



Ray Smith & Associates, Inc.

Tree and Plant Health Care
Landscape Design
& Installation

27 Henry Road * PO Box 5024, Southampton, NY 11969-5024
(631) 287-6100 * Fax (631) 287-6245

SCREENING USING TREES & SHRUBS

USES:

To define an area

- A screen is one way to separate or define areas with different uses. Trees are often used to screen parking lots, play areas, and yards. A row of trees is a great alternative to a fence or wall in the narrow space between homes.

To modify or hide a view

- Planting trees is an excellent way to provide a screen that will modify or hide the view of a wall, fence, driveway, parking area, or utility boxes/fixtures. Unsightly areas or items, such as vacant lots or dumpsters, can be concealed with the proper plantings. Trees can also be used to break up an uninterrupted view of buildings, homes, or land.

To block wind, dust, salt, and snow

- A row or mass planting of trees, especially evergreens, helps to block wind, salt spray off of water or roads, and dust from open areas. When trees are planted in the long, narrow corridors between buildings, they can break up or reduce wind tunneling. A home with screening trees planted on the prevailing wind side can benefit from energy savings. Rows of evergreens planted along roadways can help keep roads clear of windblown snow, thereby reducing the expense of salting, sanding, or snowplowing.

To control noise

- Plants are a great way to control or block noise. Leaf and branch surfaces muffle the noise from businesses, cars, air conditioners, and other sources. Trees can be planted in the narrow areas between buildings and nearby streets, in beds against buildings, in parking area islands, and in highway medians for noise reduction.

To filter light

- Control of light, whether sunlight, overhead lights, or lights from neighboring buildings, is another problem that can be remedied through the use of trees. Windows, yards, and parks can be shaded with trees either year-round or seasonally. Trees can also provide shade for people, and for flowers and shrubs that cannot be grown in direct sunlight.

To direct traffic flow

- On street medians and parking lot islands, trees give drivers visual markers that indicate distance, identify obstacles, and direct the flow of traffic. This effect also works well for pedestrian traffic, a principle utilized by many theme parks and tourist attractions. Tree screens can also act as barriers to prevent shortcuts and paths through flowerbeds and across turf in areas where small shrubs are not effective.

Important factors in selecting trees for screening:

- Before selecting any tree, consider characteristics that may change as the tree grows. A little research can prevent the cost and trouble of removing a tree that has become unsuitable for the place where it was planted. A tree's special characteristics determine its suitability for a particular situation. Give careful consideration to each of the following factors before selecting a screening tree.

Size at maturity

- As trees grow, some will become tall while others will remain short, and some will spread while others will remain compact or columnar. Determine mature tree characteristics and decide whether these characteristics will be suitable for the planting site when the tree reaches its ultimate height and spread.
- If a screen is needed quickly, plant fast growing trees. An alternative is to plant slower growing trees together with fast growing trees, removing the faster growing ones as the more desirable trees mature. When a screen is needed where trees already exist, plant understory trees. In their native setting, shade-tolerant understory trees (such as flowering dogwoods) grow beneath pines and other tall trees.
- Tall trees can block the view of tall buildings, or add interest to an angular building. In narrow areas such as foundation plantings, or in beds between buildings and streets, a tree with a small canopy and limited root spread (such as hedge maples and dwarf southern magnolias) is preferable.

Form and shape

- When selecting trees for screens, match the needed function to the mature shape of the tree. Choose trees with columnar or fastigiate forms (such as English oaks and European hornbeam) for narrow areas, row plantings, or against tall buildings. When planted in rows, trees with a narrow, columnar canopy effectively block an unsightly view, define areas, and act as a barrier. They can be planted close to fences and buildings without hanging over into other areas and can give a building a formal or classical appearance.
- These narrow, upright junipers can be planted close to a building or fence for screening in a small area.

- Trees with round or pyramidal canopies are effective for areas that have limited root area but adequate overhead canopy area, such as parking lots or street medians. Trees that can be shaped or sheared require more maintenance but can also be used in these areas.

Seasonal vs. year-round screening

- For seasonal screening, select deciduous trees. Deciduous screening trees will shade a window or door during the summer, but will allow more light in during the winter. Do not plant deciduous trees with litter problems -- messy fruit or seedpods, flowers, large leaves, or weak branches (sweetgums, crabapples, silver maples, mulberries) -- near sidewalks, patios, driveways, or other paved areas.
- Evergreen trees (such as Leyland cypress and arborvitae) provide year-round screening, but they also come with their share of problems. Planted in front of a window they will eventually block both the light and the view -- a problem unless that is the desired function. Pine needles, cones, sticky sap, and dense shade are factors that will also impact their selection as a screen.

