographic region or ecosystem (Junior Landcare 2022).

Native plant: a native plant is indigenous to a given region or ecosystem if its presence in that region is the result of only local natural evolution (Wikipedia). This paper uses ‘native plant’ to refer to Australian native plants.

A native plant means that a plant is native to anywhere in Australia, whereas an indigenous plant (or local native) occurs naturally in a geographical area. (Junior Landcare 2022)

Alien plant: ‘Plant taxa in a given area whose presence there is due to intentional or accidental introduction as a result of human activity’ (source Downey & Taylor 2023, hereafter D&T23).

Naturalised plant: ‘Alien plants that reproduce consistently ... and sustain populations over many life cycles without direct intervention by humans (or in spite of human intervention); they often recruit offspring freely, usually close to adult plants, and do not necessarily invade natural, seminatural or human-made ecosystems’ (D&T23).

Invasive native plant: ‘Naturalised plants that produce reproductive offspring, often in very large numbers, at considerable distances from parent plants ... and thus have the potential to spread over a considerable area’ (D&T23).

Transformer native plants: ‘A subset of invasive plants which change the character, condition, form or nature of ecosystems over a substantial area relative to the extent of that ecosystem (i.e. they have clear ecosystem impacts)’ (D&T23).

Hybridising plant: plants that breed freely sharing genetic material between species, resulting in new hybrids.

Ecosystem services: the benefits ecosystems or species provide, that support human life such as clean air and water or stable, enriched soil.

Taxa: scientifically classified groups (e.g. of species, genus or families).

Sources and recommended further reading

Australian Government Department of the Environment Water Heritage and the Arts (2009) Ecosystem Services: Key Concepts and Applications. Occasional paper Series No.1. <https://www.dcceew.gov.au/sites/default/files/documents/ecosystem-services.pdf>. Accessed 6 June 2024.

Downey, P 2024, ‘Growing wattles (Acacia sp.). A word of caution—many species are highly invasive!’, *The Whisper*, May 2024, p. 23, <https://wamboincommunity.asn.au/thewhisper/index.php?op=archive>.

Downey, PO & Taylor, S 2023, *An alert list of alien plant species for the Australian Capital Territory*, unpublished report prepared for the ACT Government, Canberra, https://www.researchgate.net/publication/369794264_An_Alert_List_of_Alien_Plant_Species_for_the_Australian_Capital_Territory_Unpublished_report_prepared_for_the_ACT_Government.

Downey, PO & Taylor, S 2023, *Native plant invaders in the Australian Capital Territory – a list of problematic native plant species for potential management*, unpublished report prepared for the ACT Government, Canberra, https://www.researchgate.net/publication/376237449_Native_Plant_Invaders_in_the_Australian_Capital_Territory_-_A_list_of_problematic_native_plant_species_for_potential_management.

Geary's Gap/Wamboin Landcare Group 2024, 'Geary's Gap/Wamboin Landcare Group's approach to native plant invaders in the Wamboin/Bywong area' *The Whisper*, June 2024, p. ?, <https://wamboincommunity.asn.au/thewhisper/index.php?op=archive>.

Macholán, M. (2013) Hybridization, Organismal. Brenner's Encycopaedia of Genetics (Second Edition) <https://www.sciencedirect.com/topics/medicine-and-dentistry/natural-hybridization#:~:text=Natural%20hybridization%2C%20that%20is%2C%20mating,plants%20has%20generally%20been%20acknowledged.accessed> 6 June 2024.

Richardson, DM, Pyšek, P, Rejmánek, M, Barbour, MG, Panetta, FD & West, CJ 2000, 'Naturalization and invasion of alien plants: concepts and definitions', *Diversity and Distributions*, vol. 6, no. 2, pp. 93-107, <https://onlinelibrary.wiley.com/doi/abs/10.1046/j.472-4642.2000.00083.x>.

Still, V 2024, 'Wattles (Acacia sp.)', *The Whisper*, April 2024, p. 13, <https://wamboincommunity.asn.au/thewhisper/index.php?op=archive>.

Victorian Junior Landcare and Biodiversity Grants (2022) Information Sheet 3: Indigenous Plants <https://juniorlandcare.org.au/wp-content/uploads/2022/06/Information-Sheet-3-Indigenous-Plants.pdf> Accessed 6 June 2024.

Wikipedia, June 2024. 'Native Species' [Native species – Wikipedia](#)