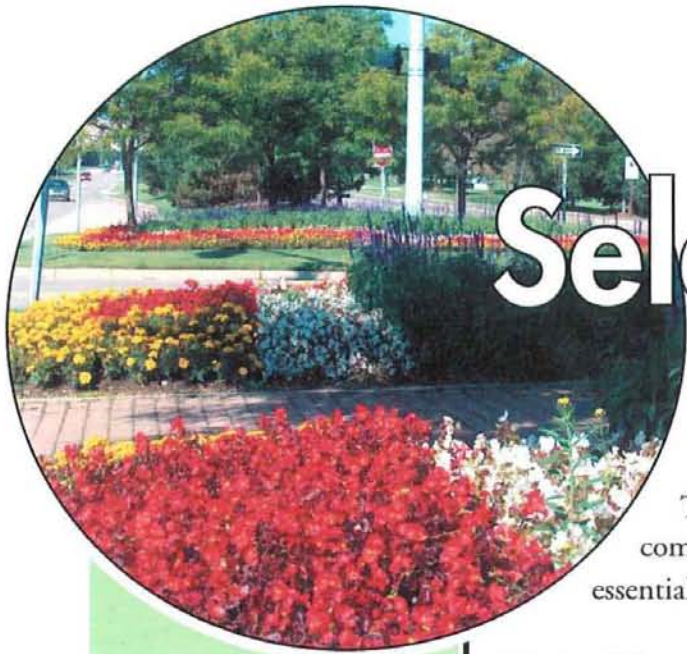


# Selecting Plants



## What's the Problem?

Trees, shrubs, and other plants provide numerous benefits to a community. However, selecting the right plant for the right place is essential for the health of the plant.

## Low-cost solutions

Selecting the right plant is a low cost way to ensure the health of your trees and shrubs. It will save the community money in the long run by having healthy, vibrant plants that don't require replacement or costly maintenance.

## Right Plant, Right Place

Selecting the "right plant for the right place" is an important theme to remember when choosing trees, shrubs, or flowers for your community. When selecting your plant, take a few minutes to consider the following tips:

- **Function.** When deciding the type of plant to use, consider the function of the plant. For example:
  - Do you want the plant to act as a screen or buffer between different land uses?
  - Do you want increased shade?
  - Do you want to mask or highlight certain features of a building?
  - Do you need to prevent erosion or plant on a steep slope?
  - Do you want to block the wind?
  - Is the area excessively wet?
  - Do you want to create a specific habitat to attract certain types of wildlife (e.g. butterflies, birds)?
- **Aesthetics.** Aesthetics or curb appeal tends to be the most notable quality of a landscape. The success or failure of a landscape is often judged on the visual quality of the plants. Consider the following tips to ensure a landscape that is aesthetically pleasing:
  - Identify the amount of space you want the plant to cover and select a plant that will fill that space at its mature size.
  - Use flowers, foliage, fruit and stems, branches/bark to add color and texture to your landscape.
  - See Landscape Design fact sheet for more ideas.

**SEMCOG**

Our Water. Our Future.



Ours to Protect



Source: Clinton Township

## Right Plant, Right Place (continued)

- **Site adaptability.** This is the relationship between the needs of the plant and the environmental and soil conditions of the planting area. It ultimately determines whether a plant will perform to expectations. If the plant is unable to establish and resume vigorous growth after planting, it is not likely to exhibit the aesthetic qualities that led to its selection. Consider the following site parameters:
  - Soil type influences aeration, water retention, drainage, and nutrient holding capacity. Identify the soil type to assist in selecting the right plant for your site.
  - Soil pH is another parameter effecting plant growth. Knowing your pH will help you work with pH sensitive plants.
  - Hardiness refers to the plant's ability to withstand cold temperatures. Make sure your plant is within Michigan's hardiness zones.
  - Light exposure refers to the amount of light available in the planting area. Knowing daily light patterns and their changes with the season help tailor plant selections.
  - Assess the exposure to deicing salt. If your planting area will receive runoff that contains deicing salt or direct overspray of salt, select plants that are salt tolerant (see list on next page).
- **Maintenance.** Maintenance practices within the landscape contribute to its overall appeal. The visual quality of the landscape can fall short of expectations if maintenance isn't consistent with what the plant needs. Using native plants is one option for those who strive for a low-maintenance landscape. (See fact sheets on planting/ practices and native plants for more information.)



*Consider the function of the plant when designing the site.*

*For example, do you want to have the plants act as a screen (above) or act as a hedge (below) between land uses?*



Photos courtesy of  
Carlsisle Wortman Associates  
and City of Troy

## The Importance of Diversity

Diversifying your landscape—whether it's trees, shrubs, or perennials—is important to the overall health of the landscape. Having a diverse landscape is not only visually appealing, it also prevents the spread of disease and pests. The decimation of ash trees by the Emerald Ash Borer and elm trees by Dutch Elm Disease illustrate why encouraging natural biodiversity and choosing a variety of plants for designed landscapes is so important. Globalization has increased the introduction of pests from one ecosystem to another. These introduced species often exploit their new environment and take over niches that once belonged to native species. Since these pests originated elsewhere, their native predators are not present to keep populations in check. Once an introduced species takes hold, it can be very difficult to eradicate.

