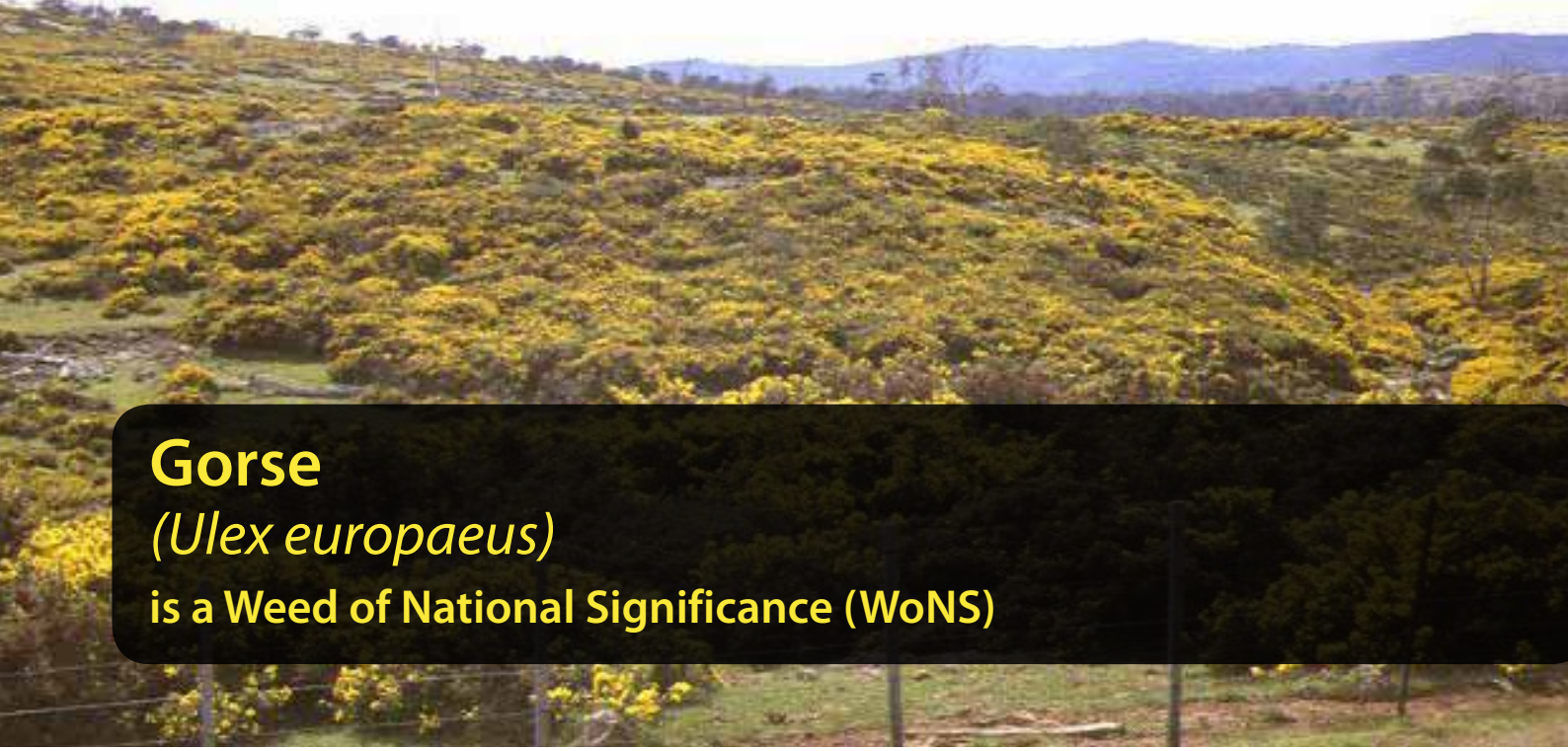


Gorse
(Ulex europaeus)
is a Weed of National Significance (WoNS)

Why is it a problem?

Gorse has devastating impacts on people, business and the environment across Australia. It is estimated that gorse costs the Australian economy $7million every year.

Gorse was introduced as an ornamental and hedge plant in the early 1800s. It can grow across a very wide range of soil types, land uses and rainfall.

Gorse has a long-lived soil seed bank; it can take decades to fully control established infestations. Gorse:

> establishes in native and improved pastures, bushland, plantation forests, neglected cropping land, river banks and along roads and rail;
> forms dense, spiny infestations which limit stock and human access to land and water;
> significantly reduces the carrying capacity of pastures;
> affects establishment and management of plantation forests;
> burns fiercely and is a fire hazard;
> reduces plant diversity and changes fire regimes in native forests.

