

Big-picture, evolutionary view of trees and shrubs (and a few of my favorite herbaceous perennials), ver. 2007-11-04

Descriptions of the trees and shrubs taken (stolen!!!) from online sources, from my own observations in and around Greenwood Lake, NY, and from these books:

- Dirr's Hardy Trees and Shrubs, Michael A. Dirr, Timber Press, © 1997
- Trees of North America (Golden field guide), C. Frank Brockman, St. Martin's Press, © 2001
- Smithsonian Handbooks, Trees, Allen J. Coombes, Dorling Kindersley, © 2002
- Native Trees for North American Landscapes, Guy Sternberg with Jim Wilson, Timber Press, © 2004
- Complete Trees, Shrubs, and Hedges, Jacqueline Hériteau, © 2006

They are generally listed from most ancient to most recently evolved. (I'm not sure if this is true for the rosids and asterids, starting on page 30. I just listed them in the same order as Angiosperm Phylogeny Group II.)

This document started out as my personal landscaping plan and morphed into something almost unwieldy and phantasmagorical. Key to symbols and colored text:

- ☐ Checkboxes indicate species and/or cultivars that I want.
- ✓ Checkmarks indicate those that I have (or that one of my neighbors has).

Text in blue indicates shrub or hedge. (Unfinished task – there is no text in blue other than this text right here.)

Text in red indicates that the species or cultivar is undesirable:

- Out of range climatically (either wrong zone, or won't do well because of differences in moisture or seasons, even though it is in the "right" zone).
- Will grow too tall or wide and simply won't fit well on my property.
- Prone to insects, bacteria, fungi, or other diseases or pests.
- Invasive, poisonous, ugly, unpleasant, or otherwise unsuitable for my property.

If there is no chance of the species or cultivar doing well on my property, I put them in font 10.

You can disregard all of these symbols and colors, as they are specific to my tastes.

Disclaimer: I compiled this document purely for love of shrubs and trees. I am not seeking financial gain or profit in any way whatsoever.

I'm not signing my name to this document or restricting its distribution in any way, because this is merely a compilation of other people's notes, put in evolutionary order. Feel free to make your own modifications, such as correcting mistakes, removing personalized information that is specific to my property, and adding more detailed notes. Feel free to send the document far and wide. If this is the PDF version that you are reading, you can copy and paste to Word, make modifications, and create a new PDF using Adobe Acrobat or another PDF-writing program.

Gymnosperms

Gymnosperms (“naked seeds”) are non-flowering plants, mostly evergreens, with seeds that are not enclosed in an ovary. Some gymnosperms are coniferous (cone-bearing). Gymnosperms consist of the following four APG II orders or Cronquist divisions:

APG II order Cycadales – analogous to Cronquist division Cycadophyta (cycads).

APG II order Ginkgoales – analogous to Cronquist division Ginkgophyta (ginkgo).

APG II order Gnetales – analogous to Cronquist division Gnetophyta (gnetophytes).

APG II order Pinales – analogous to Cronquist division Coniferophyta (conifers).

This document focuses on Ginkgoales and Pinales, because the two other gymnosperm orders are not common in the northeastern USA, and they contain few shrubs and trees.

Gymnosperms | Ginkgoales order

Ginkgoaceae

Cronquist division Ginkgophyta (only one member, Ginkgo)

Class Ginkgoopsida (only one member, Ginkgo)

APG II order Ginkgoales (only one member, Ginkgo)

Ginkgoaceae (Ginkgo family), with only one member, Ginkgo

Ginkgo biloba (maidenhair tree)

The only remaining species from a group of trees that were common in prehistoric times. Likes full sun. Be sure to plant male tree. Fruits on the female tree emit foul odor when they disintegrate. There are some young specimens on Main Street in Warwick. There are hundreds, perhaps thousands of ginkgos in New York City, because they tolerate compacted soil, road salt, and pollution.

