

Feral Olive (*Olea europaea*)



Feral Olive

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 *Landscape South Australia Act 2019*.

Cultivated olive groves that are maintained and harvested are not declared.

Description

European olive is an erect, bushy tree growing up to 12m 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 Hills and Fleurieu region originate from plantings made in the mid 1800s and were later abandoned. Ongoing escapees from tree crops and gardens contribute to the wild population.

Feral olives are well-adapted to the Hills and Fleurieu'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 region.

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 olives 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 requires continued control effort.

Landscapes Hills and Fleurieu staff have found that methods of control whereby the tree is left standing and herbicide allowed to circulate through the entire tree, have higher success rates than cut and swab methods.

For further advice on chemical control techniques contact Landscapes Hills and Fleurieu or visit <https://pir.sa.gov.au/biosecurity/weeds/controlling-weeds>

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.

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.

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.

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

Feral olive Declarations

The following sections of the *Landscape SA Act* apply to feral olives in the Hills and Fleurieu region:

192 (2) Landowner must control the plant on their land

192 (3) Landowner must follow council regulations regarding olives

194 Boards may recover certain costs from owners of land adjoining road reserves



Further information

Further information is available through Landscapes Hills and Fleurieu

Mount Barker Office: Cnr Mann & Walker streets, Mount Barker, 5251 (08) 8391 7500

Email: hf.landscapeboard@sa.gov.au

LANDSCAPE
SOUTH AUSTRALIA
HILLS AND FLEURIEU

Keep in touch with our activities through
Facebook [@HFLandscapeSA](https://www.facebook.com/HFLandscapeSA)

landscape.sa.gov.au/hf