



The  
**HOLDEN**  
Arboretum

# Selecting Plants for the Home Landscape

**M**any homeowners choose plants for their property on impulse or emotion. This scenario is usually played out at the local nursery when the plant selected is in bloom. The unsuspecting plant victim is bought because of its beauty and then taken home to its final resting place. To be more specific, the casual plant consumer will bring the plant home and site it on property as he would a piece of furniture in his living room. Unfortunately, where the plant looks best is not necessarily the best location for it to grow. The plant may look good for a couple of years or longer, but, eventually its health will fail, insects or diseases will find it, and the next thing you know its R.I.P. on the compost pile.

If these events sound familiar to you, then read on and learn how to select plants which will flourish in your home landscape.

The first step to proper plant selection is reversing your thought process. By this, I mean to change the criteria you use for selecting plants. Too often we choose plants on appearances only, when in reality we should look at their adaptability first. The process can be broken down into four steps:

**1** Analyze the site to determine:

- ◆ **Light Exposure** – full sun, part sun, shade, or dense shade.
- ◆ **Soil Drainage** – is there standing water for more than a few hours at any time? If there is, you may have a problem.
- ◆ **Soil Compaction** – is the ground hard like concrete or soft as the forest floor? Harder, or dense soils, are more difficult to grow plants in.
- ◆ **Soil pH** – a measurement on a scale from (1-14), 7 is neutral; below that is acidic and above is alkaline. The ideal pH for most conditions is 6.5. Mix a tablespoon of dried soil into an ounce of distilled water and use litmus paper to get a good pH estimate.
- ◆ **Soil Fertility** – this factor is directly related to organic matter content. All urban soils in



northeast Ohio are low in organic matter and thus, low in fertility.

These are the main limiting factors to growing plants in the Cleveland area. You can choose plants which will adapt to them or correct the problems before planting.

- 2** Decide on how much care you are willing to give your plants. Some plants require almost constant attention with fertilizing, pruning, and protecting from pests. Other plants are very low maintenance.
- 3** What function will the plant fill in the landscape? Plants can be used in many different ways – for barriers, screening, framing, accenting – to name a few. When you know how a plant is going to be used, select ones which will mature at the size for the function. This will cut down on pruning. You will no longer need to fight with your plants in order to contain them.
- 4** Now that you have the difficult decisions done, you are ready to do what everyone enjoys the most – picking out the aesthetic features you desire in a plant. Colors, textures, seasons of interest – all that your landscaping dreams can conceive.

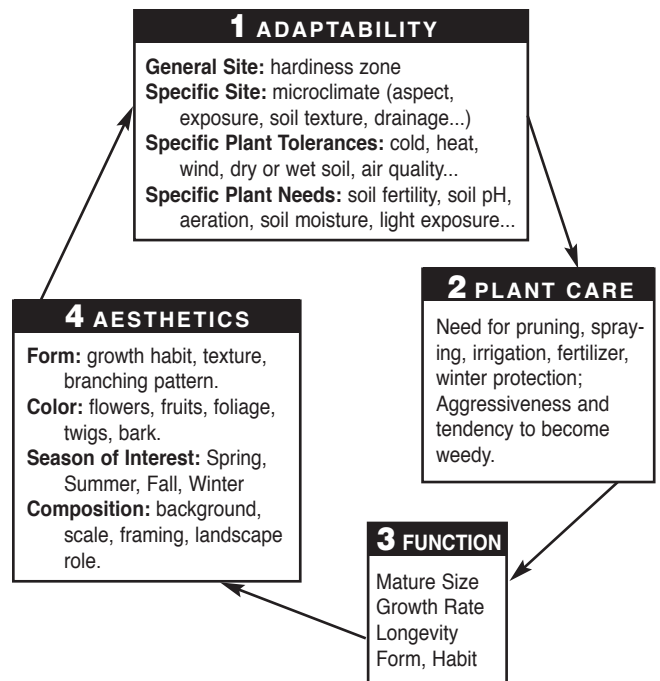
# CRITERIA FOR PLANT SELECTION

After compiling criteria from these four steps, take your list to a library with a good selection of reference books on woody plants.

Take your criteria list and decide what is the most limiting factor for growing plants in your landscape. Use that criterion to start your research. Write down the names of plants from the book's list which fit the basic form of plant you are looking for (i.e. tree, shrub, evergreen, deciduous). Now cross reference the list you just created with lists in the books from other criteria (shade, dry soils...). Cross off the names of plants on your list which do not appear in the reference books.

When you get to your criteria for landscape function and aesthetics, you should have a fairly short list. For these criteria you will need to look up each plant individually and determine which ones will fit your needs. If your site is not too difficult to work with, you should finish this research with a list of good plants – all of which will adapt to your site conditions.

Now you can take your plant list to any nursery and buy your plants with the confidence that you are selecting the right plant for the right place. To help you make the best selection from your nursery's stock, use the following table as a check list.



## CHOOSING A TREE AT THE NURSERY

### GENERAL APPEARANCE

- ◆ The tree should have a balanced shape.
- ◆ Make sure there are no bare spots in the foliage, missing or damaged limbs, spotted or discolored leaves.
- ◆ The tree should have a single "central leader" (main stem).
- ◆ Check the size of the crown and root ball in relation to the caliper of the tree - should not be top heavy.

### CROWN

- ◆ Seek trees with branches which come off the trunk at between 45° and 90° angles. The closer the angle is to 90°, the stronger the branch will be.
- ◆ Wounds from pruning should be callused over or well on their way.
- ◆ Branches should be distributed evenly with 6-8" between them on the main trunk.
- ◆ Branches should not be longer than 1/4 the height of the tree. Too long limbs place undue burden on the tree.

### TRUNK

- ◆ The trunk should be straight.
- ◆ Look for insect damage such as borer holes.
- ◆ The trunk should be free of discolored, swollen, or sunken areas.
- ◆ No wound should be larger than 1/4 of the trunk's circumference.

### BALLED-AND-BURLAPPED (B&B) TREES

- ◆ Trees should be dug during or close to dormant season.
- ◆ The trunk should not move independently of the root ball.
- ◆ The burlap should be tightly wrapped.
- ◆ The trunk should be in the center of the root ball.
- ◆ Select trees with some indication of a trunk flare at the top of the ball. This indicates you are getting a larger portion of the root system than you would with one in which the trunk flare is buried in the ball.

### CONTAINERIZED TREES

- ◆ Pot bound roots are in danger of "girdling" – encircling the pot and cutting off the vascular system. This can continue even after planting.
- ◆ Avoid trees that have large roots coming out of the container's water holes or roots circling on the soil surface.

### BARE-ROOT TREES

- ◆ When available, bare-root is a good choice. Properly dug, they will retain more roots than similar sized B&B trees. Bare-root trees will adapt to their site more quickly.
- ◆ Care must be taken to insure that the roots do not dry out.
- ◆ Bare-root trees must be planted before leafing out.