Desired cultivar(s):

- ‘Fastigiata’
- ‘Saratoga’
- ‘Princeton Sentry’
- ‘Variegata’

Gymnosperms | Pinales order (conifers)

Conifers are plants (mostly trees, and a few shrubs) that bear cones. Most conifers are evergreen, but some are deciduous, for example, baldcypress. The wood of conifers is known as softwood, as opposed to hardwoods from angiosperms like oak and hickory.

Gymnosperms | Pinales order (continued from previous page)

Sciadopityaceae (Japanese umbrella-pine family)

- *Sciadopitys verticillata* (Japanese umbrella-pine, koyamaki)

The only species in its genus and in its family. Living fossil. Has long, slender needles in umbrella-like clusters. Unique looking specimen tree, but grows slowly. Genetically distinct from all other conifers.

Araucariaceae

Araucaria

Living fossil. Exotic looking. Can grow extremely tall (more than 50 meters high!). Growth is formal and symmetrical, even when exposed to nearly constant seaside wind. Some species have edible nuts.

Araucaria araucana (monkey puzzle)

Native to South America, looks crazy, **out of range in GL**.

Araucaria heterophylla, sometimes called *Araucaria excelsa* (Norfolk Island pine)

Won't survive outdoors in most of USA, but often sold in USA as indoor Christmas tree, looks exotic, creepy, and extraordinary. Has symmetrical triangular shape when mature, with straight trunk and widely spaced branches. In the USA, susceptible to frost and hurricane damage, and only grows in Florida, southern California, and Hawaii.

- *Wollemia nobilis* (Wollemi pine)

Paraphrased from Wikipedia: Evergreen, discovered in 1994 in temperate rainforest area of Wollemi National Park, Australia. More adaptable and cold-hardy than its restricted subtropical distribution would suggest, tolerating temperatures between 23 and 113 °F, with reports that it can survive down to 10 °F. Can reach more than 100 feet high, with distinctive, dark brown, knobby bark resembling “Coco Pops” breakfast cereal. Coppices readily (self-coppicing), and most specimens are multi-trunked or appear as clumps of trunks thought to derive from old coppice growth. The branching is unique in that nearly all the side branches never have further branching. After a few years, each branch either terminates in a male or female cone, or ceases growth. After this, or when the cone becomes mature, the branch dies. New branches then arise from dormant buds on the main trunk. Tolerates full sun as well as full shade. Living fossil.

Cupressaceae (cypress family)

Many members of this family have delicate needles or soft, flattened sprays that are pleasant to touch. Now, as a result of the genetic research of APG II, this family includes trees such as bald cypress, cryptomeria, and sequoia that were formerly regarded as belonging to a separate family, Taxodiaceae.

Metasequoia, *Sequoia*, and *Sequoiadendron* are closely related to each other.

✓ *Metasequoia glyptostroboides* (dawn redwood)

Zones 4 to 8, extremely fast growing, living fossil, scientists thought this species was extinct until they discovered some trees growing in central China in the 1940s. Grows faster when planted in good soil with adequate sunlight and moisture. Prefers full sun and moist, deep, well-drained soil. Tolerates clay.

Desired cultivar(s):

- ❑ ‘Gold Rush’ – denser and lusher than species? More golden color?
- ❑ ‘Little Giant’ – fast growing dwarf that tops out at about 15 feet high.
- ❑ ‘Sheridan Spire’ – columnar, with all of the branches pointing up.
- ❑ ‘Waasland’ – narrower and more compact than the species, with apricot autumn color and dark, almost black, bark.
- ❑ ‘White Spot’ – speckled with white, resistant to sun scorch, and tops out at about 15 feet high.

My two specimens (straight species, not cultivars) are both thriving. Both are more than 10 feet high, amazing considering that one of them started out as a delicate, leafless, wispy, foot-high sapling, and I planted the other one in a large mound of nearly pure clay excavated from around my house’s foundation (with some compost mixed in).

