

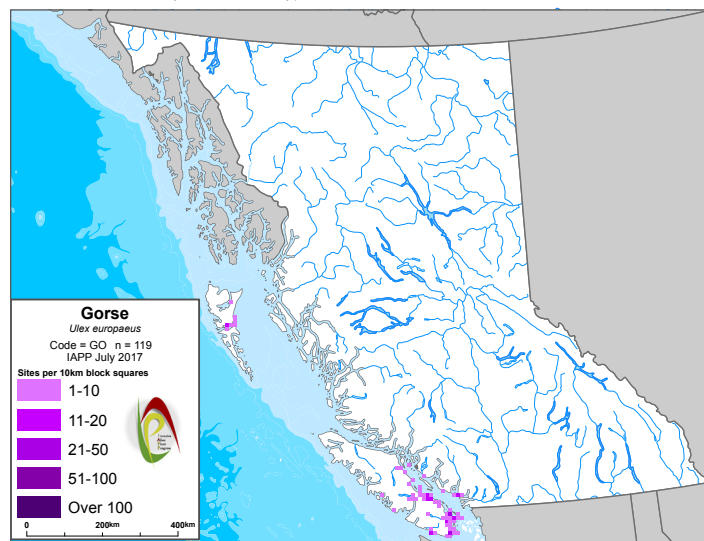
Gorse *Ulex europaeus*

About Gorse

Gorse is a spiny shrub from the Mediterranean region of Western Europe. It was first introduced as an ornamental in south coastal Oregon in the late 19th century, and has since spread widely in coastal areas from California to British Columbia. Gorse forms vigorous stands that grow outward and crowd out all other vegetation causing a considerable loss of habitat.

Legal Status

Invasive Plants Regulation, Forest and Range Practices Act;
Noxious Weed (Provincial), 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.



Eric Coombs, Oregon Department
of Agriculture, Bugwod.org

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

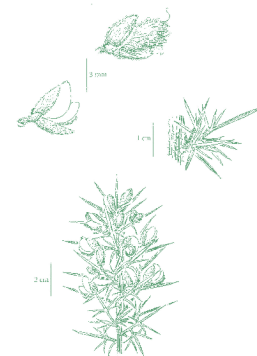
Habitat: Prefers clearings such as sandy or rocky areas, roadsides, fields and pastures, bluffs, cutblocks, and cutbanks; prefers full sun and is adapted to low soil fertility.

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.



Norman Rees, USDA



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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.

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 treatments, 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

- » There are 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.
- » Triclopyr or glyphosate application treatments include: foliar, basal cut stump, cut stump, and basal bark. (Refer to labels for specific instructions and rates)
- » 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.
- » Metsulfuron methyl and picloram alone applied foliar are selective herbicides that provide effective control. Picloram is not recommended in coastal, high rainfall areas due to persistence and mobility of the herbicide.
- » 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.

References/Links

- » Field Guide to Noxious Weeds and Other Selected Invasive Plants of British Columbia. https://bcinvasives.ca/documents/Field_Guide_to_Noxious_Weeds_Final_WEB_09-25-2014.pdf
- » BC Ministry of Forests, Lands, and Natural Resource Operations, Invasive Alien Plant Program (IAPP). www.for.gov.bc.ca/hra/Plants/application.htm
- » E-Flora BC, an Electronic Atlas of the Plants of BC. www.eflora.bc.ca/
- » Invasive Plants Regulation, Forests and Range Practices Act and BC Weed Control Act. http://www.bclaws.ca/civix/document/id/consol31/consol31/00_02069_01
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- » USDA Forest Service. FEIS Invasive Plants List. *Ulex europaeus*. <https://www.fs.fed.us/database/feis/plants/shrub/ulex/all.html>
- » DiTomas, J.M., G.B. Keyser et al. 2013. Weed Control in the Natural Areas of the United States. Weed Research and Information Centre University of California 544pp. https://wric.ucdavis.edu/information/natural%20areas/wr_U/Ulex.pdf



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