

factsheet

A community approach:

green cestrum



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Problem and history

Green cestrum (*Cestrum parqui*) is native to the South American countries of Chile and Peru and is widely naturalised in a number of countries including Australia. In Queensland, New South Wales and Victoria it is a declared noxious weed due to its ability to invade agricultural land, and its known toxicity to livestock.

In Sutherland Shire the major infestations are found on private and public land within the townships of Bundeena and Maianbar.

Green cestrum is one of many garden escape weeds in Australia and since the 1960s has built up large populations around both townships and in the surrounding Royal National Park. In Bundeena and Maianbar it is most commonly found in moist habitats along drainage lines such as river flats, creek banks and wetland edges, and in disturbed edges of bushland pockets



Green cestrum is a medium sized shrub with shiny leaves and greenish yellow flowers
Photo: Sutherland Shire Council

Project: Community driven program to increase the awareness and control of green cestrum.

Participants: Local Bushcare groups, Sutherland Shire Council and residents.

where thickets dominate, and growth and regeneration by native species is prevented.

Green cestrum is a medium sized perennial shrub with shiny green leaves that smell foul when crushed. It has greenish yellow flowers (throughout the year) and shiny black egg-shaped berries 7 to 10 mm long (summer and autumn). It is spread by seed (transported by birds and in waterways) and thickets increase in size and density by seedling growth and suckering.



Seeds are contained in shiny black egg-shaped berries spread by birds and in waterways.
Photo: North West Weeds County Council

Location: Townships of Bundeena and Maianbar, located within the Royal National Park in southern Sydney, NSW.

VET sector resource: RDT5402A
Develop a strategy for the management of target pests.

Both the plant and berries are toxic to cattle, horses, poultry and pigs, with reports of cattle deaths in the Bundeena area as a result of consumption of green cestrum. The presence of this plant on many properties and in backyards means that there is the potential for children to gain access to plant material, especially seeds. This is a huge concern to both the community and the local council.

Management options

Mechanical control

Mechanical control involves digging up plants by hand and removing all plant material including roots. Due to cestrum's ability to sucker from root fragments, follow up control is often required.

Chemical control

Chemical control involves spot-spray application of herbicides and is used in heavy infestations to knock down mature stands. Alternatively a basal bark application with a dropper bottle



Green cestrum invades areas leaving it void of native vegetation and biodiversity.
Photo: Sutherland Shire Council

can be used on isolated plants. Timing of treatment is important and should be done prior to setting seed. Suckering and seedling growth may occur so follow up treatment will be required.

Cultural control

Cultural control using an application of mulch to cover and suppress seedling growth has been used. This method retains moisture in the soil and provides protection for native plants sown in conjunction with the mulching operation. It is used following chemical or mechanical control.

Community involvement

Local council controlled green cestrum in Bundeena and Maianbar for many years on an ad hoc basis. In 2002 members of a local Bushcare group approached council requesting a more comprehensive approach. Together, members of the Bushcare group and council officers decided upon a strategy for engaging the community in the control of green cestrum.

The strategy was based on the belief that long-term control can only be achieved if the community is involved.



Chemical control is a useful first step to managing dense thickets of green cestrum.
Photo: Sutherland Shire Council

This required the implementation of the principles of **knowledge, relevance** and **resources**, together with the acknowledgement that people need to be told new information often and in many different ways before internalising the message.

Community awareness

The first task was to develop community awareness of green cestrum, giving them information about what green cestrum looks like, how it can be controlled and why the community should be concerned (knowledge and relevance). A 'Weed Facts' sheet was produced by the council with input from community members to 'localise' the contents. The Bushcare group then carried out a 'letterbox drop'. The leaflet contained a high quality photo of cestrum and information on the planned control program.

The letterbox drop was timed to coincide with a newsy article in the local paper praising the efforts of Bushcare workers. The article named local identities speaking about green cestrum and its introduction to Bundeena. The article was aimed at increasing the community's ownership

(relevance) of the green cestrum weed problem, highlighting it as both a danger and a pest. On the same page as the article, council placed an advertisement about Bushcare and the green cestrum program. Both the advertisement and the article were headlined with emphatic words: "Weed Busters" and "Weed Blitz" to promote the idea of urgency and action. Residents were encouraged to report infestations of green cestrum.

Community response

The community responded well, reporting cestrum infestations on both private and public land. Council responded to the reports in the last couple of months of 2002, by arranging to have the largest infestations treated with herbicide by a licensed contractor.



Articles and advertisements were placed in local newspapers naming local identities to promoting community ownership and to develop general awareness.
Image: Sutherland Shire Council

In addition, private landholders with green cestrum shrubs on their property received letters notifying them of its presence and providing advice on how to remove it. Members of the Bushcare group monitored the flow of information in the community and reported on the results.

Council inspections

To increase the resources of the community to deal with green cestrum, council offered a free garden inspection service (by appointment) to residents. Council officers inspected properties, identified cestrum and other weeds, and gave advice on the most cost effective and successful techniques for removing any identified plants. To date council has inspected about 30 properties and conducted a further 200 passing inspections.

Continued community pressure

In 2003, another letterbox drop was carried out, and another advertisement article published in the local newspaper to maintain the momentum. In response to the media release and letter drop, new infestations were reported to council by residents and follow-up herbicide applications were used to treat the plants prior to seed set. In addition, infestations treated in 2002 had repeat herbicide applications where needed.



Members of the Bushcare group apply a jute matting to suppress growth of green cestrum seedlings and other weeds. The matting acts as a mulch, retaining moisture in the soil and providing protection for newly planted native plants.
Photo: Sutherland Shire Council

The future

The program has been highly successful on public land, and on the properties of cooperative landowners who have removed all plants with the help of council. The joint efforts of the community and the council proved to be a great approach, especially for a weed that was found in many home gardens. The nature of the area, however, is a high proportion of 'weekender' properties, which are rarely occupied. These present a long-term challenge to the program.

The group is hoping that several highly visible and successful spray events by council, and continued local media releases will improve the likelihood of compliance on private property, which is now where a majority of infestations

can be found.

Community support for the program has meant that to date the noxious weeds legislation has not been enacted. It is anticipated, however, that in order to complete the planned eradication of cestrum from the area some landowners will eventually have to be pressured.

Council has now developed a fully integrated management plan for green cestrum. It involves mobilising interested members of the community to participate, liaison with other authorities (especially the NPWS) and using a variety of control methods. As the program progresses it will be measured against outcomes and adapted as required to achieve the stated goals.

For further information visit the Weeds CRC's website: www.weeds.crc.org.au

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