



BCTS

BC Timber Sales
Strait of Georgia

West Coast FSP

Sept. 6, 2011 – July 16, 2016

Invasive Plants Measures

The following document provides information to be used to identify priority invasive plants in the above FSP(s). These plants do not occur naturally in British Columbia and their presence can cause environmental and/or economic harm, and some species can harm human health. The purpose of the Measures in the FSP is to reduce the introduction and spread of the following **priority invasive plants**:

- Gorse
- Scotch Broom
- Purple Loosestrife
- Marsh Thistle

WHAT TO DO:

1. Where new incidences of priority invasive plants are noted in the field, notify your BCTS representative.
2. Where invasive plants are likely to be introduced or spread as a result of the activities being carried out, seed contiguous areas of exposed soil that exceed 0.25 ha within 1 year of completing activity. Where readily available and comparable in cost, preference must be given to grass seed that is:
 - a. High sod-forming content, except in areas that are planted with tree seedlings;
 - b. Has been certified by the Canadian Seed Growers Association that the seed;
 - i. Meets the standards for varietal purity established by the Canadian Seed Growers Association for seed of that species (Seeds Act, Seeds Regulation s.2(1)), and
 - ii. is of native origin.
3. Revegetate temporary access structures with legumes, within 1 year of completing activity.

These seeding commitments are only required where seed are expected to grow and such re-vegetation would materially reduce the likelihood of invasive plants germinating on site.

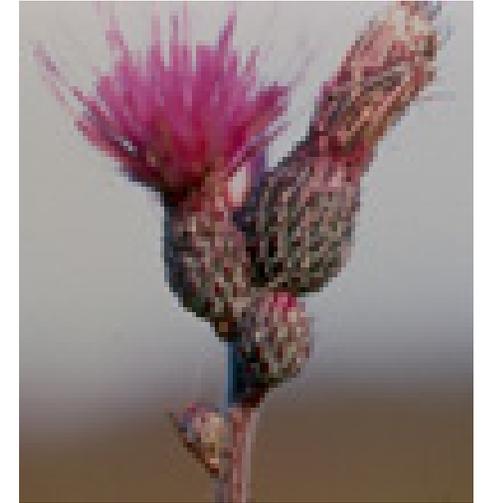


Marsh Thistle

Marsh Thistle (*Cirsium palustre*) is a biennial and considered regionally noxious under the BC *Weed Control Act*.

Marsh plume thistle is distinguished from other thistles by its single, slender, un-branched stem with spiny wings. Purple flowers cluster at the end, with spiny, hairy leaves that have prominent woody veins on the underside. Plants grow up to 1.5 metres in height at maturity.

Preferring moist to wet, naturally open, or disturbed habitats, marsh plume thistle spreads through wind and water seed dispersal, as well as ingestion and deposit by birds. Plants replace native vegetation in open, undisturbed, natural areas including wet meadows, fields, and riparian areas; thereby reducing native species and threatening natural diversity. Additionally, they form dense clumps in cut blocks, competing for moisture and nutrients with tree seedlings planted for reforestation. Tall stems can lead to snow press, permanently damaging tree seedlings.



Gorse (*Ulex europaeus*) is a spiny evergreen shrub with bright yellow pea-like flowers, resembling Scotch broom.

It grows on open clearings, coastal bluffs, logged areas, and roadsides. It is most common on southern Vancouver Island near Victoria, but also occurs on a number of Gulf Islands. Gorse out competes native vegetation, reduces access for recreation, increases fire hazard, reduces pasture growth and has the potential to impair forest regeneration in logged areas.

Gorse expands rapidly in its first 15 years and may live up to 45 years. Seeds may be dispersed by wildlife, water and machinery. Gorse can be controlled by hand-pulling young plants and cutting down mature shrubs. Care should be taken to minimize soil disturbance as dormant seeds may start germinating once exposed to light.



Gorse



Purple Loosestrife

Purple Loosestrife (*Lythrum salicaria*) can be found growing in open riparian areas and wetlands throughout Vancouver Island and surrounding coastal communities. Introduced as a garden ornamental, due to its vibrant purple flowers perched on top of a tall stem, this beautiful plant aggressively crowds out native vegetation, impacting native plants, amphibians, birds and other wetland species. Purple loosestrife is estimated to be spreading at a rate of 115,000 hectares per year in the United States, destroying valuable wetlands.

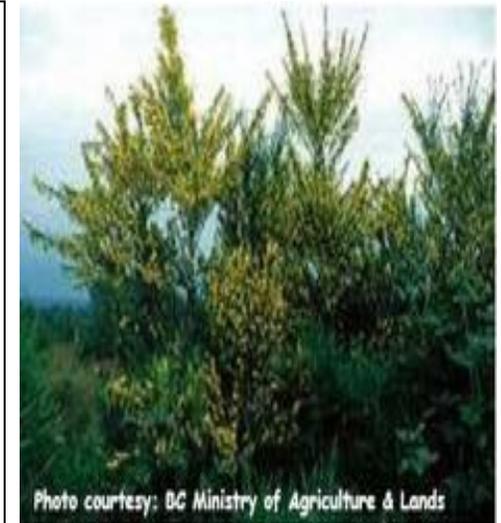
Each plant is capable of producing up to 2.5 million seeds that can be dispersed by wind, water, wildlife, and humans. Plants can also reproduce from root fragments.

The best way to identify purple loosestrife is by its square stems (roll it in your fingers) and opposite leaves. If you have purple loosestrife in your garden, remove it immediately. Pull or dig the plants out and ensure that all root fragments are removed to prevent re-growth. For large patches, there are relatively effective biocontrol agents, *Galerucella californiensis* and *pusilla*. These beetles feed on the plant stems in their larval stage.

Scotch Broom (*Cytisus scoparius*) is often admired as a beautiful ornamental species. With bright yellow flowers and leathery green stems, it is certainly attractive; however, it is considered a highly invasive alien plant. This woody perennial shrub can be identified by its yellow pea-like flowers that bloom in May, and flat brown seed pods.

Scotch broom along with other broom varieties, such as Spanish broom (*Spartium junceum*), "jump the garden fence" invading roadsides and sensitive ecosystems throughout Vancouver Island and surrounding Coastal communities.

These seemingly harmless ornamentals are aggressive and damaging to our natural environment. Residents are encouraged to remove plants on their property. Small seedlings (less than a pencil width) can be pulled when the soil is moist. Larger plants must be cut down, preferably in May when the flowers are out but have not yet gone to seed. It is important to try to prevent plants from going to seed as this is the major method of spread. Broom does not grow well in shade, so to prevent mature stalks from re-growing; the cut stumps should be covered with plastic to prevent light access. It is also important to remove cut plant material from desirable areas as these old plant parts will release toxins into the soil that prevent re-establishment of desirable plants.



Scotch Broom