

PLANTING LISTS

Plants within the Charles River Basin serve a wide spectrum of needs, including:

- enhancing park areas and framing open space
- strengthening the parkway character of roads
- embellishing structures
- framing or screening views as needed
- providing shade
- facilitating maintenance
- directing use

These plant lists are intended to build on the palette of plants that exists within the Basin, increasing diversity while maintaining species that are performing well in the landscape. Specific design plans will be needed throughout the parkland, parkways and riverbanks to address particular improvements and to ensure that the right plant is used in the right place and manner.

Charles Eliot intended that the landscape development of the Charles River Reservation give preference to native plants, but that nonnatives or exotics that blended visually into the landscape be included as well. These lists reflect that design intent.

The following lists, while extensive, are not comprehensive. They provide a range of choices that reflect the design intentions of the original plan and the current master plan. They will serve as the basis for further development and refinement of plant use in the Charles River landscape.

The plant lists are organized by zones within the Charles River Basin:

1. Parkway Plants
2. Riverbank Plants
3. Parkland Plants

The lists have been generated from several sources, including master plan consultants The Halvorson Company; horticulturist Paul Rogers; Rizzo Associates; and the plant list for North Point Park of Oehme and van Sweden/Carr, Lynch, Hack and Sandell.

Some species currently in use along the Basin have been eliminated from the lists because of disease problems, lack of hardiness, or problems with form and intended function.

PARKWAY PLANTS

Trees in the *Parkway* list include species that currently are performing well along the Basin's roads, as well as additional species that satisfy the two primary requirements for parkway planting: hardiness to withstand the stresses of the roadside environment, and a form that provides at maturity a canopy over the parkway. Other plants in the Parkway list refer to median/rotary shrubs and ornamental plantings at key gateway and transition points.

RIVERBANK PLANTS

Tree, shrub and perennial species in the *Riverbank* list are broken down in two ways: by soil-moisture requirements and by projected height of plant. The height designation will be used to design riverbank compositions that satisfy the needs for views, screening, height variability, and other visual criteria.

The moisture-requirements designation identifies species by potential bank locations, or in terms of elevation relative to the mean water height. The *Middle to Upper Bank* zone applies to banks higher than six feet above the mean water level. Species recommended for this zone are upland plants that prefer dry or typical upland soil conditions. *Lower Bank* is lies between six and two feet above the mean high-water level.

Species in this zone live just up-slope of a wetland, prefer moist soil, and are inundated less than 10% of the time. *River Edge* species prefer wet soil and can accommodate periodic inundation.

Many of the woody Riverbank species listed are suitable for planting only as container-grown stock, not as live brush/live stake cuttings. Species suitable for installation as live cuttings are marked with an asterisk (*). Wide variation in success rates of live brush exist among “suitable” species. Willows and various dogwoods are the most reliable performers; all other species have shown mixed results.

PARKLAND PLANTS

Parkland plants include trees, shrubs, and flowers for meadow use, and bulbs for embellishment of selected areas. Cherry trees are not listed, since the MDC has been receiving an abundant supply from the Japanese government. The use of this species should be limited in the future, because of the large number of specimens already in place. Other flowering understory trees are proposed below to diversify the landscape.

Plants on the Parkway and some of the Riverbank lists should also be considered appropriate for the Parkland Plants list.

PARKWAY PLANTS

A. TREES

- pin oak (*Quercus palustris*)
- red oak (*Quercus rubra*)
- scarlet oak (*Quercus coccinea*)
- swamp white oak (*Quercus bicolor*)
- red maple (*Acer rubrum*) (not grafted)
- lacebark elm (*Ulmus parviflora*)
- London planetree (*Platanus x acerifolia*)
- silver linden (*Tilia tomentosa*)
- Japanese pagoda tree (*Sophora japonica*)

