

# Farm Stewardship Tips Help Gardeners – Part 3



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## RESPONSIBLE PEST MANAGEMENT

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Since moving to the country it's become even more apparent to me that farmers' knowledge is extremely useful to gardeners. While insects, weeds, and disease can negatively affect your enjoyment of your backyard, farmers deal with similar problems on a much larger scale. Ultimately their job is to provide a safe, reliable and abundant food supply.

Farmers have the opportunity to enhance their environmental knowledge through the Environmental Farm Plan (EFP) program, which allows them to evaluate the environmental benefits and risks of their farm operations, and create action plans to enhance the benefits and reduce the risks. It is a voluntary educational program supported through the Agricultural Policy Framework (APF), a federal, provincial and territorial initiative that aims to make Canada's agricultural sector a world leader in environmentally sustainable production. The 'EFP' is a very sophisticated program. I know as I have completed it myself for our own farm.

Before you jump to any conclusions about the impact that Ontario farmers are having on our environment, remember that more than two-thirds of Ontario's farmers have participated in the EFP program.

Most farmers practice what is known as "integrated pest management" (IPM), using a wide variety of strategies to minimize damage to their crops. Crop rotation (not planting the same crop in the same place year after year) and choosing hardy disease-resistant varieties are good first steps to controlling damage caused by weeds, harmful insects, and disease. Other tools include biological controls, mechanical weed control (e.g. tillage), or government-approved pesticides.

Through the Environmental Farm Plan farmers learn about and adopt responsible pest management techniques and tools such as using crop scouts to monitor pest populations or modifying their sprayer to ensure pesticide application is targeted and minimized. Farmers have reduced their use of pesticides by 52% in the past 20 years and the trend continues in a positive direction.

Every year I get hundreds of gardeners asking how to deal with bugs in the home garden. Many are surprised to learn that the majority of bugs, up to 95%, are either neutral in their effects or beneficial as pollinators, decomposers or predators. However, there are some pests which manage to defoliate or destroy our precious garden plants. An IPM program emphasizes pest prevention, regular monitoring and the use of a variety of tactics to deal with pest problems. IPM can be an effective way to reduce the use of pesticides.

You can practice IPM in your own garden by identifying pest problems early. This can be as simple as walking through your yard and garden, coffee cup in hand, observing what out of the ordinary activity is going on there. It is easier to prevent an outbreak when you can catch the problem at an early stage. On a small scale, insects can often be hand-picked. As soon as you notice a plant with signs of disease or serious insect damage, remove all suspect material. Prune only the affected parts and send them straight to the garbage. Do not add infected plant material to the compost heap.

Before using a pesticide, consider using a physical or mechanical method like hand weeding or sticky traps. It is important to identify the pest to help decide when to

apply treatments and how to prevent future problems. Keep in mind that some of the most destructive pests in the garden, like aphids, are also among the easiest to control. One application of insecticidal soap will usually do the job.

If your lawn is infested with white or grey grubs they can be controlled biologically by applying beneficial nematodes, available at hardware stores and garden centres from late spring through to early fall. Nematodes, which are harmless to children and pets, are most effective when applied twice per season. Apply late May through early June to stop grubs from damaging the grass roots, and again in late August through early September for proactive control over next year's population.

Once you have identified a pest problem, decide whether action is necessary. If you are dealing with a few weeds in an otherwise healthy lawn there really is no cause for alarm in my opinion. The best way to deal with them is to compete them out of existence by spreading a 1 to 2 inch layer of triple mix over the area and overseeding with a quality mix of grass seed. Rake smooth, step on the area to get the seed and soil in firm contact and keep it well watered for several weeks.

Vegetable gardens are also susceptible to insect and disease problems. The best method of protecting a vegetable garden against predators and disease is to garden defensively. Clean up refuse, weed regularly, especially when the weeds are young and ensure that plants have what they require in the way of space, sun and water. I hang tinfoil pie plates and strips of colourful cloth from trees to deter bird predators. Plant disease-resistant plant varieties and rotate crops each year to reduce the risk of over-wintering insects and diseases in the soil. Before you declare chemical warfare against groundhogs, rabbits and other unwelcome guests, consider physical barriers like fences, live traps and nets.

For more information on choosing plant varieties that are insect and disease resistant and for more information on IPM visit [markcullen.com](http://markcullen.com).