Foliage density

- Trees with thick, dense foliage (such as callery pear & Crabapple are excellent for noise control and blocking a view. Evergreens with thin, wispy needles (such as pines) or deciduous trees with small leaves or leaflets (such as honeylocusts) create soft, filtered light for any shade-loving flowers and shrubs.

Branch arrangement

- Trees with ground level branches (most unpruned evergreens such as hollies and junipers) and with weeping branches (weeping cherries and willows) are great for blocking the view of fences or walls, for control of noise, for blocking wind and snow, and for use as barriers. For parking lots, medians, and sidewalks, bottom branches need to be high on the trunk so as not to block the view for drivers (10'-12') or to create hazards for pedestrians (6'-8').

Site conditions

- Besides the stress imposed by a limited planting area, screening trees often must withstand damaging elements such as pollution, soil compaction, excess heat, vandalism and poor cultural practices. If screening trees are located near utility lines, sidewalks, parking lots, streets, fences, walls or buildings, they will be subjected to abuse from construction and maintenance in these areas.
- Trees used for screening have the same needs as any other trees: light, soil, water, nutrients, and periodic maintenance. Select disease and pest resistant trees that are appropriate for the hardiness zone and soil type of your planting site.

Special characteristics

- Thorny or prickly trees (such as hollies and hawthorns) can be effectively used for screening to stop all but the most determined pedestrian or stray animal. Use them around public areas to control traffic and define areas with different uses, but do not select these trees for areas where children play.

- The thorns of the small hardy orange tree help to create a screen through which few people or animals will try to go.
- Screening trees can also add aesthetic appeal to an area. Use cultivars with unusual foliage, colorful flowers, interesting bark and pleasing fragrance. A tree's special characteristics can soften or enhance the view from a drab or utilitarian building. Some screening trees attract birds and wildlife, as well as humans wanting a pleasant place to avoid the sun.

Other screening ideas:

Mass tree plantings

- One technique for maximizing the effectiveness of tree screens is massing or grouping trees of either the same type or of different heights or forms. Row plantings of columnar or fastigate trees give a neat formal appearance. Trees with multiple trunks (such as birches, redbuds and crape myrtles) give the appearance of more trees in a smaller space.

Mix shrubs with trees

- Try planting trees and shrubs together because shrubs can quickly fill in areas giving time for trees to reach mature sizes. Vines or climbing plants will work in these combinations. Use large shrubs instead of trees for a small-scale landscape grouping. Many shrubs (such as privet, photinia, viburnums, vitex, wax myrtle, witch hazel) can be pruned into tree form.

Use trees in containers

Trees growing in containers make an instant, temporary screen. Containerized trees offer the advantage of moving and rearranging, and their containers can add a decorative element.

Some Examples of plants suitable for natural screening:

Deciduous trees

Deciduous hollies	<i>Ilex decidua, Ilex verticillata</i>	Many cultivars; tolerates wet soil; fast growing
Crape myrtle	<i>Lagerstroemia fauriei, L x indica.</i>	Many cultivars; single and multitrunked; fast growing
Kousa dogwood	<i>Cornus kousa</i>	Small tree, heat tolerant
Japanese maple	<i>Acer palmatum</i>	Many cultivars; small tree
Crabapple	<i>Malus spp.</i>	Many broad and narrow cultivars, diverse flower colors

Evergreen trees

Common name	Latin name	Cultivars and Comments
False cypress	<i>Chamaecyparis spp.</i>	Several narrow or pyramidal species and cultivar
Japanese cryptomeria	<i>Cryptomeria japonica</i>	Pyramidal; fast growing
Leyland cypress	<i>x Cupressocyparis leylandii</i>	Many cultivars -- tall and narrow; fast growing
American holly	<i>Ilex opaca</i>	Many cultivars -- tall and pyramidal; tolerates wet soil
Chinese juniper	<i>Juniperus chinensis</i>	'Torulosa' -- arrow; twisted branches
Red cedar	<i>Juniperus virginiana</i>	'Glauca' -- narrow; silver-blue
Eastern white pine	<i>Pinus strobus</i>	'Fastigiata' -- upright