How do I recognise gorse?

Gorse is a dense woody shrub growing up to 7m tall, but more often to 2.5m. It has extremely spiny stems and leaves which are a dull green in colour and end in a sharp yellow point.

Gorse flowers heavily during spring and then again in late summer. The flowers are bright yellow, 15 to 25mm long and have a characteristic "pea" or "bean" (legume) flower shape. Flowers also have a distinctive coconut-like smell.

Flowers are followed by 10 to 20mm long black, pea-shaped pods, densely covered with fine hairs. Gorse has hard seeds, 3 or 4mm across and green or brown in colour, with a white appendage.

Gorse seedlings are recognisable by their soft, hairy grey-green "trifoliate", or three-lobed leaves.

Gorse is a dense woody shrub

Leaves and stems

Flower

Fruit and seeds

Seedling

Gorse *(Ulex europaeus)*

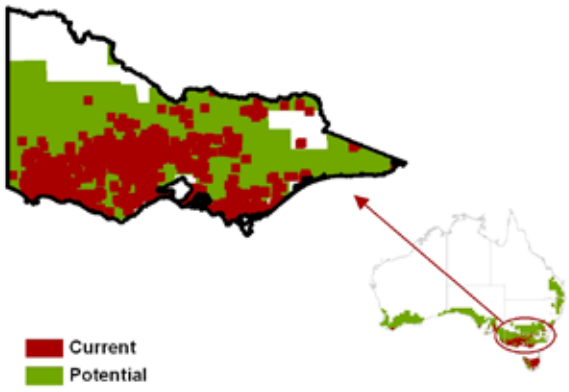
Where does it grow?

In Australia gorse grows across a wide range of sites where the average temperature is in the 18 to 20°C range during the warmer months. Rainfall at gorse-infested sites across the country ranges from 450 to 2400mm!

Gorse will thrive on a wide variety of soil types. Because it is a legume, it can establish on soils with very low nitrogen fertility, including degraded soils in quarries and gravel pits.

In Victoria, gorse has been recorded throughout the state, except for the Mallee and parts of Gippsland. Heaviest infestations are located around Ballarat. The control of all infestations is needed to prevent further serious impacts to people, the economy and the environment in this state.

Current and potential distribution of Gorse (*Ulex europaeus*)



Gorse has long-lived seed

Gorse plants produce abundant seed. Seed builds up in the soil around gorse infestations to form a very large soil seed bank. Most of the seed is "hard", that is it can lie dormant without germinating for up to 25 years under normal conditions. The seed bank can accumulate as many as 40,000 seeds/m^2, or 400 million seeds/ha under mature gorse.

Gorse seeds in the soil are hidden from control. Seeds are mainly lost from the soil seed bank through germination. This happens when the soil is disturbed by cultivation, fire, animals, or large changes in moisture. At these times, massive germination of seed can occur, along with strong regrowth of existing plants from roots as well. This makes gorse a very persistent weed once it is established.

What can I do about gorse?

In Victoria gorse is a declared noxious weed under the *Catchment and Land Protection Act 1994*.

The good news is that there are many control options for gorse.

When you begin a program against gorse, consider the following points:

> **Act early** while gorse infestations are still small and more affordable to control
> **Get a copy of the *Gorse national best practice manual*** (available at: www.weeds.org.au/WoNS/gorse/)
> **Plan and budget your work,** identify what vegetation should replace the gorse
> **Prevent spread** and protect clean areas
> **Reduce the above-ground mass** of gorse then **kill the regrowth**
> **Expect to follow up** seedling germination for 5 to 25 years.

Gorse control options

> **Hand removal.** Pulling is effective on seedlings and cut and paint is effective on larger plants
> **Mechanical control.** A bulldozer or loader can be a good way to start on large infestations
> **Foliar spraying**. A wide range of herbicides are registered against gorse. Always follow label instructions
> **Read detailed gorse control information in the *Gorse national best practice manual***
> **Seek advice.** Contact your local DPI office for control advice (see website below).

For more information

Visit these websites for more details on who to contact, weed identification and control options:
www.dpi.vic.gov.au/weeds | www.weeds.org.au/WoNS/gorse/

CARING FOR OUR COUNTRY
National Gorse TASKFORCE
State Government Victoria Department of Primary Industries