



Delta  
Naturalists  
Society

## “Chafer Beetle/Grub Solutions that put Nature & the Environment First”

Developed by: Lawns to Life Committee

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### Our Goal:

This document is to provide people with a variety of wildlife & environmentally conscious solutions to either **maintain/save** (see questions 1 below), **alter** (see question 2 below), or **replace** (see question 3 below), lawns affected by chafer beetle grubs.

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### Understanding the Chafer Beetle



### Wondering what’s killing your lawn? Read this:

The culprit may be the **European Chafer Beetle**, a lawn pest introduced to the Lower Mainland in 2001. The larvae (grub) stage has been damaging traditional turf lawns ever since.

- **Grub appearance:** White, C-shaped, with a blackish end, about 2 cm long



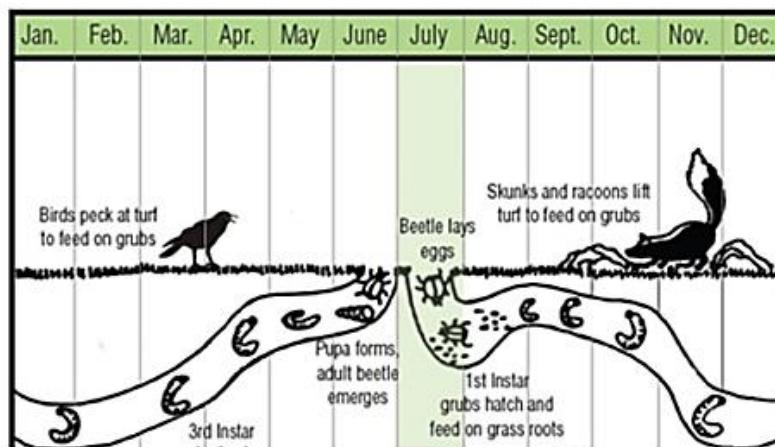
Above: The offending grub and evidence of damage

## Signs of an Infestation:

- Brown patches or spongy areas in your lawn
- Sod being pulled back or divots caused by nature's pest controllers like birds, skunks, and raccoons searching for grubs

**(NOTE: it is not legal or acceptable to harm or kill wildlife for accessing a food source in your lawn)**

- **Lifecycle:**
  - **June:** Adult beetles emerge, mate and lay eggs in lawn thatch
  - **Summer to Spring:** Grubs live in the soil, feeding on grass roots
  - **May/June:** Pupation occurs, and the cycle repeats



Life cycle of the chafer beetle (from City of Delta website)

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## Solutions

### 1. Question: Do you want to maintain or save a traditional turf lawn?

If you want to keep your lawn while also preventing or eliminating chafer beetle damage, consider these eco-friendly options:

## Infestation prevention - Maintenance & Lawn Care Tips

- **Keep grass long** (up to 8 cm) to reduce vulnerability
- **Aerate and dethatch** your lawn to promote root health
- **Use a mulching mower (or blade)** to return nitrogen to the soil naturally – this does not increase thatch
- If an **infestation is present** and turf has been dug up by wildlife, waiting until spring to rake it and reseed it, can be a good option

## Infestation elimination/control - Biological Control

- **Nematodes (read package instructions):** Microscopic parasites that consume chafer beetle larvae in their early stages
  - Apply: as early as mid-July and into September if the soil is still warm
  - Water: Requires **5-7 days of lawn moisture** (you may need a Watering Exemption Permit from your city)
  - Results: grubs should disappear in **2-3 weeks**
  - Available: at garden centers and retail outlets like **West Coast Seeds**
  - Brands: **Nemasys G & Larvanem**
- **BTG (Biological Pesticide):** a naturally occurring soil bacteria (bacillus thuringiensis galleriae)
  - Apply: Spring, later in Summer & early Fall - more flexible in terms of timing than nematodes — follow directions on the package
  - Water: thoroughly after application (a Watering Exemption Permit may be required)
  - Available: at garden centres and hardware stores
  - Brand: **Scotts Grub BGon Max Grub Killer**
  - An alternate commercial formula is available for use by licensed professionals

## Physical Barriers

- **Netting or metal mesh:** Could prevent wildlife from digging up your lawn but will not prevent or eliminate a grub problem. If there is evidence of an infestation, one of the treatments above should be applied
  - Some folks leave these barriers down permanently with grass growing through them

## What to Avoid

- ✗ **Avoid chemical insecticides** (potentially harmful to people, pets, wildlife & environment)
  - ✗ **Artificial turf is not recommended** (no ecological value)
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## 2. Question: Do you want an alternative to traditional turf?