B. SHRUBS

- dwarf Annabelle hydrangea (*Hydrangea arborescens* ‘Annabelle’)
- Japanese spiraea (*Spiraea japonica* ‘alpina,’ ‘Gold Flame,’ ‘Gold Mound,’ ‘Magic Carpet,’ ‘Little Princess’)
- Anthony Waterer spiraea (*Spiraea bumalda* ‘Anthony Waterer’)
- quince (*Chaenomeles*)
- sweetfern (*Comptonia*)
- red osier dogwood (*Cornus sericea* ‘Kelsey’)
- slender deutzia (*Deutzia*)
- dwarf fothergilla (*Fothergilla gardenii*)
- St. Johnswort (*Hypericum*)

- Japanese holly (*Ilex crenata* ‘Green Luster’)
- sweetspire (*Itea*)
- globe flower (*Kerria*)
- cinquefoil (*Potentilla* var.)
- yew (*Taxus* var.)
- lowbush blueberry (*Vaccinium angustifolium*)
- dwarf European cranberrybush (*Viburnum opulus nanum*)
- bayberry (*Myrica pensylvanica*)
- criska cutleaf Stephanandra (*Stephanandra* ‘Crispa’)

C. ORNAMENTAL GRASSES AND BAMBOO

- feather reed grass (*Calamagrotis acutiflora stricta*)
- dropping sedge (*Carex pendula*)
- sea oats/wild oats (*Chasmanthium latifolium*)
- tufted hair grass (*Deschampsia cespitosa*)
- blue clump bamboo (*Fargesia nitida*)
- Hakone grass (*Hakonechloa macra*)
- Japanese blood grass (*Imperata* ‘Red Baron’)
- red maiden grass (*Miscanthus purpurascens*)
- maiden grass (*Miscanthus sinensis* ‘Malepartus’)
- tall purple moor grass (*Molinia caerulea arundinacea* ‘Windspiel’)
- red switch grass (*Panicum virgatum*)
- fountain grass (*Pennisetum alopecuroides*)
- silver spike grass (*Spodiopogon sibiricus*)
- ribbon grass (*Phalaris arundinacea picta*)

RIVERBANK PLANTS

A. TREES

A1. RIVER-EDGE TREES

- alder species (*Alnus*)*
- red maple
- speckled alder*
- common alder*
- serviceberry
- river birch
- American hornbeam
- eastern larch
- black tupelo
- swamp white oak
- cottonwood*
- white willow*
- corkscrew willow*
- black willow (*Salix nigra*)*
- silver maple (*Acer sacharrinum*)
- american basswood (*Tilia americana*)
- white pine (*Pinus strobus*)
- Atlantic or Eastern white cedar
(*Chamaecyparis thyoides*)
- Allegheny serviceberry (*Amelanchier laevis*)

A2. LOWER- TO MIDDLE-BANK TREES:

Same as River Edge Trees, with these additions:

- sweet gum (*Liquidambar styraciflua*)
- sweet bay (*Magnolia virginiana*)

* SPECIES SUITABLE FOR INSTALLATION
AS LIVE CUTTINGS.

- American arborvitae (*Thuja occidentalis*)
(many fared poorly in April 1997 blizzard)
- amur maple (*Acer ginnala*)
- katsuratree (*Cercidiphyllum japonicum*)
- tartarian dogwood
- tulip-tree (*Liriodendron tulipifera*)
- black spruce (*Picea mariana*)
- mountain ash (*Sorbus*)
- Japanese dogwood (*Cornus kousa*)
- pagoda dogwood (*Cornus alternifolia*)
- cornelian cherry (*Cornus mas*)
- eastern redbud (*Cercis canadensis*)
- snowdrop tree (*Halesia caroliniana*)
- yellowwood (*Cladastrus lutea*)
- Korean stewartia (*Stewartia koreana*)
- star magnolia (*Magnolia stellata*)
- paper birch (*Betula papyrifera*)
- sweet birch (*Betula nigra*)
- yellow birch (*Betula alleghaniensis*)
- pin oak (*Quercus palustris*)
- American hop hornbeam (*Ostrya virginiana*)
- sourwood (*Oxydendron arboreum*)
- holly varieties (*Ilex x meserveae*)
- witch hazel (*Hamamelis virginiana*)
- sassafras (*Sassafras albidum*)
- Eastern hemlock (*Tsuga canadensis*)

A3. MIDDLE- TO UPPER-BANK/TOP-OF-BANK

TREES:

Same as Lower-Bank Trees, with these additions:

- sugar maple (*Acer saccharum*)
- red oak (*Quercus rubra*)
- white oak (*Quercus alba*)

- black locust (*Robinia pseudoacacia*)
- common hackberry (*Celtis occidentalis*)
- Eastern red cedar (*Juniperus virginiana*)

B. SHRUBS

B1. RIVER-EDGE SHRUBS

(2'-3' height approx.)

