Farm Stewardship Tips Help Gardeners

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Since moving to the country it's become even more apparent to me that farmers' knowledge is extremely useful to me as a gardener. To a large extent the application of their intellectual wealth on the farm applies to my garden – just on a smaller scale.

Farmers have the opportunity to enhance their environmental knowledge through the Environmental Farm Plan (EFP) program, which allows farmers 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. More than two-thirds of Ontario's farmers have participated in the EFP program.

In a workshop setting, one of the first issues farmers investigate is their soil type, topography, and drainage. By starting with these important factors, they are better able to make management decisions that minimize the environmental risks of their farm properties.

These factors not only influence what types of crops can be grown, but also any environmental risks that the farmer will need to consider. For example, steep slopes are more susceptible to erosion, and therefore cropping systems that encourage a lot of protective cover, such as pasture for livestock, may be more appropriate than cropping systems that leave soil uncovered or require a lot of "working up" or tillage of the soil. In the garden a steep slope needs to be planted intensely with fast-rooting plants, or heavily mulched to avoid soil erosion.

Soil type is also important. Consider the condition and content of your garden soil. Heavy, clay soils favour Daylilies and Purple Coneflower, while Butterfly Bush and Mock Orange will perform better in sandier soils. If parts of your yard tend to be damp most of the season, Bleeding Heart and Astilbe are great choices, while Potentilla and Sedum are better planted in drier locations. Carefully match your plants to the climate, soil and drainage characteristics of your garden and you will be far happier with the results.

My first rule of green thumb in the garden: Ninety percent of the success you achieve is the result of proper soil preparation. Understanding the soil type in your yard will help you determine what to grow and what to expect from your garden.

Clay soil can inhibit growth because it compacts easily and drains poorly. It can be difficult for plants to access the moisture held in clay soil. Clay soils will often stay wet for extended periods of time and, along with compaction, this prevents plant roots from reaching air: a necessary ingredient in healthy plants everywhere.

Sandy soils have relatively large particles allowing water, air and plant roots to move freely. It drains quickly, is well aerated and warms up quickly in the spring giving plants a quick start to the season. The price to pay for this advantage is that plants will be thirsty and hungry for nutrients. Farmers have used mulch for generations to hold moisture in the ground – for the garden I recommend finely ground up softwood bark mulch about 3 inches [7 to 8 cm] thick on sandy soil.

Adding composted organic matter and leaf mould will improve all types of soil. Decaying organic matter helps sandy soil retain water and nutrients which would otherwise wash away. Clay soil amended with organic matter is looser so that air, water and roots can penetrate more easily. If starting a new garden bed you can dig the organic matter into the soil prior to planting. However, if you are working with an existing garden, lay the compost on top of the beds in the early spring. Earthworms will pull the organic matter down into the soil and do the work for you [you have GOT to like that idea!].

Paying careful attention to the natural attributes of your property, such as soil types, topography, and drainage will not only help you create a beautiful landscape more easily, it will help you prevent environmental degradation from erosion or water contamination.