Shoalhaven City Council Weed Management Plan– Boneseed
Common name: Boneseed
Botanic name: *Chrysanthemoides monilifera* subsp. *monilifera*
South East Regional Priority Weed Objective - Eradication
Boneseed Control Zone: Owners and occupiers of land on which there is boneseed must notify the local control authority of new infestations; immediately destroy the plants; ensure subsequent generations are destroyed; and ensure the land is kept free of the plant.

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- **Boneseed** has the ability to aggressively invade native bushland in Australia.
- Its vigorous growth and ability to regenerate and spread quickly in disturbed situations, such as fire or clearing, allows it to outcompete native species. It is also a threat to a number of significant rare or threatened species.
- In NSW, scattered infestations occur along the south and central coasts, and isolated infestations have occurred in central and western parts of the state. Without effective control, boneseed has the potential to become more abundant across its current distribution and spread into new areas, with most of southern NSW under threat.
- Boneseed reproduces by seed. One plant can produce 50 000 seeds a year, of which approximately 60% are viable. For some seeds, the hard seed coat splits open, allowing them to germinate as soon as there is sufficient moisture. Other seeds remain intact and can stay viable in the soil for more than ten years.
- Boneseed prefers sandy or medium textured soils and tolerates salty conditions, therefore thriving in coastal conditions. However it can grow in a range of habitats including dunes, mallee, open woodlands and sclerophyll forests, preferring winter rainfall regions. It does not persist when grazed or cultivated, therefore is not a threat to agriculture. Seeds can be spread by birds, rabbits, foxes and cattle, as well as in contaminated landscape supplies and dumped garden waste.

General Biosecurity Duty
*All plants are regulated with a **general biosecurity duty** to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable*

Boneseed Control Zone: The whole of the Shoalhaven Local Government Area

The *Biosecurity Act 2015* and the *Biosecurity Regulation 2017* set out a range of penalties for non-compliance with the provisions of the legislation. Penalties range from $1,000.00 on the spot fines, through to court imposed penalties of up to a maximum of $220,000 for individuals or $440,000 for corporations for failing to discharge a biosecurity duty.
If an offence is proven to have been committed negligently, the court may impose a penalty of a maximum of $1,100,000 for an individual and $2,200,000 for a corporation.

Key Identification Features:
- Woody stems are branched and upright.
- Leaves are 3-9 cm long and alternate along the stems. They are oval shaped with irregularly serrated edges. New growth is covered with white hairs that are shed as the leaves mature.
- Flowers are yellow with 5-8 petals and up to 3 cm in diameter. Peak flowering occurs from August to October. Some plants flower in the first year, although most are at least 18 months old.
- Young fruit are round, green and fleshy and turn black when mature. They contain a single, smooth, round seed (6-7 mm diameter) which is bone-coloured when dry, giving rise to the name 'boneseed'

Chemical control calendar

January	February	March	April	May	June	July	August	September	October	November	December
				Glyphosate 360 g/L (Roundup®) Handgun, backpack or splatter gun **NIL Withholding period**							
				Metsulfuron-methyl 600 g/kg (Brush-off®) ®) Handgun, backpack or splatter gun **7 day Withholding period to allow uptake of chemical**							
				Picloram 44.7 g/kg + Aminopyralid 4.47 g/L (Vigilant II ®) Cut stump or stem injection **NIL Withholding period**							

Herbicides are a safe and effective method of control as part of an integrated Boneseed management plan. e of herbicides does not stop the need to maintain or establish a competitive pasture. The aim of herbicide treatment is to minimise the establishment of a large population of Boneseed. The longer that Boneseed plants live, the more seed they produce, and large amounts of seed lead to heavy infestations. A well-timed herbicide application can be very effective in reducing the density of Boneseed.

ALWAYS READ THE LABEL AND USE CHEMICALS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS
 Refer to NSW DPI Weedwise website: https://weeds.dpi.nsw.gov.au/
Boneseed page: https://weeds.dpi.nsw.gov.au/Weeds/Boneseed

Control with herbicides Boneseed can be controlled by applications of registered chemical.
Physical or mechanical removal Boneseed may be hand pulled (small plants) or by hand cutting (to create access through thickets to carry out other control methods). Manual control methods are effective for small infestations or scattered clumps over large areas, especially where machinery and vehicles cannot access. Manual control minimises soil disturbance and damage to desirable vegetation.

Useful references:
NSW Weedwise: http://weeds.dpi.nsw.gov.au/WeedBiosecurities?AreaId=114
Biosecurity Act 2015: **https://www.legislation.nsw.gov.au/acts/2015-24.pdf**
*Biosecurity Regulation 2017: h*ttps://www.legislation.nsw.gov.au/regulations/2017-232.pdf
South East Regional Strategic Weed Management Plan: http://southeast.lls.nsw.gov.au/__data/assets/pdf_file/0006/722706/South-East-Regional-Weed-Mgmt-Plan.pdf
Boneseed Weeds of National Significance: http://environment.gov.au/cgi-bin/biodiversity/invasive/weeds/weeddetails.pl?taxon_id=16905#