

# T.I.P.S.

Targeted Invasive Plant Solutions

8 Gorse



## Legal Status

- ✓ Invasive Plants Regulation, *Forest and Range Practices Act*
- ✓ Noxious Weed (Provincial), *BC Weed Control Act*

## Distribution

Currently distributed in the following areas: southern Vancouver Island, West Vancouver, some of the Gulf Islands, and Skidegate on the Queen Charlotte Islands.

## Identification

**Flowers:** Bright yellow and pea-like; single; 1.5–2 cm long; found on hairy stalks; fragrant.

**Stems:** Dense evergreen shrub with single upright stem; 1–3 m tall; heavily branched and mostly 5-angled; hairs sparse.

**Leaves:** Young plants have trifoliate leaflets; mature plants have scales or spines. Spines are branched and grooved; 1.5–2.5 cm in length.

**Fruits:** Black hairy seedpods; 1.5–2 cm in length.

**Similar Species:** Scotch broom also has yellow pea-like flowers, but has simple leaves rather than the spine-like leaves of Gorse.

## Ecological Characteristics

**Habitat:** Prefers clearings such as sandy or rocky areas, roadsides, fields and pastures, bluffs, cutblocks, and cutbanks; prefers full sun and is adapted to low soil fertility.

**Reproduction:** Perennial species that can live up to 45 years and reproduces mainly by seed. Up to 18,000 seeds are produced per mature plant. Seeds mature in pods and remain viable for up to 40 years. Gorse can also spread vegetatively.

**Dispersal:** Seeds are released explosively by the splitting pod. Seeds may land several feet away and can also be carried by water, animals, humans, machinery, and ants.



## Current Distribution in BC



Dots indicate species presence as recorded in IAPP (accessed September 19, 2007).



Gorse • *Ulex europaeus* • Synonyms - Common gorse, furze, whin

## Impacts

**Economic:** Can hinder re-growth of harvested areas and recreational use of land; can increase fire hazard as plants contain volatile oils and produce large amounts of litter; invades pastures and rangelands, replacing desirable forage plants.

**Ecological:** Displaces native vegetation, thereby decreasing forage for wildlife and decreasing local plant biodiversity; increases erosion.



J. Hallworth

## Integrated Pest Management

IPM is a decision-making process that includes identification and inventory of invasive plant populations, assessment of the risks that they pose, development of well-informed control options that may include a number of methods, site treatment, and monitoring.

### Prevention

- Avoid creating disturbances in infested areas which will promote seed germination.
- Wash equipment, clothing, and animals that have been in infested areas to prevent the spread of seeds.

### Mechanical Control

- Hoeing or digging up small infestations, including all plant roots, may be effective. Re-sprouting can occur from any remaining root portions. Follow-up treatments to remove seedlings originating from root portions or from the seed bank will be required.
- Seedlings must be pulled/dug out as mowing promotes vegetative growth. Larger equipment may be necessary to dig up the roots of larger plants and infestations.
- Cutting plants alone is not effective to completely remove an infestation; herbicide should be applied to the stumps following any cutting. Cutting above the root encourages re-sprouting. However, cutting will prevent seed-set for a growing season and can allow access to the plants for other forms of control.
- Repeated mowing may deplete plant root reserves. If mowing only once, however, it is recommended that mowing occur before the plants flower.
- Sprouting can occur from stumps following fire, but fire may be an effective control method for large infestations.

### Biocontrol

- No agents available in BC at this time.

### Chemical Control

*Herbicide recommendations and use must consider site characteristics and be prescribed based on site goals and objectives. Herbicide labels and other sources of information must be reviewed before selecting and applying herbicides.*

- Herbicides can be applied in smaller amounts if they are applied to new shoots of mature plants. This can be achieved by first cutting back the plant and allowing re-growth.
- Basal treatment, or herbicides applied to cut stumps, can also be effective.
- Herbicide applied after bloom drop is most effective on Gorse.
- Glyphosate should be applied to growing plants. This treatment should be followed by seeding/replanting the site to prevent re-infestation from the seed bank.
- Selective broadleaf herbicides (e.g. dicamba, triclopyr, 2,4-D and metsulfuron) are also effective and useful when infestation is within a grassed area.
- Application of pesticides on Crown land must be carried out following a confirmed Pest Management Plan (*Integrated Pest Management Act*) and under the supervision of a certified pesticide applicator. [www.env.gov.bc.ca/epd/edppa/ipmp/index.html](http://www.env.gov.bc.ca/epd/edppa/ipmp/index.html)

## References and links to further information

- *A Guide to Weeds in British Columbia*. Gorse. [http://www.weedsbc.ca/weed\\_desc/gorse.html](http://www.weedsbc.ca/weed_desc/gorse.html)
- BC Ministry of Agriculture and Lands. Field Guide to Noxious Weeds and Other Selected Invasive Plants of British Columbia. Gorse. <http://www.agf.gov.bc.ca/cropprot/weedguid/gorse.htm>
- BC Ministry of Forests and Range, Invasive Alien Plant Program. <http://www.for.gov.bc.ca/hra/Plants/application.htm>
- E-Flora BC, an Electronic Atlas of the Plants of BC. [www.eflora.bc.ca](http://www.eflora.bc.ca)
- Invasive Plants Regulation, *Forests and Range Practices Act* and *BC Weed Control Act*. <http://www.for.gov.bc.ca/tasb/legregs/frpa/frparegs/invplants/lpr.htm>
- <http://www.agf.gov.bc.ca/cropprot/noxious.htm>
- King County. *King County Noxious Weed Control Program Weed Alert*. Gorse. [http://dnr.metrokc.gov/wlr/LANDS/Weeds/pdf/Gorse\\_factsheet.pdf](http://dnr.metrokc.gov/wlr/LANDS/Weeds/pdf/Gorse_factsheet.pdf)
- King County. *Best Management Practices*. Gorse. <http://dnr.metrokc.gov/wlr/LANDS/Weeds/pdf/gorse-control.pdf>
- USDA Forest Service. FEIS Invasive Plants List. *Ulex europaeus*. <http://www.fs.fed.us/database/feis/plants/shrub/uleeur/all.html>