

# FACT SHEET



## LAWN WEED PREVENTION & CONTROL

### MEET THE PEST

Any plant growing where it is not wanted can be considered a weed. Although difficult to control completely, lawn weeds can be kept to a minimum with a little extra work. Following good lawn care practices is the best way to produce a healthy lawn which will provide the best protection against weeds.

### LIFE CYCLE

It is important to determine what type of weeds are present in your lawn and garden. There are three classifications of weeds; annual, biennial and perennial. Annuals complete their life cycle in one year and produce many seeds. Biennials complete their life cycle in two years - the first year is for vegetative growth, and seed is produced in the second year. Perennials live for more than two years. Because they produce seeds from the second year onward, their potential for spread can be greater. Identifying the main types of weeds present in your lawn will help you determine what conditions must be changed and also help in selecting the appropriate control measures.

### CONTROL

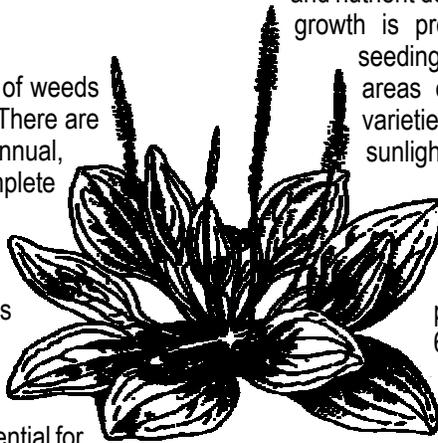
#### Physical & Cultural Control

Following proper lawn care practices is the most effective method of controlling weeds. While this may take extra effort and time, the results will be well worth it. Good lawn care includes: maintaining healthy soil, fertilizing, mowing, watering, aerating and other physical control measures. It is also important to learn to tolerate some weeds. Although they compete with grass for necessities such as water, sunlight and nutrients, if kept managed, problems with weeds should not be too severe.

#### Soil and Nutrition

Good soil provides your lawn with the tools it needs to successfully compete against most weeds.

Good lawn care begins even before the lawn is planted. The first step is to create a good soil base by removing large rocks, tree stumps and other barriers to water movement. A minimum of six inches of good quality soil is needed. Future problems with drought, compaction and nutrient deficiency can be reduced if healthy root growth is promoted right from the start. When seeding, choose a good quality seed. Shaded areas of the lawn should be seeded with varieties of grass which do not require full sunlight. These varieties are often sold as "shade mixes".



Have the soil tested to determine the pH level and the fertility. A pH level of 6.5 is optimum as the nutrients which are vital to plant growth are most readily available at this pH level. Lower pH levels are common in some parts of Eastern Canada. At these lower levels, nutrients remain tied up in the soil, and are less available to the plant. If the soil is too acidic (the pH level is less than 6.5), the addition of limestone may be necessary. A soil-testing lab (such as the Provincial Department of Agriculture and Fisheries Lab in Truro) can provide suggestions for the amount of limestone to add, and fertilizers to use for optimal plant growth. Have soil analyzed every two to three years, and the pH level tested every year. Home test kits, which allow gardeners to test their soil pH themselves, are also available at many garden centers. Limestone, if needed, is best applied in the fall or early spring. It should be added regularly - first, to bring the pH level to 6.5, and then, to maintain it at that level.

Fertilizers contain nitrogen (N), phosphorous (P) and potassium (K). These three nutrients, N-P-K correspond to the three numbers that are listed on the fertilizer package label (e.g., 12-12-12). All are vital to

plant health. Nitrogen aids leaf growth and color, phosphorous helps promote strong roots and potassium makes the plant stronger and better able to fight pests and disease. Avoid lawn fertilizers that are identified as being “fast acting” or that promise “a quick green-up”. These fertilizers will often provide too much nitrogen at once and result in a soft weak lawn that is susceptible to wear and damage. Weeds will soon follow in the weak areas. Instead, select a good quality “turf type” or “lawn” fertilizer with 40-60% of its nitrogen in a slow release form. The label will state “slow release N”, “water insoluble N” or the letters “W.I.N”. Adding organic matter (e.g. bulk compost or a bagged organic fertilizer) to your soil will add nutrients and also improve soil quality. A healthy soil will produce healthy turf and help reduce pest problems.

The lawn should be fertilized in the spring and fall when it is actively growing. In the fall, fertilize the soil using a fertilizer with a low nitrogen. Nitrogen is the first of the three numbers shown on the fertilizer bag label. Fall is also a good time to aerate and re-seed damaged sections of the lawn!

### **Mowing**

Once a lawn is established, proper mowing techniques will help prevent weed problems. Grass should be mowed to a height of two to three inches (5 to 7 1/2 cm). Mowing to levels shorter than this will reduce plant vigor and give weeds an opportunity to flourish. Mow frequently to minimize plant stress and use lawn mowers with sharp blades which will not tear the grass. Leave the clippings on the lawn to serve as a natural fertilizer.

### **Watering**

Proper watering techniques also help in the control of weeds. It is best to only water your lawn when it actually needs it. Ensure that water reaches the root zone. Frequent watering for short periods of time each day promotes shallow root growth. A single, heavy watering once a week provides sufficient water to the lawn, and promotes the development of deeper roots. Conserve water by watering the grass early in the day or in late evening when the sun is not at its peak.

### **Reduce Compaction**

Weed problems often begin in areas where the soil is compacted and the lawn is thin or weak. Heavy traffic and poor drainage cause soil compaction. Prevent soil compaction by staying off the lawn when the soil is very wet (e.g. in the early spring as snow is melting or after a heavy rain). If soil compaction is a problem (evidenced by weak thin or weedy areas of the lawn) it may be

necessary to use an aerator to loosen the soil and increase air and water circulation in the root zone of the turf. Thin, bare or damaged areas should be re-seeded to avoid giving weeds an opening. In areas of the lawn that receive constant traffic, such as the path to the composter, consider installing a proper path of gravel, mulch or pavers etc.

### **Hand Weeding**

Hand weeding is a practical control option for small areas and localized problems. Over time, pulling weeds combined with the other practices mentioned above will help reduce weed numbers. Most garden centers now carry one or more of the many specially designed lawn weeding tools. Often these tools can be used while standing upright, making the job easier and less tiring. Hand weeding is easiest in the spring when the ground is soft or after a heavy rain when the whole plant can be removed. Dandelions that are pulled out in the spring when their root reserves are low often don't have the energy to regrow.

### **Chemical**

If physical control measures are not effective, use a pesticide which will have a minimal impact on both you and the environment. Chemical pesticides can be useful to control an occasional weed problem, however, it is important not to rely on herbicides as a quick fix for all lawn weed problems. Weeds are indicators of other lawn problems, therefore, it is important to find out why they are growing and fix the problem. Remember herbicides do not offer permanent protection against weed regrowth. Also, lawn herbicides that are available for control of broadleaf weeds in lawns only control the weeds you actually see growing. Applying a lawn herbicide to an area where no weeds are currently growing will not prevent weed problems from appearing in the future. If using herbicides, spot treat by applying the herbicide only to the weedy areas of the lawn. If the above measures are not effective, consult with an expert at a garden center for herbicides available.

**Always use a registered domestic class pest control product labeled for lawn weed control and carefully follow the label directions.**

*Fact sheet adapted from the Backyard Bug Brigade, Turf Weeds - published Atlantic Provincial Environment Departments, PEI Department of Agriculture, Fisheries and Forestry, Agriculture and Agri-Food Canada and Environment Canada. Revised April, 2001 by Nova Scotia Department of Environment and Labour.*