



Boxthorn Blitz Workshop Notes

African Boxthorn is a highly invasive weed originating in Africa and brought to Australia as a hedge plant and has become well established in many areas and states. It displaces native vegetation and can harbour pests animals like rabbits and foxes. While it is a 'Weed of National Significance', Western Australia is the only state where it is not a 'Declared Weed', as it is seen as an environmental weed not an agricultural problem. As such, there are limited funds available from the State for control. The City of Greater Geraldton has spent hundreds of thousands of dollars over recent years controlling boxthorn in priority areas such as the Greenough and Chapman rivers. To assist community members and groups contribute to keeping these areas boxthorn free, and treat their own patches of bush and properties, the City developed the Boxthorn Blitz Kits and workshops.



LEARNING

African Boxthorn is a highly resilient plant, proving resilient to most forms of treatment. **Foliar spraying** has very limited success; the plant shuts down the section of plant that has been sprayed, while unsprayed section keep growing. If this method is used, it is extremely important to spray every single leaf while the plant is actively growing.

Boxthorn also re-sprouts strongly from disturbed root stock. **Mechanically pulling boxthorn** from the ground most often results in the creation of multi-stemmed thickets, exacerbating the problem. If this method is used, a program of follow up treatment with a herbicide is recommended. This system works well in open areas where the plants are large and difficult to reach for cut-stump or 'cut and paste' treatment.

Burning boxthorn also has limited success, due to the capacity to re-shoot from root stock. However, the use of fire to manage the biomass following other treatment methods can be useful. In the Greenough River area, for example, strong natural regeneration has occurred of the ash beds created by burning boxthorn biomass. As the boxthorn burns very hot, it has the added benefit of creating a weed free zone while the native species germinate and establish.

The resilience of boxthorn is contributed to by its capacity to go dormant over dry periods. The plant will look dry and dead, responding rapidly with leaves, flowers and fruit following even the smallest rain event.

However, all is not lost. There are aspects of boxthorn's biology that work in our favour. It can take 1-2 years for Boxthorn to produce seeds, and unlike other weeds, the seed does not persist in the soil for many years. Current understanding is that boxthorn seeds maintain viability for only one to two years. These two factors provide windows of opportunity. Initial treatment of infested areas, with two years of follow up treatment should result in an area being boxthorn free. Monitoring for new plants brought in by birds is still important, though, especially where adjacent to untreated areas.





TREATMENT

The method that has been found to be most effective is 'Cut and Paste'; the stem is cut as close to the ground as possible, and herbicide applied within 10 seconds. When a stem is cut, the vascular system of the plants rapidly draws away from the cut, and it is this process that draws the herbicide into the roots. This is why it is so important to apply herbicide immediately following the cutting – if not, the herbicide sits on the cut stem and does not penetrate into the roots system.

Large and small plants can both be treated in this manner. Smaller plants (under a metre) can be rapidly treated using secateurs/loppers and pasting. Thick gloves and safety glasses are recommended to prevent injuries from the spines. When treating multi-stemmed plants, it is important to cut, and then immediately treat, each stem. For plants that are over a metre, or have thick stems that can't be cut with loppers, a suitably qualified and experienced contractor is recommended. There are a number of local contractors who do this work, and one of them has developed a machine that cuts and pastes large boxthorn plants.



BOXTHORN BLITZ KITS

The City have produced an easy-to-use kit with everything required to treat small plants and re-growth. The contents below are kept in a spill-proof, easy to carry bag:

- Herbicide: 'Vigilant II' as a gel formulation. The applicator pack which makes it easy to apply and reduces the risk of spillage. Care must be taken around aquatic environments. You can find the SDS here: [Vigilant II SDS](https://www.corteva.com.au/products-and-solutions/crop-protection/vigilant-ii.html). <https://www.corteva.com.au/products-and-solutions/crop-protection/vigilant-ii.html>
- Heavy duty secateurs and long leather gloves
- Identification and recording booklet. We are collating information on all boxthorn control activities, and use it to leverage additional funding for boxthorn control.

Please contact us at environmentalplanning@cgg.wa.gov.au for more information or to register your interest in participating at the next Boxthorn Blitz session.

Links:

[City of Greater Geraldton African Boxthorn booklet](#)

[African Boxthorn: National best practice manual](#)

NACC Regional Boxthorn Strategy (link to come)