If you prefer the look of a lawn without the risk of chafer beetle damage, try these options:

**Chafer-Resistant Lawn Alternatives** - these don't provide the thatch that the grubs need:

- [Chafer Beetle Resistant Lawn Blend](#) (West Coast Seeds) – suitable for foot traffic. Check out the rest of their [lawn alternative seed blends](#) . Some have the added benefit of helping pollinators
- [Bee-Friendly Flowering Mix](#) (Premier Pacific Seeds) – pollinator-friendly and low growing. Click [here](#) for retail locations
- **Drought-Tolerant Lawn Replacement Options** ([Grow Green Guide](#)):
  - A few examples: moss, creeping thyme, ornamental grasses, sedum, Dutch-white & micro-clover

✓ **Tip:** It is advisable to remove the old lawn and treat for grubs before reseeding with an alternative blend. Check soil for grubs before planting.

✓ **Benefits:** Less watering, less mowing, may support pollinators, and requires no chemical fertilizers.

✓ **A local success story:** One resident of Tsawwassen combined the West Coast Seeds Chafer Beetle Blend with Micro-clover, White Yarrow and White-bellis English Daisy and is very happy with the results (see photo).



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### 3. Question: Do you want a “Habitat Garden” that benefits nature - instead of a lawn?

If you're open to replacing your lawn with native and ornamental plants and wildflowers, follow these steps:



#### Why Native Plants?

- Drought-tolerant – require less water
- No chemical fertilizers or pesticides needed
- Support pollinators and other wildlife

#### Planning Your Garden:

- **Step 1: Site Preparation**
  - Remove turf and perennial weeds properly to prevent regrowth. There are several ways to go about this (including hiring someone) but this [link](#) can help
- **Step 2: Design Your Space**
  - Draw a layout of your yard and plan plant placement. (see below for help)

#### Choosing Plants/Seeds:

- **Meadows:** Opt for a mix of perennial and annual seed blends – there are countless blends to choose from such as these from [West Coast Seeds](#) . Some native options are [here](#) and [here](#)

- A guide to [planting plants from seed](#)
- **Other suggestions for native low-growing ground cover:**
  - Yarrow (*Achillea millefolium*)
  - Field Chickweed (*Cerastium arvense*)
  - California Oatgrass (*Danthonia californica*) – Fall sowing
  - Western Rush (*Juncus occidentalis*) – Fall sowing
  - Self-Heal (*Prunella vulgaris* ssp. *lanceolata*)
  - Satinflower Nursery's 'Garry Oak Ecosystem Blend' would be wonderful in a dry sunny area

### ✓ Tips for a Smooth Transition

- **Be patient:** Native plants can take 1-2 years to fully establish
- **Educate neighbors:** Use “Work in Progress” signs to explain your project
- **Start small:** Test a small area before converting your entire lawn
- **Avoid invasive species:** Check out [Invasive Species Council of BC website](#) and read the fine print on packages (ie. English Ivy, Scotch broom). Try their '[Grow me instead](#)' resources

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## Need Help?

If you're feeling overwhelmed, these local gardeners, landscapers and retailers can assist:

- [Kindred Gardens](#) - can help with consulting and doing the garden work while working with nature, not against it – based in Ladner
- [Wildspaces Landcare](#) – specialize in lawn to meadow conversions and can help with consulting and doing the work. Wildflower seeds are available for purchase on website
- [Grass Roots Contessa](#) (contact Joni) – organic gardener – creating habitat for biodiversity - based in Tsawwassen
- **West Coast Seeds** [lawn alternative seed blends](#), nematodes and great advice
- [Plan Bee Native Plant Nursery](#) – in Langley - for native seeds and plants
- [Satinflower Nursery](#) – for native seeds and plants – call, email or visit them on Vancouver Island.
- Or contact any local gardener/landscaper and explain your plans and goals to them

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## Resources

### Workshops by City of Delta

Free & related to lawn care! FREE SUSTAINABLE WORKSHOPS – specific to the topic of lawns – check them out [here](#) and register [here](#)

- **May 31, 2025:** Gardening for Pollinators
- **June 7, 2025:** Grow Less Grass
- **June 28, 2025:** Grow Less Grass

### More Information:

- City of Delta - Chafer Beetle [info here](#)
- Metro Vancouver - Chafer beetle [info here](#)
- Ministry of Agriculture – Chafer Beetle [info here](#)
- Metro Vancouver [‘GrowGreen’ guide](#)
- Info on removing and preparing your turf lawn for new plantings/seeding – [click here](#)
- David Suzuki [‘Lawn Share Toolkit’](#)
- Invasive Species Council of BC [‘Grow me instead’ Guide](#)
- Gardening with nature in mind – click [here](#)
- Growing a tapestry lawn – click [here](#)
- Print a sign to add to your meadow project – click [here](#)
- Native plant nurseries in Metro Vancouver – click [here](#)

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## GLOSSARY

- **Native plant** – those that have been growing in an area for millennia
- **Ornamental plant** - brought here from elsewhere
- **Habitat garden** – aka - wildlife garden, pollinator garden, Naturescape