Sequoia sempervirens (California redwood, coast redwood)

Hardy to zone 7, evergreen, tallest tree in the world, gorgeous, columnar, often thins with age, long lived. Has hard, dark green leaves with sharp points, thick, soft, stringy reddish bark, and small, wrinkled, scaly cones. Widely planted outside of its native range. Will not tolerate the winter cold and wind and summer heat and droughts in GL. Too tall. Can reach more than 300 feet high!

Sequoiadendron giganteum (giant sequoia)

Hardy to zone 6, largest tree in the world in terms of volume, very tall, can grow more than 200 feet high, with distinctive pointed crown. Has hard, dark green pointed scales arranged in sprays, thick, resilient, stringy pinkish brown bark, and cones on long stalks. Paraphrased from Wikipedia: In the northeastern USA, there has been limited success in growing the species, but growth is much slower, and prone to fungal diseases due to the hot, humid summer climate.

Desired cultivar(s):

‘Glaucum’ – planted on the edge of Pete and Evelyn’s property in Kingston, but died, probably because of heat and drought conditions.

- ❑ ‘Hazel Smith’ – cold tolerant cultivar selected in about 1960, proving more successful in the northeastern USA. This clone was the sole survivor of several hundred seedlings grown at a nursery in New Jersey.

Cryptomeria, *Glyptostrobus*, and *Taxodium* are closely related to each other.

Cryptomeria japonica (cryptomeria, sugi)

Evergreen, can reach more than 200 feet tall, has long, drooping leaves with tiny needles that change color in autumn, and then change back to green in spring. Has red-brown bark that peels in vertical strips. Resembles giant sequoia, but has longer leaves, smaller cones, and harder bark (thick, soft and spongy in giant sequoia). Sensitive and finicky. All *Cryptomerias* must have consistently moist soil and protection from desiccating winter winds, spring frosts, and scorching sun to avoid browning of needles. They prefer rich, deep soil but can tolerate sandy or clay soils as long as the soil has good drainage. They are not adapted to waterlogged conditions. They prefer a sheltered position. They do not like packed-on snow or moisture to remain on the needles. They need enough sunlight to dry the needles quickly after rain, but not so much as to desiccate the needles and roots. This set of conditions (moist soil, plenty of sunlight, in a location sheltered from scorching sunlight and high winds) can be difficult to achieve, and *Cryptomerias* often suffer some damage sometime during the year. Those that suffer damage often can grow back from a cut off limb or even from a stump, although this can take some time. *Cryptomerias* grow slowly but steadily. There are some cultivars that grow as shrubs.

Desired cultivar(s):

- ❑ ‘Yoshino’ – exceptionally cold hardy, and grows up to 40 feet high. Needles yellow in winter, but color normally comes back in spring. Can suffer permanent damage during exceptionally cold, windy winters.
- ❑ ‘Cristata’
- ❑ ‘Elegans’ – small, shrubby tree that retains its juvenile foliage for life, turns brownish red in winter, and grows slowly to about 15 feet high.
- ❑ ‘Gracilis’
- ❑ ‘Sekkan Sugi’ – has stark contrast between new and old growth (creamy yellow against dark green), and large, round cones. Grows slowly to about 15 feet high.

Glyptostrobus pensilis (Chinese swamp cypress)

Hardy to zone 8. Needles resemble those of baldcypress. Tree must have swampy conditions, unlike baldcypress, which can tolerate drier soil. **Out of range in GL.**

Taxodium distichum (baldcypress)

Zones 4 to 10. Thrives in Southeast swamplands, but can grow almost anywhere in the USA except the far north. Adaptable to different soils, from somewhat dry to extremely wet and everything in between. Tolerates root immersion. Has natural defenses against the poisons found in stagnant water.

Desired cultivar(s):

- ✓ ‘Shawnee Brave (Michelson)’ – I planted two of these. Stray cat Ragamuffin scratched up the bark of the one planted in the north corner, which may have stunted its growth. I removed the giant oak tree that was casting this one in deep shade and may also have been stunting its growth. The other one, planted near the east corner, is thriving and is upwards of 12 feet tall as of 2007.

