

Ministry of Environment – Integrated Pest Management Brochures: Lawn and Yard Weeds

Mowing Practices

Mowing is the key to weed control in lawns. Mow lawns (except for bent grass turf) to a height of 6-7 cm. The greater leaf area of longer grass makes its roots grow stronger while at the same time shading fallen weed seeds and preventing them from germinating. Longer turf is also more resistant to fungal diseases and is more drought resistant because it has deeper roots.

Mow often with a sharp blade and leave the clippings on the lawn to fertilize the grass. This does not contribute to thatch accumulation. Although all mowing is stressful to grass, it is much better to clip a small amount (less than a third of the length) frequently than to remove a large amount at longer intervals. Long clippings should not be left on the lawn as they will shade the grass and increase disease problems.

Fertility

Most of the weeds common to turf, such as dandelions, English daisy, plantain and thistles are indicators of poor fertility, compacted soil and either droughty or waterlogged conditions. Correcting poor growing conditions strengthens the grass so that it is more competitive.

Use slow release fertilizers or top-dress every year or two with well-made, fine compost to supplement nutrients from the grass clippings. Do not over fertilize with soluble nitrogen because this stimulates soft, lush growth, which is more susceptible to disease, contributes to the build up of thatch, and makes more frequent mowing necessary.

Use soil testing services provided by some garden centres to check the soil Ph (a measure of soil acidity). Apply dolomitic lime as needed to maintain the soil Ph between 6.5 and 7.0. This makes soil nutrients available to grass.

Watering

Water turf deeply, but not often. Soak to the root zone (about 6-8 cm deep) and don't water again until the surface 2 cm has dried out. This promotes deep rooting, drought resistant turf. Do not overwater and create waterlogged conditions, which kills grass roots and leaves room for weeds to become established.

Aerating

In compacted or heavy clay soils, it may be necessary to aerate the soil mechanically every year or two. A lawn aerator can be rented for large areas. On small lawns, repeatedly spiking the soil at a slight angle with a garden fork will work.

After aerating, top-dress the turf with sized sand (.25-1 mm), which is available from local gravel companies. This is especially recommended for lawns subjected to heavy use to improve drainage and aeration.

Thatching

Thatch is the layer of un-decomposed organic material that accumulates at the base of the grass plants. Some thatch is beneficial and shades roots and reduces water loss, but it should be removed if the layer becomes more than 1cm. deep. Grass may begin to root in

thick thatch rather than the soil and becomes more susceptible to diseases, chinch bugs and drought stress. Thatch management is best left to earthworms but can be done mechanically with a heavy rake or thatching equipment.

Earthworms

A thriving earthworm population is important for a healthy lawn. Earthworms burrow in the soil and break down the thatch layer and other organic material turning it into rich fertilizer. They mix this fertilizer deep into the root zone and aerate the soil. Earthworm castings rarely show in grass kept over 6-7 cm high, however, if large accumulations make bumps in the lawn they should be periodically raked or scattered over the grass.

Manual Weeding

Well-established rosettes of dandelions, thistles and plantain lie low enough to be missed by the mower and must be removed. The good news is that longer mowing heights and improved lawn care will prevent new ones from becoming established. When the soil is moist, dig out the entire root using a sharp weeding tool. If a large weed leaves a gap, level the soil and sprinkle grass seed into the bare spot.

Change Your Outlook

Finally, reduce the weeding problem by changing your idea of what is a weed. Many people like the look of English daisies or dandelions and these weeds do attract beneficial insects to the garden. Weeds with deep roots break up compacted soil and bring nutrients to the surface. White Dutch clover, in particular, should not be considered a weed because it is of long-term benefit to turf.

Seeding New Lawns

Have a soil sample tested for pH and fertility. Follow local recommendations for preparing your soil type for lawn grass, including proper liming, fertilization, and incorporation of well digested compost or other organic matter into the soil. Here are some tips for preparing your new lawn.

- Weed seeds can lie dormant for years until cultivation brings them to the surface, so stimulate weed seeds to germinate before planting. Cultivate and water the soil, wait for two weeks to allow weeds to germinate, then repeat the process. Seed the lawn after the second cultivation, or better yet, after a third cycle of germination and cultivation.
- Choose an appropriate seed mix for soil type, shade or sun, heavy or light use, etc. You might consider incorporating varieties of perennial ryegrass or fescues with endophytes in the seed mix, because of their increased vigour.
- Include a small proportion of white Dutch clover in the mix on poor or compacted soils. It is low growing, stays green, resists drought and works to increase the soil fertility and break up compaction. Under good management, the soil will eventually smother the clover.

Grass with Endophytes

Endophytes are fungi that infect some grasses but live harmoniously with the leaves. They benefit the grass by producing toxins that kill and repel insects and also give some disease resistance. Turfgrass varieties with endophytes are generally more vigorous, more tolerant of heat and drought and more competitive than the same varieties without endophyte

infections. Several varieties of perennial ryegrass and fescues with high levels of endophyte infections are now available from turf seed suppliers. Check the lot numbers to make sure seed is fresh because the endophytes may die after prolonged storage even though the grass seed itself remains viable. Do not plant endophyte-infected grasses where horses or other livestock might reach it as the endophytes are harmful to grazing animals.

Change the Site

Some areas are weedy because grass simply cannot grow well there. Shady areas, especially under large trees that absorb the available water and nutrients, could be planted to shade-tolerant groundcovers or covered with bark mulch, gravel, stones or pavers laid over landscaping fabric.

Heavy traffic areas and "short-cut" paths across lawns are often weedy areas of compacted soil. Change the traffic pattern by fencing, planting hedges or using other barriers. Consider mulching or paving the pathways or laying turf blocks in the travelled areas. Turf blocks are hollow concrete pavers that allow grass to grow in the centre, while the weight of traffic is supported on the concrete.

Weed Prevention

Reduce the number of weed seeds entering the yard. Watch for flowering weeds along roads, driveways and fence lines or waste areas and make sure they are cut down before they go to seed. If there is a patch of noxious weeds going to seed in your neighbourhood, the owner can be forced to remove the weeds under the Weed Control Act or under municipal bylaws. Although the list of noxious species varies between regions and municipalities, Canada thistle occurs on all lists. It must be cut down before the flowers start to bloom or the seed will continue to ripen in the cut heads and scatter on the wind.