

# Feral Olive (*Olea europaea*)

November 2015



Image credit: J Donnelly

Olives can develop into dense infestations

Feral European olives are a major pest plant in native vegetation where they displace native species and degrade fauna habitat.

The oil-rich trees burn with great heat and are a significant hazard in bushfires.

Feral Olives are a declared plant under the *Natural Resources Management Act 2004* (NRM Act). Cultivated trees, that planted and maintained for use, are not declared.

## Description

European Olive is an erect, bushy tree growing up to 12 m tall. It has a deep branched root system. A large lignotuber stores energy and generates new stems.

The trunk branches from the base and has rough grey to black bark.

Leaves are narrow, glossy dark green on top and silvery underneath.

Small cream flowers with four petals appear in large clusters in late spring.

Mature trees produce thousands of fruit each year, each bearing one seed. The fruit is initially green and becomes purple-black as it ripens over summer.

Seeds germinate mainly in autumn and seedlings grow during winter. New plants are several years old before flowering.

New shoots and suckers can develop from the woody roots after the trunk is injured or removed.

## Impacts

Feral Olive is a major pest plant of grassy woodlands. Feral Olives develop a dense mid-storey which displaces shrubs and suppresses the growth of ground-layer plants.

It is a strong competitor and can form new infestations in undisturbed plant communities. However germination is suppressed by shade and mass germinations can follow vegetation disturbance.

In severe infestations the understorey can be almost bare, which creates an erosion risk particularly along watercourses.

Olive trees are rich in oil and burn with intense heat. They increase the impact of bushfires on native vegetation and significantly increase the danger of fire fighting.

## Distribution

European Olives are native to the Mediterranean.

Many of the Feral Olives in the Adelaide region originate from plantings made in the mid 1800s. Ongoing escapees from tree crops and gardens contribute to the wild population.

Feral Olives are well-adapted to Adelaide's cool wet winters and warm dry summers. They are very tolerant of drought. They grow in a wide range of soils from deep loams to rocky outcrops.

Feral Olives occur throughout the Mount Lofty Ranges, with severe infestations occurring on the western slopes including Brown Hill Creek, Shepherds Hill, Sturt Gorge and Onkaparinga Gorge.



Government of  
South Australia



Natural Resources  
Adelaide and Mt Lofty Ranges

The oil-rich fruit is sought after by birds and mammals, including foxes. Seed distributed by animals can establish new infestations over a range of many kilometres.

Seeds and tree fragments can be transported in soil and moved through earthworks.

## Control methods

Effective control of Olive requires a long-term plan.

The trees are hardy, have a vigorous and persistent root systems and have a substantial long-lived seed bank. Regrowth and ongoing germination require continued control effort.

For advice on chemical control techniques contact your nearest Natural Resources Centre. Please refer to the *Weed control handbook for declared plants in South Australia* for advice on chemical control. You can find it on Biosecurity SA's website at [www.pir.sa.gov.au](http://www.pir.sa.gov.au)

### Hand pull

Suitable when seedlings are small and in winter when soils are moist, making the plant and roots easier to remove. Any disturbed soil should be tamped down after removal.

### Grubbing

A grubber or 'tree popper' can be used in winter when soils are moist. Suitable for plants with stems from 6 cm to 1.5 m high. Any disturbed soil should be tamped down after removal.

### Cut and swab

Cut the trunk as low as possible and paint (swab) with a registered herbicide within 20 seconds. Suitable for small seedlings and trees where minimal soil disturbance is desired. Can be treated all year, however avoid hot periods when the plant may be stressed.

### Drill and fill

Holes are drilled 2-3 cm deep, into the lignotuber and trunk, about 40 mm apart and for a minimum of three rows. A registered herbicide is then applied within 20 seconds to the holes. The dead tree can be left in situ to provide habitat or sentry points for birds, or removed at a later time. Suitable for small and mature trees. Can be treated all year, however avoid hot periods when the plant may be stressed.

### Frill and fill

Grooves are cut with a hatchet or chainsaw around the lignotuber and trunk, 2-3 cm deep, about 40 mm apart (being careful not to ringbark the plant), at a 45° angle and for a minimum of three rows (the more the better). Fill each groove or cut with herbicide within 20 seconds. Suitable for small and mature trees. Can be treated all year, however avoid hot periods when the plant may be stressed.

### Spot spray

Use of a registered herbicide at label rates is effective. Suitable for seedlings and small plants up to 1.5 m tall. Can be treated all year, however avoid hot periods when the plant may be stressed.



Image credit: J Donnelly

Olives will readily regrow from cut stumps

### Mechanical removal

Mature trees and their stumps can be bulldozed or mechanically removed, however the potential damage this may cause to soils must be weighed up. If necessary a Water Affecting Activity permit may be required if the works being carried out are in a watercourse. Please contact your local Natural Resources Centre for more information.

### Basal treatment

Basal treatment for olives is recommended at a rate of 1lt Triclopyr 600 g/l to 30 litres diesel or bio safe oil, as per label and APVM permit number PER12932.

All techniques should be monitored and any regrowth or new seedlings treated via the hand pull, grub, basal or spot spray techniques.

## Declarations

the following sections of the NRM Act apply to Wild Olive (not planted and maintained for use) in the Adelaide and Mount Lofty Ranges region:

**182 (2) Landowner must control the plant on their land**

**182 (3) Landowner must follow council regulations regarding olive**

**185 NRM authority may recover costs for control of weeds on roadsides from adjoining landowners**

## More information

Please contact your local Natural Resources Centre for further information, advice and assistance in controlling Wild Olive.

### Black Hill

115 Maryvale Road, Athelstone 5076  
T: 08 8336 0901

### Gawler

8 Adelaide Road, Gawler South 5118  
T: 08 8523 7700

### Willunga

5 Aldinga Road, Willunga 5172  
T: 08 8550 3400

