



CAPE COD COOPERATIVE EXTENSION

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“RIGHT PLANT, RIGHT PLACE”

A PLANT SELECTION GUIDE FOR MANAGED LANDSCAPES

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Choosing the “right plant for the right place” is an important consideration for all types of landscaping but often this guideline is ignored, which may lead to increased maintenance, a failure of plants to thrive, and sometime the death of installed plant material. Careful planning and site evaluation are the first steps in applying this concept. Trees and shrubs vary considerably in their ability to tolerate different site conditions and it is critical to select plants to match the existing growing conditions of the site in addition to their ornamental value. Even the best planting practices will not help a plant to thrive if it is poorly suited for a particular site. It is also important to know the mature height and width of the selected plants so that they will not outgrow the space allotted to them.

Some site conditions to keep in mind when selecting landscape plants include:

- light availability, intensity and duration (full sun to deep shade)
- water availability, both quantity and quality
- exposure to wind and temperature extremes
- soil type, drainage, compaction
- hardiness zone
- competition from existing vegetation
- below ground conditions in urban sites
- above ground wires or obstructions

A major factor to consider when selecting woody ornamentals is insect and disease resistance. If two plants have similar form, function, and aesthetic qualities but one has an insect or disease problem and the other has none, it makes sense to choose the resistant species. For example, European birch (*Betula pendula*) is often used as a landscape tree but the bronze birch borer significantly impacts it. River birch (*Betula nigra*) offers the same form and function but is resistant to this pest. The cultivar Heritage™ has the desired lighter colored, exfoliating bark and is the preferred species to use in the landscape.

Aesthetic considerations for plant selection include:

- growth habit, i.e. pyramidal, columnar, spreading, etc.
- season and color of bloom
- foliage color, texture, and shape
- winter interest of bark, fruit, or structure
- benefits to wildlife
- fall color
- longevity



Low-maintenance landscaping does not mean that no maintenance will be required, as all plants will require some routine care in order to succeed. In addition to plant selection, proper planting practices and the grouping of trees and shrubs according to their needs for water, fertilizer, and maintenance will go a long way to ensure good plant health. With good site evaluation and plant selection, woody ornamentals will thrive and enhance the landscape for many years. The following lists of plants have no significant disease or insect problems. Plants native to North America are indicated by an *.

Small shade trees (< 35')

Acer buergerianum – Trident maple
Acer campestre – Hedge maple
Acer ginnala – Amur maple
Acer griseum – Paperbark maple
Acer japonicum – Fullmoon maple
Acer palmatum – Japanese maple
Acer tartaricum – Tartarian maple
Acer triflorum – Three-flower maple

Acer truncatum – Shantung maple
*Asimina trilobum** – Paw Paw
Betula nigra ‘Little King’* – Fox Valley™ River birch
*Carpinus caroliniana** – American hornbeam
*Cotinus obovatus** – American Smoke tree
*Ostrya virginiana** – Hophornbeam
Parrotia persica – Persian Parrotia

Medium shade trees (35' – 45')

Acer x freemanii – Freeman hybrid maple cultivars
*Acer rubrum** – Red maple cultivars
Aesculus carnea – Red horsechestnut
Carpinus betulus – European hornbeam
Cercidiphyllum japonicum f. *pendula* – Weeping katsura

Corylus colurna – Turkish filbert
*Sassafras albidum** – Sassafras
Sorbus alnifolia – Korean mountain ash
Ulmus parvifolia ‘Athena’ – Athena™ lacebark elm

Large shade trees for landscapes and public grounds (> 45')

*Acer saccharum** – Sugar maple cultivars
*Betula nigra** ‘Cully’ - Heritage™ River birch
*Betula nigra** ‘BNMTF” - Dura-heat™ River birch
Cercidiphyllum japonicum – Katsura
Cercidiphyllum japonicum ‘Morioka Weeping –
 Weeping katsura
Ginkgo biloba - Ginkgo
*Liquidambar styraciflua** – Sweet gum
*Liriodendron tulipifera** – Tulip tree

*Nyssa sylvatica** – Black gum
Platanus x acerifolia – London planetree
*Quercus bicolor** – Swamp white oak
*Quercus palustris** – Pin oak
Quercus phellos – Willow oak
Quercus robur – English oak
*Ulmus americana** ‘New Harmony’
Ulmus parvifolia – lacebark elm cultivars
Zelkova serrata - Zelkova

Small flowering trees (> 25')