## Plants for Difficult Areas

Some plant species work well in difficult growing conditions (e.g. wet soil conditions, steep slopes, clay soil, etc.). See the fact sheet on landscape design for more information on plants for difficult areas. Following is a list of salt-tolerant plants:

### *Deciduous Trees/Shrubs*

Red maple  
Common honeylocust  
Sweetgum  
Magnolias  
American planetree, Sycamore  
London planetree  
White oak  
Eastern red oak  
Blackjack oak  
Scarlet oak  
Willows  
Downy shadblow (serviceberry)  
Japanese barberry  
Flowering dogwood  
Gray dogwood  
Redosier dogwood  
Ibota privet  
California privet  
Tatarian honeysuckle  
Northern bayberry  
Shrub oak  
Flameleaf sumac  
Rugosa rose  
Spireas, all kinds  
Kashgar tamarisk

### *Evergreen Trees/Shrubs*

White fir  
Common juniper  
Eastern redcedar  
White spruce  
Japanese red pine  
Mugho pine  
Austrian pine  
Pitch pine  
Scotch pine  
Loblolly pine  
American holly  
Southern magnolia  
Junipers  
Eastern arborvitae  
Japanese privet  
Southern waxmyrtle

### *Perennials*

Goldentuft alyssum  
New England aster  
Grass pink  
Common perennial gaillardia  
Lemon daylily  
Tiger lily  
Lupines  
Moss pink  
Carolina themopsis  
Lemon thyme  
Adamsneedle

### *Annuals*

California poppy  
Castor bean  
Dwarf nasturtium  
Feather cockscomb  
Gaillardia  
Heliopsis  
Petunia  
Portulaca  
Scotch pink  
Snow-on-the-mountain  
Strawflower  
Stock  
Sweet alyssum  
Zinnia



Source: Carlisle Wortman Associates

**Cover photo:** Courtesy of City of Farmington Hills. Curb appeal can often be one of the most important aspects of your landscape. Consider using flowers, foliage, fruit, and stems to add color and texture to your landscape.

**Top left photo:** Using native plants is one option for those who strive for a low-maintenance landscape.

**Top right photo:** Salt used to deice roads and sidewalks can harm plants growing nearby. Salt can reduce plant growth and make the plant susceptible to disease and insect pests. Consider using salt tolerant plants – such as *Potentilla* – in these areas.

**Back page photo:** Ash trees infested with Emerald Ash Borer and marked for removal.

Source: Michigan State University Extension.

## Ash Tree Replacement Trees for Street Tree Planting Program – City of Troy

Diversity is an important component of any tree-planting program. The need for diversity is clear based on the loss of the ash trees in Southeast Michigan. Following is a list of replacement trees that the City of Troy is using to increase diversity in their street tree-planting program.



Source: Plymouth Township

<i>Common Name</i>	<i>Botanical Name</i>
Hackberry	<i>Celtis occidentalis</i>
Katsura	<i>Cercidiphyllum japonicum</i>
Yellowwood	<i>Cladrastis kentukea</i>
Turkish Filbert (hazelnut)	<i>Corylus colurna</i>
Hardy Rubber tree	<i>Eucommia ulmoides</i>
Gingko	<i>Gingko biloba (male only)</i>
Kentucky Coffee Tree	<i>Gymnocladus dioica (male only)</i>
Tulip Tree	<i>Liriodendron tulipifera</i>
Sweetgum	<i>Liquidambar styraciflua</i>
Blackgum (tupelo)	<i>Nyssa sylvatica</i>
London Planetree	<i>Platanus x acerifolia</i>
Japanese Pagodatree	<i>Styphnolobium japonica</i>
Bald Cypress	<i>Taxodium distichum</i>
<b>Hybrids for disease resistance</b>	
Silver Linden 'Sterling'	<i>Tilia tomentosa</i>
American Elm 'Accolade'	<i>Ulmus Accolade</i>
American Elm 'Valley Forge'	<i>Ulmus americana 'Valley Forge'</i>
Zelkova 'Green Vase'	<i>Zelkova serrata</i>

## Selecting Plants

### Resources

Michigan State University. *Salt Tolerant Plants*. Fact Sheet.

Michigan State University Extension Oakland County.  
*Problem Solvers: Salt Injury to Landscape Plants*.

Schutzki, Robert. *A Guide for the Selection and Use of Plants in the Landscape*.  
Michigan State University. 2005.

Funding provided by Designated Management Agencies and SEMCOG, the Southeast Michigan Council of Governments.