



Tina Nordstrom

INVASIVE PLANT PROFILE

Scotch Broom *Cytisus scoparius* Family: Fabaceae Zone 6b



EVERGREEN
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Originally a native of Southern Europe, Scotch Broom is now commonly sold as an ornamental shrub and is also used for erosion control in road right-of-ways.

What makes Scotch broom a problem?

While Scotch broom thrives in full sun and prefers sandy, well-drained soil conditions, it can tolerate moist soil conditions and partial shade. This flexibility combined with the production of many seeds and its ability to grow most of the year, facilitate the easy spread of this plant.

Scotch broom is typically concentrated on southern BC Gulf islands and the southern coastal mainland. However, it can now be found from mid-coast BC (Queen Charlotte Islands) to the interior, with sightings reported in the Kootenays and Castlegar.

Scotch broom reproduces via seed capsules that explode and distribute seeds up to seven metres away from the source plant. Over 10,000 seeds can be produced per plant. The seeds have hard coats enabling them to survive in the soil for up to 80 years. Broom's deep roots, its ability to re-sprout from stumps, and its long life span (usually 10 to 15 years, although individual plants can live for over 20) all contribute to its ability to invade natural areas. In grassland habitats, areas of dense broom brush shade out and kill native grassland plants and favour invasion by other woody, non-grassland plant species.

Despite flowers and bushy habitat, research indicates there is little use of broom by wildlife, even in large thickets. The shrub offers little cover and the fruit is inedible. Several local governments, including the City of Vancouver, the Greater Vancouver Regional District in Burnaby and Fort Langley, are working with stewardship groups to remove Scotch broom from public lands, such as parks, as part of an effort to reclaim biodiversity and habitat values.

How is Scotch broom controlled once a site is invaded?

Manual or hand pulling can be effective if care is taken to extract all of the stump and roots, minimize soil disturbance, and do not spread the seeds. The following techniques are typically used

- For small infestations, plants are pulled or dug up and as much of the root as possible is removed. All mature plants need to be removed so no new seeds are produced.
- Mature shrubs can also be cut down. Mowing does not work on young, green plants. The shrub needs to be cut near the ground where the stem is more yellow than green. It is best cut while the plant is flowering. Cutting when the seeds are set can lead to unintentional seed dispersal.
- The key is to avoid having seeds form after the initial clearing – control areas need to be monitored and plants removed before they flower.
- If full removal of the plant is not practical, it is recommended to cut off flower heads in June-July before the seeds set.

Removal techniques often need to be repeated over a number of years because of broom's ability to re-sprout. Frequently, hand pulling disturbs the surrounding soil and creates ideal conditions for additional broom seeding. Older broom in coastal sites, however, resprouts less than 5% of the time.

Broom has been listed as a Class B noxious weed in Oregon and Washington. Complete Douglas-fir plantation failures, due to Scotch broom, have been documented in both states. There are concerns that this invasive may be threatening endangered ecosystems such as the Garry oak ecosystem in southwestern British Columbia.

Natural Resources Canada



Nick Page

Plant description

Scotch Broom has pea shaped flowers that are typically yellow, sometimes mixed with red or white, that bloom from March to June. The seedpods are flat, brown to black in colour, with fine hairs on the margins. Broom grows to an average height of two to three meters. It is an upright evergreen shrub in the Legume family that has a taproot and an ability to fix nitrogen in the soil. The stems are ridged, woody, green to brownish-green and prominently five-angled. The upper leaves are simple and unstalked, while the lower leaves are stalked and comprised of three oval leaflets.

Market Alternatives

There are other shrubs that offer similar benefits to Scotch broom (attractive flowers, soil erosion control, a continuous hedge) without becoming invasive and a threat to local ecosystems.

- 1 **Red flowering currant** *Ribes sanguineum* This is a deciduous shrub with pink to red flowers in the spring that attract hummingbirds. It grows in dry sunny sites where broom would normally thrive and is suitable in commercial planting, for slope stabilization and as an ornamental in large and small gardens.

NATIVE SPECIES, FULL SUN, DRY/MOIST, 1-4M TALL



- 2 **Oceanspray** *Holodiscus discolor* This large deciduous shrub also grows where broom tends to thrive but its range also extends to moist, partially shady sites. Oceanspray is known for the large plumes of white to cream flowers that show in spring. It is suitable for slope stabilization, commercial planting and large gardens.

NATIVE SPECIES, FULL SUN, PART SHADE, DRY/MOIST, 2-4M TALL



- 3 **Cinquefoil** *Potentilla fruticosa* This low mounding deciduous shrub produces colourful yellow flowers in late summer. It is also drought tolerant and suitable for commercial planting, restoration and large and small gardens. Very attractive when massed.

NATIVE SPECIES, FULL SUN, DRY/MOIST, 20CM-1M TALL



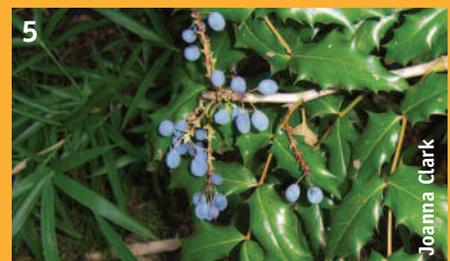
- 4 **English lavender** *Lavendula angustifolia* Lavender is a great perennial for sunny well-drained spots. Purple scented blooms last well into the summer and the silver foliage provides some winter interest. English lavender is one of the most tolerant lavenders for the coastal climate. It also attracts beneficial insects. Suitable for small commercial plantings and large and small gardens.

FULL SUN, LOW WATER, 30-60CM TALL



- 5 **Tall Oregon grape** *Mahonia aquifolium* This evergreen shrub produces a spray of yellow flowers in the spring and purple berries in the fall, which provide food for birds. It grows in sun to partial shade, and is drought tolerant though it prefers moist soil. This plant grows in woodlands or along a woodland edge, and can often be found on rocky sites. It is an easy-to-grow plant suitable for commercial plantings, large gardens and under trees.

NATIVE SPECIES, SUN/SHADE, DRY/MOIST, 1-3M TALL X 50CM-1M WIDE



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