*Amelanchier arborea** – Juneberry
*Amelanchier laevis** – Allegheny serviceberry
*Amelanchier x grandiflora** – Apple serviceberry
*Cercis canadensis** – Redbud
*Cornus alternifolia** – Pagoda dogwood
*Cornus florida** ‘Appalachian Spring’ – Flowering
dogwood (anthracnose resistant)
Cornus kousa – Kousa dogwood

Cornus mas – Corneliancherry dogwood
Magnolia x loebneri ‘Leonard Messel’
Magnolia stellata – Star magnolia
Malus cultivars – Crabapple (disease resistant)
Styrax japonica – Japanese snowbell
Syringa reticulata – Tree lilac
Viburnum sieboldii- Siebold viburnum

Medium flowering trees (25' – 35')

*Cladrastis kentuckea** – Yellowwood
Evodia daniellii – Korean evodia
*Halesia tetraptera** – Silverbells
Koelreuteria paniculata – Goldenrain tree

*Magnolia virginiana** – Sweetbay magnolia
*Oxydendrum arboretum** – Sourwood, Sorreltree
Stewartia monodelpha – Tall stewartia
Stewartia pseudocamellia – Japanese stewartia

Large flowering trees (< 35')

Magnolia acuminata* – Cucumber magnolia

Prunus sargentii – Sargent cherry

Styphnolobium japonicum – Japanese pagoda tree (formerly Sophora japonica)

Trees/shrubs tolerant of moist/wet soils

Acer rubrum* – Red maple

Amelanchier spp.* – Shadbush, Juneberry

Betula nigra* – River birch

Calycanthus florida* – Carolina allspice

Cephalanthus occidentalis* - Buttonbush

Chamaecyparis thyoides* – Atlantic white cedar

Cornus alba – Tatarian dogwood

Clethra alnifolia* – Sweet pepperbush

Cornus sericea* – Redosier dogwood

Cornus amomum* – Silky dogwood

Ilex glabra* - Inkberry

Ilex verticillata* - Winterberry

Itea virginica* – Virginia sweetspire

Lindera benzoin* - Spicebush

Liquidambar styraciflua* - Sweetgum

Magnolia virginiana* – Sweetbay magnolia

Metasequoia glyptostroboides – Dawn redwood

Nyssa sylvatica* - Tupelo

Quercus bicolor* – Swamp white oak

Rhododendron vaseyi* – Pinkshell azalea

Rhododendron viscosum* – Swamp azalea

Sambucus canadensis* - Elderberry

Taxodium distichum* – Bald cypress

Thuja occidentalis* – Eastern arborvitae

Thuja plicata* - Western arborvitae

Vaccinium angustifolium* - Blueberry

Viburnum cassinoides* – Witherod viburnum

Dry soil

The plants listed below will tolerate dry soils and short periods of drought. They may perform better when planted in more moisture retentive soils. However, any plant, regardless of how drought tolerant it may be, will require supplemental watering during its period of establishment in the landscape.

Deciduous trees

Acer griseum - Paperbark maple

Carpinus caroliniana* - American hornbeam

Cornus kousa - Kousa dogwood

Cotinus obovatus* - American smoke tree

Ginkgo biloba - Ginkgo

Halesia tetraptera* - Silverbells

Koelreuteria paniculata – Goldenrain tree

Liquidambar styraciflua* - American sweetgum

Magnolia x loebneri - Loebner hybrid magnolia

Malus spp. - Crabapple

Platanus x acerifolia - London planetree

Quercus spp.* -Oak, many species

Styphnolobium japonica - Japanese pagoda tree (formerly Sophora japonica)

Syringa reticulata Japanese tree lilac

Ulmus parvifolia - Lacebark elm

Zelkova serrata - Japanese zelkova

Shrubs

Aesculus parvifolia* - Bottlebrush buckeye

Arctostaphylos uva-ursi* - Bearberry

Aronia spp*. - Chokeberry

Calluna spp. - Heather

Chaenomeles x superba - Japanese flowering quince

Clethra alnifolia* - Sweet pepperbush

Comptonia peregrina* – Sweetfern

Cornus mas - Corneliancherry dogwood

Cotinus coggygria - Smokebush

Cotoneaster spp. - Cotoneaster

Erica spp. - Heath

Exochorda racemosa - Pearlbrush

Forsythia sp. - Forsythia

Hydrangea paniculata - Panicle hydrangea

Hypericum prolificum - Shrubby St. John's wort

Itea virginica* - Virginia sweetspire

Morella pensylvanica* - Bayberry (formerly Myrica)