Thuja (arborvitae)

Pyramidal, typically slow growing and long-lived. Needs sustained moisture. Prefers full sun. Tolerates partial shade but then loses dense texture.

Thuja koraiensis (Korean arborvitae)

Leaves aromatic when crushed. Looks denser than American arborvitae (my opinion from looking at photos in a book).

Thuja occidentalis (American arborvitae)

Zones 3 to 8, tall, narrow, pyramidal, elegant, neatly-growing tree that requires little maintenance. Excellent for windbreaks. Tends to suffer burn out on bottom branches, especially when planted alongside road. There are many cultivars.

Desired cultivar(s):

- ✓ 'Smaragd' aka 'Emerald Green' – zones 3 to 7, normally grows to 15 feet and then stops, tends to hold its color in winter, heat tolerant. This cultivar is overused, sold in massive quantities at Home Depot, mistreated and frequently planted in less than ideal conditions where its needles turn brown. I bought mine from Hickory Hollow; much healthier than the ones I've seen at Home Depot.

Thuja plicata (giant arborvitae, western arborvitae)

Zones 5 to 7, fast growing, can reach 50 feet high, thrives in moist and wet areas, resists needle browning in winter, alternative to arborvitae that looks much more elegant.

Desired cultivar(s):

- 'Atrovirens' – gorgeous. Dirr raves about this cultivar.
- ✓ 'Zebrina' – yellow variegated foliage on an already gorgeous tree. Planted small sapling along front yard perimeter in 2006, which suffered wind scald on its lower branches during the winter but now seems to be slowly growing. Planted 6-foot specimen near picnic table in 2007.

Thuja standishii (Japanese arborvitae)

One of the parents of 'Green Giant'. Do more research on this.

- ✓ *Thuja* (*standishii* x *plicata*) 'Green Giant', often simply *Thuja* 'Green Giant'

Adaptable, fast growing, can reach 60 feet high with 20-foot wide base. Pyramidal, dense, excellent as specimen or evergreen windbreak. Resistant to diseases and pests. My specimen started out slow but then took off and is now close to 10 feet high.

Thujopsis dolabrata

The only species in its genus, and closely related to *Thuja*. The foliage sprays angle themselves in all different directions. Need to do research on its requirements before ordering and planting. The 'Nana' cultivar takes away the beauty and charm of the species, in my opinion.

Chamaecyparis (falsecypress)

I love every *Chamaecyparis* that I've ever seen and I want more. They all have grace, elegance, and dignity, even naturally occurring *C. thyoides*. There are many cultivars.

Chamaecyparis lawsoniana (Port Orford cypress, Lawson's falsecypress)

Gorgeous scales and cones, but **my soil probably has too much clay for this tree.**

Chamaecyparis obtusa (Hinoki falsecypress)

The leaves of the straight species are arranged in delicate, flat sprays that look like they are bubbling forth from the trunk, spreading outward but with consistent orientation.

Desired cultivar(s):

- 'Crippsii' – zones 4 to 8, slow growing, with gorgeous yellow variegation, can be expensive because of its slow growth.
- ✓ 'Filicoides' (aka fernspray Hinoki falsecypress)
- ✓ 'Gracilis' (aka slender Hinoki falsecypress)

Chamaecyparis pisifera (Sawara falsecypress)

Large, narrow, pyramidal tree with flattened sprays of branched twigs and small cones with pointed scales. Many cultivars (drooping, yellow, slender-twigged, dwarf).

Desired cultivar(s):

- ✓ 'Filifera Aurea' (dwarf lemon thread Sawara falsecypress)

Chamaecyparis thyoides (Atlantic white cypress)

Large tree, can reach 80 feet high, with scale-like, feathery leaves, slender, branched twigs, and tiny, round cones that start bluish and turn brown and raisin-like. Prefers growing in swamps. Native to Atlantic coast from Maine to Georgia. Often planted in cemeteries (maybe naturally occurring, like *J. virginiana*?) and as an ornamental.

