

## **Gardening 101 – Lesson Two – Analyzing Your Garden**

### **By Sheila Burvill**

Plants are a little bit like people – they have their own likes and dislikes. Most of the plants we like to grow in gardens come from somewhere else where have adapted over time to grow in certain conditions. Put them in these same conditions and they're likely to look good and flourish; put them in other conditions which they don't like and they're likely to just sit and sulk and not do much. They may even die.

In order to make plants happy, you have to find out what conditions they grow best in and see whether your garden can supply these conditions. It pays off to analyze your land to see what sort of growing conditions exist there.

### **Light**

One of the most important things to check is the amount of light you have in the areas where you want to grow plants. Some plants absolutely love the sun and need quite a few hours of direct light each day in order to flourish. Other plants prefer some shade combined with some sun. And yet others like deep shade and will just shrivel up if planted in sunny places.

So take a look at your garden beds or the areas where you're thinking of digging beds and figure out whether they're mainly in the sun (at least 6 hours a day), whether they get some sun and some shade, or whether they're mainly in shade all day.

Even if you want only to have a lawn you still have to pay attention to light levels. Lawns are mixtures of different grasses and some grasses grow well in full sun and others can tolerate shade. Choose a grass mixture which suits your conditions. For instance, if the lawn is under a tree, you'll want a shade mixture.

### **Water**

Some plants really don't like wet soil and others absolutely love having wet roots. In most gardens, there will be areas where the soil is pretty dry all the time. For instance, if your house is close to a neighbouring house and the roofs have overhangs, it's pretty likely that the area between the houses is very dry. On the other hand, if rain drains off a roof in only one or two places, the soil there will likely be quite moist. Some places will just naturally be a little boggy. In Old Ottawa East, there are lots of backyards which used to have small streams running through them and water still collects there after heavy rains.

To figure out what your garden is like in terms of water available to plants, take a walk through it a day or two after a heavy rain. Look to see if there are still some muddy or soggy places; if so, that means there's lots of water available and any plant you put there will have wet roots. On the other hand, if the soil is dry even after a heavy rain, there's not going to be much water available to plants so either choose a plant which likes dry conditions or make sure that area is watered regularly. Don't just look at the surface of the soil; dig a small hole down a few inches to see

whether the soil is dry just on the top or all the way down. If water collects at the bottom of any little hole you dig, you've definitely got boggy conditions.

## **Soil**

Since plants get their nutrients from the soil, the kind you have in your garden will influence how well plants grow. See lesson one for more information on soils.

## **What's already in the garden**

Plants which are already established in a garden often affect other, newer plants so take a good look around your yard to see what's already there. Trees certainly have a great effect on other plants because they not only influence the amount of shade and/or sun available, they also use a lot of moisture and nutrients from the soil, making it more difficult for other plants to prosper. Shrubs have a similar effect although usually over a smaller area than does a tree. It's not impossible to grow flowers right under a tree or shrub but it does require special preparation and care so if you're just starting out as a gardener, you're better off not even to try.

## **Wind**

Sometimes a plant seems well suited to a particular place in the garden but still doesn't do well. It might be because it happens to be in a wind tunnel or in an area next to a barrier which causes wind to downdraft right into your plants. If a place is windy, it's also likely to be drier because wind sucks up moisture from the soil. For these areas, put in plants with short stems which also like dry soil.

Wind conditions are pretty tricky to evaluate. Our winds tend to come from the west/north west so if your garden is oriented so that there are long rows of tall plants lining up from west to east, they'll probably be getting a fair amount of wind. Also tall solid fences which run north and south will force the prevailing winds up but then the wind will descend down the east side of the fence to cause a downdraft over the plants which are there.

## **What to do with this information**

You'll be a more successful gardener if you match up your garden's growing conditions with a plant's likes and dislikes. So when you go to a nursery or other place where plants are sold, look only for those plants which do well in your growing conditions. To find out what these are, check plant labels or ask the people who are selling them for advice. There are also many book guides to plants available through the Ottawa Public Library if you feel like researching specific plants in advance.

Here's a quick list of common plants for common situations in Old Ottawa East to give you a little guidance.

Full sun: Asters, Black-eyed Susans (Rudbeckia), Cotoneaster, Wormwood (Artemisia), Rock Cress (Aubrieta or Arabis), Snow-in-summer, Potentilla, Globeflower (Trollius), Veronica, Verbena, Coneflower (Echinacea), Peonies, Roses, Irises, Forget-me-not

Sun/Semi shade: Lady's mantle (*Alchemilla mollis*), Bergenia, Bleedingheart, Coral bells (*Heuchera*), some Hostas, Creeping Jenny, Potentilla, Globeflower (*Trollius*), Veronica, Verbena, Peonies, Irises, Forget-me-not

Full Shade: Ajuga, Bergenia, Lily-of-the-valley, Pachysandra, Sweet woodruff, Trillium, some Hostas, Foamflower (*Tiarella*), Creeping Jenny

Dry: Caragana (Pea shrub), Lavender, Amsonia, Globe thistle (*Echinops*), Chamomile, Marguerite, Fescue, Blanket flower (*Gaillardia*), Oriental poppy

Wet/Boggy: Black snakeroot (*Cimicifuga racemosa*), Gunnera, Ligularia, Cardinal flower, Great blue lobelia (*Lobelia siphilitica*), Cannas, Primulas, Calla lilies, Chelone (Turtlehead), Siberian iris

Clay soils: Magnolia, Spirea, Asters, Campanula, Daylilies (*Hemerocallis*), Goldenrod (*Solidago*), some Roses

Sandy Soils: Rose of Sharon, Mallow, Russian sage (*Perovskia*), Achillea, Coreopsis, Potentilla, Feverfew

Next lesson: Kinds of Plants