Physocarpus opulifolius* - Ninebark

Potentilla fruticosa - Bush cinquefoil

Rhus aromatica* - Fragrant sumac

Rhus copallina* - Flameleaf sumac

Rhus typhina* - Staghorn Sumac

Rosa rugosa - Saltspray rose

Rosa virginiana* - Virginia rose

Spirea spp. - Spirea, many species

Syringa spp. - Lilac

Vaccinium angustifolium* - Lowbush blueberry

Viburnum dentatum* – Arrowwood

Needled Evergreens

*Abies concolor** - White fir
Cedrus atlantica - Atlas cedar
Cephalotaxus harringtonia - Japanese plum yew
Chamaecyparis pisifera - Sawara false cypress
Juniperus spp. - Junipers, most species

Picea spp. - Spruce, most species
Pinus spp. - Pine, most species
Taxus spp. - Yew, most species
*Thuja occidentalis** - Eastern arborvitae

Broadleaf Evergreens

Ilex crenata - Japanese holly
*Ilex glabra** - Inkberry

Ilex x meserveae - Meserve holly
*Ilex opaca** - American holly

Trees/shrubs for partial shade

Abelia grandiflora – Glossy abelia
Acer buergerianum – Trident maple
Acer campestre – Hedge maple
Acer ginnala – Amur maple
Acer griseum – Paperbark maple
Acer japonicum – Fullmoon maple
Acer palmatum – Japanese maple
Acer triflorum – Three-flower maple
Aesculus pavia – Red buckeye
Amelanchier spp* . – Juneberry, shadbush
*Carpinus caroliniana** – American hornbeam
*Cercis canadensis** - Redbud
Chionanthus retusus – Chinese fringetree
*Chionanthus virginiana** - Fringetree
Cornus alba – Tartarian dogwood
*Cornus alternifolia** – Alternate leaf dogwood
*Cornus florida** – Flowering dogwood
Cornus mas – Corneliancherry dogwood
*C. sericea** – Red twig dogwood

Corylopsis paucifolia – Buttercup winterhazel
Corylopsis spicata – Spike winterhazel
*Clethra alnifolia** – Sweet pepperbush
Fothergilla gardenii * – Dwarf fothergilla
*Fothergilla major** - Fothergilla
Hamamelis spp. - Witchhazel
Hydrangea spp. - Hydrangeas
*Ilex opaca** – American holly
*Kalmia latifolia** – Mountain laurel
*Pieris floribunda** – Mountain pieris
Rhododendron spp. - Rhododendron
Sambucus spp. - Elderberry
Stewartia spp. - Stewartia
Taxus spp. – Taxus
*Thuja occidentalis** – Eastern arborvitae
Thuja plicata * – Western arborvitae
Vaccinium spp.* - Blueberry
Viburnum spp. - Viburnum

Trees/shrubs for narrow areas/ vertical interest (fastigate)

Acer x freemanii ‘Armstrong’
Acer saccharum ‘Newton Sentry’*
Carpinus betula ‘Columnaris’
Cephalotaxus harringtonia ‘Fastigiata’
Fagus sylvatica ‘Dawyck’
Fagus sylvatica ‘Dawyck Purple’
Ginkgo biloba ‘Princeton Sentry’
Ilex crenata ‘Sky Pencil’

Juniperus scopulorum ‘Sky Rocket’*
Liquidambar styraciflua ‘Slender Silhouette’*
Pinus strobus ‘Fastigiata’*
Quercus palustris ‘Green Pillar’*
Quercus robar ‘Fastigiata’
Taxus baccata ‘Fastigiata’
Xanthocyparis nootkatensis ‘Green Arrow’* (formerly
Chamaecyparis nootkatensis)

Trees/shrubs for hedges and screening

Acer campestre – Hedge maple
Acer ginnala – Amur maple
Carpinus betula – European hornbeam
Hibiscus syriacus – Rose of Sharon
Ilex x meserveae – Meserve hybrid holly
*Ilex opaca** – American holly

Metasequoia glyptostroboides – Dawn redwood
Picea spp. – Spruce
Rhododendron spp. - Rhododendron
Taxus spp. – Yew
*Thuja occidentalis** – Eastern arborvitae
*Thuja plicata** – Western arborvitae
xCupressocyparis leylandii – Leyland cypress

Trees/shrubs with interesting bark/stem color (winter interest)

Acer griseum – Paperbark maple
Acer triflorum – Three flower maple
Betula nigra ‘Cully’* - Heritage™ river birch
Cornus kousa – Kousa dogwood
Cornus sericea*, C. alba – Red twig dogwood