- broad-leaf meadowsweet (*Spiraea latifolia*)
- steeplebush (*Spiraea tomentosa*)
- maleberry (*Gaylussacia baccata*)
- box huckleberry (*Gaylussacia brachysera*)
- sheep-laurel (*Kalmia angustifolia*)
- swamp rose (*Rosa palustris*)

(3'-4' height approx.)

- fothergilla (*Fothergilla major*)
- swamp azalea (*Rhododendron viscosum*)
- sweet azalea (*Rhododendron arborescens*)
- purple osier or streamco willow (*Salix purpurea*)*
- buttonbush (*Cephalanthus occidentalis*)*
- banker's dwarf willow (*Salix x cotteti*)*

(4'-6' height approx.)

- Virginia sweetspire (*Itea virginica* 'Henry's Garnet') (4')
- American cranberry (*Vaccinium macrocarpon*)
- arrowwood viburnum (*Viburnum dentatum*
or *recognitum*)*
- winterberry (*Ilex verticillata*)
- sparkleberry (*Ilex verticillata* 'Sparkleberry' or
'Winter Red')
- St. Johnswort (*Hypericum densiflorum*)

(6'–8' height approx.)

- red osier dogwood (*Cornus sericea* or *stolonifera*)*
- silky dogwood (*Cornus amomum*)*
- gray dogwood (*Cornus racemosa*)*
- pussy willow (*Salix discolor*)*
- highbush blueberry (*Vaccinium corymbosum*)*

(8'–10' height approx.)

- spicebush (*Lindera benzoin*)
- elderberry (*Sambucus canadensis*)*
- red chokeberry (*Aronia Arbutifolia*)
- summersweet (*Clethra alnifolia*)*

B2. LOWER- TO MIDDLE-BANK SHRUBS

Many of those listed above and these additions

(2'–3' height)

- sweetfern (*Comptonia peregrina*) (2')
- Eastern leatherwood (*Dirca palustris*) (2'–3')

(3' height)

- blackberry (*Rubus species*)
- raspberry (*Rubus pubescens*)
- dewberry (*Rubus enslenii*)
- thimbleberry (*Rubus odoratus*)
- Virginia rose (*Rosa virginiana*)
- shining rose (*Rosa nitida*)
- Carolina rose (*Rosa carolina*)

(4'–6' height)

- andromeda species (*Pieris species*) (4')
- American cranberrybush (*Viburnum trilobum*)*

(8'–10' height)

- Carolina allspice (*Calycanthus floridus*)
- enkianthus (*Enkianthus campanulatus*)
- bayberry (*Myrica pennsylvanica*)
- witherod or wild raisin (*Viburnum cassinoides*)*
- nannyberry (*Viburnum lentago*)*
- blackhaw (*Viburnum prunifolium*)*
- mountain Laurel (*Kalmia latifolia*)

(12'–14' height)

- hybrid witchhazel (*Hamamelis x intermedia*)

(16'–20' height)

- rosebay rhododendron (*Rhododendron maximum*)

B.3 MIDDLE- TO UPPER-BANK/TOP-OF-BANK SHRUBS

Many of those listed for Lower- to Middle-Bank Shrubs and these additions:

(2' height)

- lowbush blueberry (*Vaccinium ovatum*)

(3' height)

- bush cinquefoil (*Potentilla fruticosa*)

(4' height)

- inkberry (*Ilex glabra*)
- common juniper (*Juniperus communis*)
- American hazelnut (*Corylus americana*)
- beach plum (*Prunus maritima*)

