

SELECTING TREES AND SHRUBS

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Trees and shrubs represent a major investment for homeowners, municipalities, and park commissions. Careful selection, siting, soil preparation, and planting of these materials along with good follow-up care, can help insure success. No amount of good post-transplanting cultural care can compensate for insufficient planning and poor planting practices. Each plant is different in its requirements for space, maintenance, soil, sun, etc. Consult a good reference to see if the plants desired fit the following parameters. For example, a plant that requires full sun will languish in a shady location. A tree whose roots lift pavement should not be planted next to a driveway or sidewalk.

PLANT SITING CONSIDERATIONS

- **COMPETITION:** Will there be competition from nearby trees and shrubs for water, nutrients, and sun?
- **NEARNESS TO STRUCTURES:** How close is the nearest building, driveway, sidewalk, fence? Will the plant block vision or impede pedestrian traffic? Will it block doors or windows as it grows? Will carpenter ants or squirrels be able to get on the roof? Will it drop debris (leaves, catkins, twigs, flowers) in the house gutter?
- **UTILITIES:** Are there power lines above ground, or sewer and water pipes or electrical or cable conduits underground? If service is required for these pipes or lines, will the plant or its roots be in the way?
- **PAVEMENT:** Is pavement or other impermeable surface, such as sidewalks, terraces or patios, present or intended?
- **FUTURE CONSTRUCTION:** Is there a probability of future construction; (deck, house addition, pool, gazebo, shed, tennis court) in the planting area? Is a vegetable or flower garden planned?
- **LIGHT INTENSITY:** Is the location sunny? Shady? Partly sunny? Is the sun morning, afternoon, or all day?
- **POTENTIAL FOR WINTER INJURY:** Is the site windy? in a frost pocket? in an area of reflected light or heat?
- **DRAINAGE:** Is the soil drainage good? Does the area flood occasionally or often? Is it a bog or wetlands?
- **EASE OF LANDSCAPE MAINTENANCE:** As the plant grows, will its presence interfere with maneuvering lawn mowers or other maintenance equipment?
- **SIZE OF PLANTING AREA:** Is the tree pit/street lawn strip large enough to accommodate this tree? A tree pit must be at least 4'x4'. Street lawn strips vary in width from 28" to over 4 feet. There are appropriate trees for each size. Will the ultimate landscape size of this plant be too large for the site?
- **CHEMICAL POLLUTANTS:** Are air pollutants a problem? De-icing salt road splash?

PLANT SELECTION CONSIDERATIONS

Individual plants have different characteristics of growth and special cultural requirements. Some of the considerations when choosing plants for any locations are:

- **GROWTH FORM/CANOPY SHAPE:** Is a narrow, broad, tall, short, rounded or spreading plant needed?
- **ULTIMATE SIZE!** Keep plant in scale to buildings, other plants, and space allowed. When it is full sized, will it block windows or doors or endanger anything if branches fall?

- **COLD HARDINESS and SUMMER TOLERANCE:** We are USDA hardiness zone 6-7. Will this plant tolerate New Jersey winters or summers? Gumpo azaleas, crape myrtle, and mimosa are hardy to zone 7 and will survive some of our winters. Balsam fir cannot tolerate our summer temperatures.
- **PEST RESISTANCE:** Some plants are less likely to attract damaging pests or be susceptible to diseases.
- **FOLIAGE COLOR:** Many plants have variegated foliage (green or red plus one or more other colors), attractive fall color, or foliage color other than green.
- **FLOWERS and/or FRUIT:** Will this plant attract beneficial insects, pest insects or birds or create a litter problem. Is it a food source for animals or humans?
- **ATTRACTIVE BARK:** For some plants, the bark is an ornamental feature and may be platy or peeling (exfoliating), smooth or rough, a color other than brown.
- **LITTER:** Plants may drop petals, fruit, leaves, or small branches that create a litter problem. Some low-growing twiggy shrubs may trap wind-blown litter.
- **DROUGHT/EXCESS MOISTURE TOLERANCE:** Some plants are wet-site tolerant once they are established.
- **CULTURAL REQUIREMENTS:** What are the soil, exposure, sun/shade, water, fertilizer, and pH needs?
- **MAINTENANCE REQUIREMENTS:** What are the pruning, winter protection, mulching, and pest control needs? Some plants require much more care than others to keep them healthy and looking good.
- **TYPE OF ROOT SYSTEM:** Will the root system lift a sidewalk, invade a water line, make lawn mowing difficult, compete with other plants for water/fertilizer?
- **WIND TOLERANCE/STORM DAMAGE RESISTANCE:** Is the plant weak-wooded and tends to break in storm?
- **SPECIAL ADVANTAGES:** Does that plant attract birds and butterflies, have a fragrance, or have a special sentimental meaning?
- **SPECIAL PROBLEMS:** Is the plant salt-tolerant if near streets or sidewalks? Is it tolerant of air pollution? Is it, like the black walnut, alleopathic (toxic) to nearby plants? Is the plant attractive to vandals?
- **SHADE CAST:** Shade is an advantage on a patio or on the south side of a house in summer or a disadvantage if trying to grow vegetables. Some trees (Norway maple, beech) cast dense shade, while others (honeylocust, sweet gum) cast light shade.
- **FORMAL/INFORMAL SHAPE:** Will the expected landscape form fit in with landscape expectations for formality?
- **INVASIVENESS:** Does the plant seed heavily, spread by rhizomes or stolons, or crowd out desirable adjacent plants or plants in nearby forests?

PLANTING CONSIDERATIONS

- **TRANSPLANT RECOVERY RATE:** Will the plant recover rapidly from transplanting and continue active growth? Red oak, for example, recovers slowly.
- **ROOT FORM:** Is there a taproot? Are the roots shallow and fibrous?
- **AVAILABLE FORM:** Is the plant available as balled and burlapped (B&B), as a bare rooted plant, or in a container. B&B material can be planted in spring and fall and is relatively heavy. Bare root material can be planted only when dormant in early spring and (sometimes) fall, is lightweight, and is available in smaller sized plants. Container materials can be planted from spring through fall.