Kerria japonica - Kerria
Heptacodium miconioides – Seven-son flower
Salix alba ‘Flame’ – red twig willow
Stewartia monodelpha – Tall stewartia
Stewartia pseudocamellia – Japanese stewartia

Woody shrubs for ground cover

Arctostaphylos uva-ursi* - Bearberry
Comptonia perigrina* – Sweet fern
Deutzia gracilis ‘Nikko’ – ‘Nikko’ Deutzia
Hypericum spp. – St. John’s wort
Itea virginica ‘Little Henry’* – ‘Little Henry’ sweetspire
Juniperus conferta – Shore juniper
Juniperus horizontalis* - Creeping juniper
Juniperus procumbens – Japanese garden juniper

Microbiota decussata – Russian arborvitae
Rhus aromatica ‘Gro-low’* – ‘Gro-low’ fragrant sumac
Spirea spp. - Spirea
Stephanandra incisa ‘Crispa’ – Cut leaf Stephanandra
Weigela florida ‘Midnight Wine’ –
‘Midnight Wine’ weigela
Xanthorrhiza simplicissima* - Yellowroot

Flowering shrubs

Spring:

Calycanthus florida*– Carolina allspice
Chionanthus virginicus* – Fringetree
Corylopsis paucifolia – Buttercup winterhazel
Deutzia gracilis ‘Nikko’ – ‘Nikko’ Deutzia
Enkianthus campanulatus – Redveined enkianthus
Exochorda racemosa – Pearlbush
Forsythia suspensa – Forsythia
Fothergilla gardenii* – Dwarf fothergilla
Fothergilla major*– Fothergilla
Hydrangea arborescens* – Smooth hydrangea
Pieris floribunda *– Mountain pieris
Rhododendron atlanticum* – Coast azalea
Rhododendron calendulaceum – Flame azalea

Rhododendron schlippenbachii – Royal azalea
Rhododendron vaseyi* – Pinkshell azalea
Rhododendron spp. - Rhododendron
Syringa meyeri – Meyer lilac
Syringa microphylla – Little leaf lilac
Syringa patula ‘Miss Kim’ – ‘Miss Kim’ Korean lilac
Syringa vulgaris – Common lilac
Viburnum x burkwoodii – Burkwood viburnum
Viburnum carlesii – Koreanspice viburnum
Viburnum dentatum* - Arrowwood
Viburnum sargentii – Sargent viburnum
Viburnum sieboldii – Siebold viburnum
Viburnum trilobum* – American cranberrybush
Weigela florida - Weigela

Summer:

Aesculus parviflora* – Bottlebrush buckeye
Caryopteris x clandonensis – Bluemist shrub
Clethra alnifolia* – Sweet pepperbush
Cotinus coggygria – Smokebush
Hibiscus syriacus – Rose of Sharon
Hydrangea macrophylla – Bigleaf hydrangea
Hydrangea paniculata – Panicle hydrangea
Hydrangea quercifolia* – Oakleaf hydrangea
Doublefile viburnum

Rhus coppalina* – Flameleaf (Shining) sumac
Rhus typhina* – Staghorn sumac
Rosa spp. – Landscape roses
Sambucus spp. - Elderberry
Spirea spp. – Spirea
Viburnum cassinoides* – Witherod viburnum
Viburnum plicatum – Japanese snowball
Viburnum plicatum var. tomentosum –
Physocarpus opulifolius* – Ninebark

Fall:

Abelia grandiflora – Glossy abelia
Heptacodium miconioides – Seven-son flower
Hamamelis virginiana* - Witchhazel

Winter:

*Hamamelis vernalis** – Vernal witchhazel
Hamamelis x intermedia – Hybrid witchhazel
Lonicera fragrantissima – Winter honeysuckle

Fruiting trees/shrubs for winter interest/wildlife

*Amelanchier arborea** - Juneberry
*Amelanchier canadensis** - Shadbush
*Arctostaphylos uva-ursi** - Bearberry
*Aronia arbutifolia** – Red Chokeberry
*Aronia melanocarpa** – Black Chokeberry
*Betula nigra** cultivars – River birch
*Cornus alternifolia** – Alternate leaf dogwood
*Cornus amomum** – Silky dogwood
*Cornus florida** – Flowering dogwood
Cornus kousa – Kousa dogwood
Cornus mas – Corneliancherry dogwood
*Cornus sericea** – Red twig dogwood
*Cornus racemosa** – Grey dogwood
*Ilex glabra** – Inkberry
Ilex x meserveae – Meserve hybrid holly
*Ilex opaca** – American holly
*Ilex verticillata** – Winterberry holly
*Juniperus virginiana** – Eastern red cedar
*Lindera benzoin** - Spicebush

