

## Gorse (*Ulex europaeus*)



Gorse is a Weed of National Significance. It is regarded as one of the worst weeds in Australia because of its invasiveness, potential for spread, and economic and environmental impacts.



### 1 **Life Cycle:**

- First flowering occurs at about 18 months of age
- Flowers are produced at all times of the year but the main flowering periods are spring and autumn. May flower more often if conditions are right
- Can live up to 30 years

### 2. **Dispersal:**

- Seed not equipped for wind dispersal
- A mature infestation can produce up to 6 million seeds per ha each year
- Seed pods burst in warm weather and can be ejected up to 5m away from parent
- Birds and ants spread seed
- Seed viable up to 30 years
- Cultivation and the spread of the root system can permit some plant fragments to regenerate.

### **3. Eradication**

Once established it is difficult to control but not impossible. The key to controlling gorse is to prevent it from flowering and setting seed.

A gorse control program will require the implementation of a number of strategies and possibly a variety of control techniques. A key strategy in an eradication program is to target sparsely spread individuals capable of producing seed (18months/flowering) across an area before treating dense infestations that perhaps aren't going to far. This means you can cover a larger area and prevent further infestation.

Target flowering individuals first – plants take 18months to start producing seeds.

Exhaust the soil seed bank – once gorse has been treated and controlled you need to manage the soil seed bank to prevent reinfestation. Burning or mechanical control/ripping can stimulate seed germination and help to reduce the soil seed bank quicker.

### **4. Control Techniques**

#### **Non-chemical Control:**

- Hand weeding is possible for small plants
- Tractor for large infestation – root raking should be done to remove as many roots as possible
- Cutting is not effective as they will reshoot
- Burning - Gorse burns readily burnt areas are usually covered with a dense carpet of seedlings after rain
- Livestock – sheep and goats will graze gorse, buying some time by preventing flowering from occurring
- Spidermite and seed weevil – slow, will not eradicate may slow further infestation

NOTE: There is a marked increase in numbers of seedlings if large bushes are removed, because seed is exposed to light and heat.

#### **Chemical Control:**

- Cut & painting – useful for smaller plants
- Knap sacking - useful for infestations up to 1m high
- Spray rigs – high volume vehicle or trailer mounted spray rigs will quickly and effectively produce a volume of spray to treat large infestations

#### **Chemicals used**

Please Note:

All chemical recommendations discussed are done so with the understanding that ANY and ALL herbicide applications are carried out within the guidelines as stated within the current chemical Material Data Safety Sheets. Any deviation from the MSDS instructions for rates, safety guidelines, applications etc are in NO WAY endorsed, instructed or recommended by Seeds Bushland Restorations.

It is common, good practice to be thoroughly familiar with any given herbicide prior to use.

<b>Technique</b>	<b>Chem/Rate</b>	<b>OH&amp;S</b>	<b>Timing</b>	<b>Comments</b>
Cut & paint	RoundUp @ 100%	Chemical resistant gloves, long sleeves.	Any – except extreme heat when plant may shut down.	IMPORTANT: Apply chemicals with 1min of cut or cut will seal up
Knapsacking	RoundUp @ 1% or Metsulphuron methyl (Esteem or BrushOff) plus any penetrant (Pulse) @ 20ml/10L Or Triclopyr (Garlon 600) @ 17ml/10L	Gumboots, chemical resistant gloves, long sleeves and long pants, hat, safety glasses or goggles. Face shield when mixing up. Do not spray in windy conditions of plants higher than 1m. *Respirator with Garlon **Gloves for Garlon must be Non-PVC	Any – except extreme heat when plant may shut down.	Any other plant over sprayed will die. Be sure to cover all of plant including tips or regrowth will occur DO NOT spray Garlon >28dg Celsius DO NOT spray Garlon around Vineyard crops
Tanker Spraying	Esteem @ 15g/100L + plus any penetrant (Pulse) @ 200ml/100L	Gumboots, chemical resistant gloves, long sleeves & pants, hat, safety glasses or goggles and respirator. Use all above plus face shield when mixing up.	Any – except extreme heat when plant may shut down.	Be sure to cover all of plant including tips or regrowth will occur.
Tanker Spraying	RoundUp @ 1% plus any penetrant (Pulse) @ 200 ml/100L	As above	Any – except extreme heat when plant may shut down.	Any other plant over sprayed will die. Be sure to cover all of plant including tips or regrowth will occur
Tanker Spraying	Triclopyr (Garlon 600) @ 17ml/10L	Gumboots, chemical resistant non-PVC gloves, long sleeves & pants/chem. suit, hat, safety glasses or goggles and respirator. Use all above plus face shield when mixing up.	DO NOT spray Garlon >28dg Celsius	DO NOT spray Garlon >28dg Celsius DO NOT spray Garlon around Vineyard crops

**5. Timing of application**

- Literature says to spray spring summer period, in our experience effective control occurs at all times of year except in hot weather, >32C when plants stomata close to conserve water.

**6. Application notes**

- Care must be taken to cover the entire plant especially the growing tips.
- Surfactant is essential