



# Garlic Mustard

*Alliaria petiolata*

**Invasive  
Plant  
Alert**

One of the biggest threats to natural ecosystems in Saanich is the spread of invasive non-native plants. The District of Saanich appreciates the cooperation of all residents in removing Garlic Mustard from private property.

**For assistance please contact:**

**On Private Land:**

Saanich Environmental Services:  
250-475-5471 or [plansec@saanich.ca](mailto:plansec@saanich.ca).

**On Public Lands:**

Saanich Parks:  
250-475-5522 or [parks@saanich.ca](mailto:parks@saanich.ca).



## **Why is garlic mustard a problem?**

- Produces phytotoxins - chemicals that inhibit growth of other plants including trees; may also disrupt life cycles of butterflies and salamanders.
- Monopolizes light, moisture and soil nutrients in early spring, allowing it to dominate and displace native flora. Creates an invasive carpet that completely takes over forest understorey.
- Self-pollinates: a single seed can produce a new invasion.
- Re-sprouts from roots; produces new flowers and seeds if top is cut.
- Prolific seed producer; seeds can stay viable in the soil for 5-10 years.
- Wide range of tolerance from sunny to densely shaded sites.
- Deer tend to avoid it, giving it a competitive advantage over other plants.

## **What does it look like?**

- First year plants form a low-growing cluster of heart-shaped leaves with scalloped margins; these remain green throughout winter.
- Second year plants grow to over 1m tall; mature leaves triangular with scalloped margins, becoming smaller towards top of plant.
- Flowers: clusters of small white 4-petal flowers form on top of stem, usually one flowering stalk per plant.
- Emits a garlic odour when crushed.
- **Look for:** Garlic odour, white flowers (April/May), purple base of the stems and roots

## **Could be confused with:**

- Wild Violet (*Viola* spp)
- Fringecup (*Tellima grandiflora*)
- Piggyback Plant (*Tolmiea menziesii*)
- Nipplewort (*Lapsana communis*)
- Money Plant (*Lunaria annua*)
- Sweet Cecily (*Osmorhiza claytonia*)
- Avens (*Geum* spp)
- Early Saxifrage (*Saxifrage virginica*)

# Invasive Plant Alert



## Other resources

Invasive Plant Council of BC  
Coastal Invasive Plant  
Committee  
King County Noxious Weed  
Program  
Invasive Alien Plant Program

## **Habitat and biology:**

- Biennial in the Brassicaceae (mustard) family, though in the mild climate of Saanich and Victoria, Garlic Mustard grows more like an annual
- Seedlings develop into basal rosettes by mid-summer. Early the following spring, plants quickly grow to the flowering phase. Flowers are produced April – May, viable seeds by June – July. Each plant can produce 1000 seeds, in slender erect pods that turn black when mature. Plants die after seed production.
- Shade tolerant, found predominantly in rich moist forests and wooded stream banks. Also occurs in river flood plains, along trails and roadsides. Does not tolerate acidic soils. Disturbed sites are more susceptible to invasion and dominance.

## **Distribution:**

- Native to Europe and Asia, likely brought to North America for use in cooking and medicine.
- Widespread in eastern Canada where it dominates the understorey of many forests.
- First reported to Saanich at Mount Douglas Park in 2004; by summer of 2009, Garlic Mustard occurred in 13 locations in Saanich and 6 in Victoria.

## **What should you do?**

*Please report any sightings of this species to the contacts below.*

- **Hand-pull:** Early spring is best when soil is moist and before plants set seed. Remove as much of the root as possible, and minimize disturbance to the soil during removal. If hand-pulling is not possible, cut the flowering stem before it sets seed, as close to the ground as possible.
- **Apply** a thick mulch layer over the area to discourage re-growth.
- **Monitor** regularly for re-growth, and remove any new plants that appear.
- **Spread the word** about Garlic Mustard and other invasive plants to your neighbours.

## **Proper Disposal**

- The District of Saanich is in the process of developing options for invasive species disposal. Please call Environmental Services or check the website for updates [www.invasives.saanich.ca](http://www.invasives.saanich.ca).
- Currently, the best option is to place all plant parts in garbage bags labelled "invasive species" and take to Hartland Landfill.
- **DO NOT COMPOST!** Flowers can still form viable seeds after removal.

## **Who do you call?**

Contact Saanich for assistance and more information about (species), other invasive plants and volunteer opportunities.

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Saanich Environmental Services:

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### **On Public Lands:**

Saanich Parks:

250-475-5522 or [parcs@saanich.ca](mailto:parcs@saanich.ca).

[www.invasives.saanich.ca](http://www.invasives.saanich.ca)

Noxious Weeds Bylaw No. 8080:

The District of Saanich requires all landowners clear their property of any noxious weeds and other vegetation that could spread or become a nuisance