*Liquidambar styraciflua** – Sweet gum
Malus spp. – Crabapple (disease resistant)
*Morella pensylvanica** - Bayberry (formerly *Myrica*)
*Nyssa sylvatica** - Tupelo
*Picea glauca** – White spruce
*Pinus strobus** – White pine
Quercus spp. – Oak species
*Sassafras albidum** – Sassafras
Symphoricarpos orbiculatus – Coralberry
*Rhus aromatica** – Fragrant sumac
*Rhus copallina** – Flameleaf (Shining) sumac
*Rhus glabra** – Smooth sumac
*Rhus typhina** – Staghorn sumac
Vaccinium spp.* - Blueberry species
*Viburnum dentatum** – Arrowwood
Viburnum dilatatum – Linden viburnum
*Viburnum lentago** - Nannyberry
*Viburnum triflorum** – American cranberrybush
Viburnum setigerum – Tea viburnum

Needled evergreens

Small:

Cephalotaxus harringtonia – Japanese plum yew
Juniperus conferta – Shore juniper
*Juniperus horizontalis** – Creeping juniper
Juniperus procumbens – Japanese garden juniper
Microbiota decussata – Russian arborvitae
Various dwarf conifers

Medium:

Chamaecyparis obtusa cultivars – Hinoki falsecypress
*Juniperus virginiana** – Eastern red cedar
Pinus cembra – Swiss stone pine
Pinus parvifolia – Japanese white pine
Taxus baccata – English yew
Taxus cuspidata – Japanese yew
Taxus media – Anglojap yew

Large:

*Abies concolor** – White/Concolor fir
Abies koreana – Korean fir
Cedrus atlantica ‘*Glauca*’ – Blue Atlas cedar
Chamaecyparis pisifera – Sawara falsecypress
*Chamaecyparis thyoides** – Atlantic whitecedar
xCupressocyparis leylandii – Leyland cypress
Larix spp. – Larch
Metasequoia glyptostroboides – Dawn redwood

Picea spp. – Spruce
*Pinus strobus** – White pine
Pseudolarix amabilis – Golden larch
*Pseudotsuga menziesii** – Douglas fir
Sciadopitys verticillata – Japanese umbrella pine
*Taxodium distichum** – Bald cypress
Thuja spp.* - Arborvitae
Xanthocyparis nootkatensis ‘*Pendula*’* – Alaskan falsecypress (formerly *Chamaecyparis nootkatensis*)

Broadleaf evergreens

Small

*Arctostaphylos uva-ursi** - Bearberry

Ilex crenata – Japanese holly

*Pieris floribunda** – Mountain pieris

Medium

*Ilex glabra** - Inkberry

Ilex x meserveae – Meserve hybrid holly

Ilex pedunculosa – Longstalk holly

*Kalmia latifolia** – Mountain laurel

Rhododendron spp. - Rhododendron

Large

*Ilex opaca** – American holly

Vines

*Aristolochia macrophylla** –

Dutchman's pipe (formerly *A. durior*)

*Campsis radicans** – Trumpet vine

Clematis montana – Anemone clematis

Hydrangea anomala subsp. *petiolaris* – Climbing hydrangea

*Lonicera sempervirens** – Trumpet honeysuckle

*Parthenocissus quinquefolia** – Virginia creeper

*Wisteria frutescens** – American wisteria

Alternatives to Invasive Plants

INVASIVE SPECIES

Acer platanoides – Norway maple

Berberis thunbergii – Japanese barberry

Euonymus alatus – Burning bush

Elaeagnus umbellata – Autumn Olive

ALTERNATIVES

Acer x freemanii – Freeman maple cultivars

*Acer rubrum** – Red maple

*Acer saccharum** – Sugar maple

Ginkgo biloba - Ginkgo

*Liriodendron tulipifera** – Tulip tree

*Oxydendrum arboreum** - Sourwood

Styphnolobium japonicum – Japanese scholar tree
(formerly *Sophora japonica*)

Weigela ‘Midnight Wine’

*Fothergilla gardenii** – Dwarf fothergilla

*Itea virginica** – Virginia sweetspire

*Diervilla lonicera** – Dwarf bush honeysuckle

*Aronia melanocarpa** – Black chokeberry

*Fothergilla major** – Fothergilla

*Rhus aromatica** – Fragrant sumac

Rhus copallina – Flameleaf sumac

Vaccinium corymbosum – Blueberry

*Baccharis halimifolia** – Groundsel

*Morella pensylvanica** - Bayberry (formerly *Myrica*)

