

Durnan Property Maintenance

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Lawn Care for the 2011 summer season.

The 2010 growing season was the second year without the use of traditional synthetic pesticides used for cosmetic purposes here in Ontario. Some new products came on the market during the year and we had a another year in which we could further asses the efficacy of others. We have again attended trade symposiums and seminars over the off-season, with others involved in lawn and turf care, in an effort to be better able to advise our clients who have concerns about their lawns and green spaces.

It has become abundantly clear that in order to have a "nice" lawn, we can no longer wait for problems to occur, whether they be weeds or insects, and then attack the problem with chemicals and the problem "goes away". We need to be pro-active in the way that we approach lawn care by developing programmes that will result in the thickest, healthiest lawns possible, resulting in a lawn that is better able to combat a pest infestation before it becomes a problem. This will mean that we will need to accept some weeds in our lawns and so the goal of a successful lawn care programme will be to limit the number of weeds to a manageable level and to be vigilant for the first signs of insect damage so steps can be taken before lawn damage becomes excessive.

Last year (2010) was a good year for growing grass. We had timely precipitation and nice sunny days without long periods of excessive heat. This meant that we did not have the heat related stresses in the lawn which we often have, leading to weed incursions and visible insect damage. On the whole, healthy lawns were active enough to combat new weeds and repair insect damage before they became a problem.

2010 was the first year that we began using new products that are available for pest control in lawn care and, as with most other operators, had mixed results. Overall we had fairly good results with the products that we used but some results were compromised by environmental changes and some by the way the product is used. Field trials and reporting by lawn care operators have resulted in changes in the way the products are used and should lead to more effective pest control.

We are not offering some of the products that we indicated were available for lawn care last year because they are not cost effective or are simply not very effective. New products are coming onto the market all the time and we will endeavour to stay current and will advise when we know more information.

Below are some of the main areas of concern which should be considered when coming up with an effective lawn care programme.

<u>Fertilizing.</u> In our area of Ontario most of our lawns are grown in very little top soil, which is sitting on gravel and rock. The result of this is that it is hard to keep the necessary nutrients for a healthy lawn in the soil, as they are washed through the top soil and into the gravel below, beyond the reach of most grass roots. Replacing the necessary nutrients is the purpose of fertilizing.

There are many elements necessary for healthy plant growth, but the most important elements for a strong healthy lawn are Nitrogen (N) which stimulates chlorophyll production and leaf growth, Phosphorus (P) for root growth and Potassium (K) which promotes over all plant growth along with resistance to drought and disease. Spring fertilizers are usually high in Nitrogen which will result in quick greening of the lawn, whilst fall fertilizers are high in Phosphorus and Potassium which promote strong roots and overall plant health essential for overwintering. Nitrogen is a very mobile element in the environment, it is easily washed out of the soil. In our area where there is very little soil depth, Nitrogen can be leached out of the soil and lost to the plants that need it. This Nitrogen loss can be combated to some degree by using a slow release fertilizer that releases its components over a longer period of time and so is available to the grass plants for longer.

Last year (2010) was the first year that we offered slow release fertilizer for early season applications and we were pleasantly surprised as to how well these lawns grew. When compared to lawns that used the traditional fertilizer, they both greened up quickly, but the slow release lawns continued to grow and stayed greener for 4 – 6 weeks after the traditional fertilizer had appeared to finish working. Slow release fertilizers are similar to traditional fertilizer but the granules have a coating so that their nutrients are released over a longer period of time. Consideration of using slow release fertilizers should be made; although they are more expensive, lawns will continue to actively grow for a greater period of time and therefore be less susceptible to problems.

<u>Dethatching.</u> Over the last couple of years studies have been done at the Guelph Turfgrass Institute (GTI) into the practice of Dethatching. Traditionally, it was felt that if grass is cut on a weekly basis then any clippings left will decompose into the ground and help sustain a healthy lawn. Studies have found that there is no doubt that clippings left on the lawn are beneficial, but not all the clippings in a given year will decompose and will over a period of time build up into a thick thatch which can lead to problems with insects and disease. Dethatching at the beginning of the year will remove any un-decomposed matter from prior years mowing, encouraging an earlier start to lawn growth.

<u>Over seeding.</u> This is a process whereby top soil and new grass seed are applied over the lawn in an attempt to thicken the lawn and so choke out any weeds. This should be done in conjunction with aerating of the lawn to get the best results. Good quality top soil, grass seed and a starter fertilizer promoting strong seed germination and root growth should be used.

Lawn Mowing. The height at which grass is cut is a very important component in overall lawn health. Too short and the grass plants will be exposed to excessive sunlight leading to short roots and less drought-resistant lawns, too long it will lead to excess shading (dampness) and matting of the grass. The optimum height for lawn cutting is between 2.5" and 3.25". No more than 1/3 of the grass blade should be removed at each mowing and sharp blades are a must. Blunt blades result in tears in the blade tip making it harder for the lawn to recover and leaving the lawn more susceptible to disease.

Grass clippings should be left on the lawn, these will break down releasing nutrients into the lawn. However, occasionally when the grass is growing vigorously, too much is being cut off which will not break down quick enough and the thatch becomes too thick, moisture related problems can then occur.

<u>Watering.</u> Just as too little water can damage a lawn, too much water can be harmful. Excessive watering will lead to shallow root systems, weaker plants and diseases related to moisture (moulds & mosses). If grass roots are encouraged to grow deeper, the lawn as a whole will be more drought resistant better able to repair surface damage and combat weeds.

Fiesta (Iron Chelate). 2010 was the first year that Fiesta was on the market for selective weed control. We began using it in mid-summer and had some fairly good but not consistent results, which after talking to others was common for most users. Studies conducted over the last two seasons (at GTI) have shown that for better results two applications, four to five weeks apart are needed in order to get better control. For (2011) we will be implementing a programme whereby the price that we show for weed control will be for TWO applications 4 - 5 weeks apart. This price will be for a spray volume of 10L applied to your lawn as a spot spray. To spray a lawn as a whole would be expensive and would not necessarily give a better result because Fiesta is only effective if sufficient product comes into contact with the target weed. This approach should ensure a better control for those weeds that we can target, especially Dandelion, Clover, Black Medic, Thistle and Narrow-Leaved Plantain.

<u>Nematodes.</u> Nematodes are naturally occurring microscopic worms that attack and kill the target insect causing damage in lawns. Specific species of Nematodes attack different insect pests, so the correct identification of pests is important. Nematodes are available to control White Grubs, Crane Fly, Sod Webworm, Chinch Bugs and many other pests. They are sprayed onto affected lawns where the nematodes seek out the target pests and kill them. Care must be taken not to apply the Nematodes in direct sunshine and after application water must be applied to carry them down into the soil.

If you have any questions, concerns or require further information regarding lawn care or pest control please call and we will be glad to assist you in whatever way we can.

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