(6' height)

- butterfly bush (*buddleia species*)

C. GROUNDCOVERS**CI. LOWER-BANK TO TOP-OF-BANK****GROUNDCOVERS**

- Bugleweed (*Ajuga reptans*)
- Canada anemone (*Anemone canadensis*)
- groundnut-vine (*Apios americana*)
- Eastern wild ginger (*Asarum canadense*)
- European wild ginger (*Asarum europaeum*)
- goldenstar (*Chrysogonum virginianum*)
- bunchberry (*Cornus canadensis*)
- bishop's-hat (*Epimedium grandiflorum*)
- Eastern trout lily (*Erythronium americanum*)
- wintercreeper-vine (*Euonymus fortunei*)
- barren-strawberry (*Waldsteinia fragarioides*)
- English ivy-vine (*Hedera helix*)
- creeping juniper (*Juniperus horizontalis*)
- coast leucothoe (*Leucothoe axillaris*)
- Oregongrape (*Mahonia aquifolium*)
- wild lily-of-the-valley (*Maianthemum canadense*)
- partridgeberry (*Mitchella repens*)
- Virginia creeper-vine (*Parthenocissus quinquefolia*)
- Solomon's seal (*Polygonatum biflorum*)
- false Solomon's Seal (*Smilacina racemosa*)
- foamflower (*Tiarella cordifolia*)
- periwinkle-vine (*Vinca minor*)
- common blue violet (*Viola papilionacea*)

* SPECIES SUITABLE FOR INSTALLATION AS LIVE CUTTINGS.

D. PERENNIALS/WETLAND PLANTS**D1. RIVER-EDGE & EMERGENT PERENNIAL AND WETLAND PLANTS**

- water plantain (*Alisma plantago-aquatica*)
- blue flag iris (*iris versicolor*)
- European iris (*iris pseudocorus*)
- spikerush (*Eleocharis palustris*)
- sweet flag (*Acorus calamus*)
- marsh marigold (*Caltha palustris*)
- cardinal flower (*Lobelia cardinalis*)
- blue lobelia (*Lobelia siphilitica*)
- monkey flower (*Mimulus ringens*)
- monkey musk (*Mimulus guttatus*)
- arrow arum (*Peltandra virginica*)
- pickerelweed (*Pontedaria cordata*)
- water dock (*Rumex orbiculatus*)
- arrowhead (*Sagittaria latifolia*)
- narrow-leaf cattail (*Typha angustifolia*)

Emergent grasses, sedges, rushes, bulrushes and reeds

- fringed sedge (*Carex crinita*)
- tussock sedge (*Carex stricta*)
- lurid sedge (*Carex lurida*)
- uptight sedge (*Carex stricta*)
- fox sedge (*Carex vulpinoides*)
- soft rush (*Juncus effusus*)
- Canada rush (*Juncus canadensis*)
- knotted rush (*Juncus nodosus*)
- soft-stem bulrush (*Scirpus validus*)
- river bulrush (*Scirpus fluviatilis*)
- hard-stem bulrush (*Scirpus acutus*)
- green bulrush (*Scirpus atrovirens*)
- woolgrass (*Scirpus cyperinus*)
- burreed (*Sparganium americanum*)

Ferns**(4' height)**

- royal fern (*Osmunda regalis*)
- interrupted fern (*Osmunda claytoniana*)
- ostrich fern (*Matteuccia struthiopteris*)
- cinnamon fern (*Osmunda cinnamomea*)
- marsh fern (*Dryopteris thelypteris* or *Thelypteris palustris*)

D2. LOWER-BANK PERENNIALS AND WETLAND PLANTS (2-4 FEET ABOVE MEAN WATER LEVEL):**(4' height)**

- queen-of-the-prairie (*Filipendula palmata* or *rubra*)

(6' height)

