

# African Boxthorn

## REDUCING THEIR IMPACT IN THE NORTHERN AND YORKE REGION

### Description

African boxthorn (*Lycium ferocissimum*), commonly known as boxthorn, has invaded all landscapes in the Northern and Yorke Region. Introduced from southern Africa, African boxthorns were originally planted as hedges for fencing and windbreaks. Considered a major problem nationally, it is listed as a Weed of National Significance (WoNS).

African boxthorn is a perennial shrub and contains many branches. It commonly grows two to three metres, but may grow up to six metres high. Branches are hairless and stiff and end in sturdy thorns. Numerous thorns also occur at right angles along the branches.

African boxthorn leaves are generally 10 to 40 mm long and four to 10 mm wide, bright green in colour with a smooth and rather fleshy texture. They are oval in shape with a rounded tip and occur in clusters along branches and at the base of thorns.

African boxthorn mainly flowers in spring and summer but flowers may be present any time of year. Flowers hang on stalks, singly or in pairs. They are white to mauve with a tubular base, usually five-lobed and about 12 mm in diameter.

The fruit is a smooth round berry, five to 12 mm long, green ripening to bright orange-red, containing more than 20 seeds. The deep, woody taproot is branched and re-sprouts vigorously if broken or cut.

Do not confuse African boxthorn with spiny native shrubs that may look similar and occupy similar types of habitat. None have spines as large and rigid as those on mature African boxthorn, which may be up to 15 cm long.



### How it spreads

African boxthorn produces large numbers of orange-red berries that are eaten by native and non-native birds and other animals. The seeds pass through the gut and are thus spread. Infestation is common under trees, shrubs, posts, fences or power lines where birds perch, however is not limited to these situations.

African boxthorn also has the ability to regrow from root segments. Care must be taken during manual removal to remove all sections of the root system.



### What is the impact?

African boxthorn is considered a major problem because it invades native vegetation, alters habitat and overruns pastures and other areas. It forms dense, impenetrable thickets that exclude other plants; provides shelter and food for feral animals such as foxes, rabbits, starlings and sparrows and reduces access for stock, native animals, people and vehicles. Boxthorn can become a problem along fences, creeks, around dams and leaking troughs where it can prevent stock accessing watering points.

Native fauna requirements should be taken into account during management of African boxthorn infestations. For example, African boxthorn in coastal regions can interfere with seabird breeding and displace native shrubs such as nitre bush. However, in some situations where much or all of the original native vegetation cover has been removed, African boxthorn's dense foliage may be used as habitat by native fauna such as fairy wrens and the fruit may be a food source for native animals.



## Examples of control methods

The best form of weed control is prevention. Weed infestations should be treated when small to prevent large-scale establishment. Effective, long term control requires the integration of a number of control methods.

### Mechanical

Large stands of African boxthorn are most cost-effectively controlled by mechanical removal of plants and their roots. This can be done by dozing, stick raking or blade ploughing. Follow up treatment with one or more of herbicide, cultivation or revegetation is required.



### Chemical

There are over 400 herbicides registered for use on African boxthorn. Always check the label of any herbicide you consider using for application rates and other critical information.

**Foliar:** spray plants to the point of run-off. Ensure plants are actively growing and have good leaf cover. Do not spray during hot, dry periods or when plants are stressed.

**Basal bark:** useful in environmentally sensitive areas, but can be made difficult as thorny branches limit access to the plant's stem base. Each stem must be sprayed carefully from the ground to a height of 30 to 40 cm, ensuring the stem is covered all the way around. Incomplete coverage of the stem will result in regrowth.

**Cut stump:** useful in environmentally sensitive areas and for treating small numbers of plants, but can be made difficult as thorny branches limit access to the plant's stem base. Cut each stem off as close to the soil surface as possible. Immediately (within 15 seconds) apply a registered herbicide to the cut surface by painting or spraying. Should the herbicide not be applied immediately, the plant will heal the cut and the herbicide will not be able to kill the plant.

### Revegetation

Revegetating treated African boxthorn infestations with native species is beneficial on two fronts. Firstly, it encourages competition to discourage African boxthorn recruitment. Secondly, the gradual or staged replacement of African boxthorn with appropriate native species will minimise impacts to native animals using it as harbour.

## Pest plants – whose responsibility?

Pest plants don't recognise property boundaries. By working collaboratively, Natural Resources Northern and Yorke and landholders have the best chance of controlling priority pest plants.

### On private land:

Landholders have a legal responsibility, under the *Natural Resources Management Act 2004*, to control declared plants on their land.

### On roadside reserves:

Roadsides are part of public road reserves, which are owned by the Crown. Under the *Natural Resources Management Act 2004*, regional NRM boards are responsible for the control of declared pest plants on roadside reserves.

Landholders have the opportunity to control declared plants on road reserves adjoining their property. Where control work is undertaken by the local board, an account may be issued to landholders.

Before undertaking control work on road reserves, landholders should contact the Natural Resource Centre to determine if any approvals are required. Care should also be taken to avoid any off-target damage to native vegetation.

### Natural Resources Northern and Yorke can provide the following support to landholders:

- A free weed identification service
- Advice about the most appropriate management method for pest plants on their property.

## For more information

### Natural Resources Centre Northern and Yorke

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W [www.naturalresources.sa.gov.au/northernandyorke](http://www.naturalresources.sa.gov.au/northernandyorke)

Hours Monday-Friday, 9am-5pm

### Control Techniques

Biosecurity SA Weed Control Handbook

[www.pir.sa.gov.au/biosecuritysa](http://www.pir.sa.gov.au/biosecuritysa)

South Australian Weed Control App

available from your App store (free)

Weed Management Guides for WoNS weeds

[www.weeds.org.au/WoNS](http://www.weeds.org.au/WoNS)