- cow parsley (*Angelica archangelica*)
- bugbane (*Cimicifuga racemosa*)
- boneset (*Eupatorium perfoliatum*)
- Joe-Pye weed (*Eupatorium maculatum*)
- bluestar or willow herb (*Amsonia tabernaemontana*)
- swamp milkweed (*Asclepias incarnata*)
- astilbe (*Astilbe species*)
- white turtlehead (*Chelone glabra*)
- red turtlehead (*Chelone lyonii*)
- closed gentian (*Gentiana andrewsii*)
- daylily (*Hemerocallis species*)
- hibiscus/mallow (*Hibiscus moscheutos*)
- rose mallow (*Hibiscus palustris*)
- hosta (*Hosta species*)
- Siberian iris (*Iris sibirica*)
- bee balm (*Monarda didyma*)
- meadow rue (*Thalictrum species*)

- spiderwort (*Tradescantia species*)
- globe flower (*Trollius laxus*)
- blue vervain (*verbena hastata*)

Lower-bank grasses:

- fowl meadow grass (*Poa palustris*)
- blue joint grass (*Calamagrostis canadensis*)
- fowl manna-grass (*Glyceria canadensis*)
- rice cutgrass (*Leersia oryzoides*)
- panic grass or switchgrass (*Panicum virgatum*)

D3. MIDDLE- TO UPPER-BANK PERENNIALS AND WETLAND PLANTS

May use standard wildflower seed or conservation mix:

- butterfly weed (*Asclepias tuberosa*)
- New England aster (*Aster novae-angliae*)
- lanceleaf coreopsis (*Coreopsis lanceolata*)
- orange hawkweed (*Heiracium aurantiacum*)
- blanket flower (*Gaillardia x grandiflora*)
- sea lavender (*Limonium nashii*)
- wild lupine (*Lupinus perennis*)
- wild bergamot (*Monarda fistulosa*)
- black-eyed Susan (*Rudbeckia species*)

Ferns

- lady fern (*Athyrium filix-femina*)
- Christmas fern (*Polystichum acrostichoides*)
- sensitive fern (*Onoclea sensibilis*)
- hay-scented fern (*Dennstaedtia punctilobula*)

E

PARKLAND
PLANTS

Planting Lists

A. TREES**A1. CANOPY TREES:**

Same as Parkway Trees and Middle-Upper Bank/Top of Bank Riverbank Trees, with these additions:

- common horsechestnut (*Aesculus hippocastanum* ‘Baumannii’)
- katsuratree (*Cercidiphyllum japonicum*)
- European beech (*Fagus sylvatica*)
- sourwood (*Oxydendrum arboreum*)
- paper birch (*Betula papyrifera*)
- river birch (*Betula nigra* ‘Heritage’)
- common hackberry (*Celtis occidentalis*)
- rosemary willow/hoary willow (*Salix elaeagnos*)
- black willow (*Salix nigra*)
- Crimean linden (*Tilia x euchlora*)
- littleleaf linden (*Tilia cordata*)
- American basswood (*Tilia americana*)
- Amur maackia (*Maackia amurensis*)
- tulip-tree (*Liriodendron tulipifera*)
- ginkgo (*Ginkgo biloba*)
- mountain-ash (*Sorbus*)
- hornbeam (*Carpinus*)
- shagbark hickory (*Carya ovata*)

A2. EVERGREEN TREES

- lacebark pine (*Pinus bungeana*)
- jack pine (*Pinus banksiana*)
- white pine (*Pinus strobus*)
- white fir (*Abies concolor*)
- fraser balsam fir (*Abies fraseri*)
- chamaecyparis (*Chamaecyparis* var.)
- Canada hemlock (*Tsuga canadensis*)
- Carolina hemlock (*Tsuga caroliniana*)

A3. FLOWERING TREES

- shadblow serviceberry (*Amelanchier canadensis*)
- Eastern redbud (*Cercis canadensis*)
- cornelian cherry (*Cornus mas*)
- Carolina silverbell (*Halesia carolina*)
- Arnold Promise witchhazel (*Hamamelis x intermedia* ‘Arnold Promise’)
- magnolia (*Magnolia* var)
- crabapple (*Malus* var)
- Japanese dogwood (*Cornus kousa*)

B. SHRUBS

Same as Parkway Shrubs and Lower- to Top-of-Bank Riverbank