Desired cultivar(s):

- 'Glauca' – has dull, blue-green leaves.

Calocedrus decurrens (California incense-cedar)

Zones 6 to 8, large, columnar tree, slow to moderate growing, long lived. Has aromatic, scale-like leaves on flat, branched twigs with small cones. Prefers full sun, and does not tolerate drought, high winds, or excessive moisture. Male flowers can color the tree yellow. Grown as an ornamental. Resembles arborvitae. Desired cultivar(s): 'Aureovariegata'.

Platycladus orientalis (Oriental arborvitae)

The only species in its genus, and was formerly placed in *Thuja*. Has small bluish cones with hooked barbs. More closely related to *Calocedrus* than to *Thuja*.

Desired cultivar(s):

- ✓ I'm not sure which cultivar I have, either 'Aurea Nana' or 'Conspicua'. Snagged two of them when I saw them mislabeled as American arborvitae at Home Depot.

Cupressus (cypress) and *Juniperus* (juniper) families are closely related.

- ❑ *Cupressus cashmeriana* (Kashmir cypress)

Absolutely gorgeous, wispy foliage.

Cupressus macrocarpa (Monterey cypress)

Zones 7 to 10, medium height, has bright green foliage and rounded, lumpy cones. Excellent windbreak. Prefers oceanic climate with cool summers and mild winters, such as the climate in coastal Oregon, Britain, and New Zealand. This species is one of the parents of Leyland cypress. Too cold and too much temperature and moisture variation in GL for this tree.

Desired cultivar(s):
'Goldcrest'

- ✓ *Callitropsis nootkatensis* (Nootka falsecypress), formerly *Chamaecyparis nootkatensis*, and its genus may change again in the near future to *Xanthocyparis*

This tree has disputed taxonomy, has been shuffled around, and is now treated in the *Callitropsis* genus. Gorgeous, naturally pendulous tree or tall hedge with leaves in flat sprays, similar to *Chamaecyparis*. Needs cool summers. Likes cool, moist, open, sunny areas (difficult combination of requirements). This species is one of the parents of Leyland cypress. I planted sapling on other side of intermittent creek from Leyland cypress in 2006.

Desired cultivar(s):

- ❑ 'Pendula' – commonly planted next to houses in the Northeast. Even more pendulous than the naturally-pendulous species.
- ❑ 'Variegata'

- ✓ *Cupressus x leylandii* (Leyland cypress), formerly x *Cupressocyparis leylandii*, cross between *C. macrocarpa* (Monterey cypress) and *Callitropsis nootkatensis* (Nootka falsecypress). This hybrid also occurs naturally when the parents are nearby each other.

My Leyland cypress (straight species) is doing extremely well, more than 10 feet high.

Desired cultivar(s):
'Castlewellan'

Juniperus (juniper)

Junipers are widely distributed throughout the northern hemisphere. Those native to the USA usually don't do well outside of their native region. They vary in size and shape from tall trees to columnar or low spreading shrubs with long trailing branches. They need full sun, thrive in moist, coarse soil, and are easy to transplant because of their spreading root system. They are enduring shrubs and trees that often survive where few other shrubs or trees can, such as on the shores of the Great Lakes and alongside highways. Some species are long lived. Female plants have round, blue, often aromatic berries (they are actually cones consisting of fused scales and hard-shelled seeds). There are dozens of cultivars to suit any need. Some species are susceptible to blight, so look for resistant cultivars. Low-growing species for cascading over walls, trailing on the ground, or using as groundcovers include *J. conferta* and *J. horizontalis*. Most junipers have prickly, needle-like leaves. Many junipers, such as *J. chinensis* and *J. virginiana*, have two types of leaves: Seedlings and some twigs of older trees have needle-like leaves, whereas the leaves on mature plants are tiny, overlapping, and scale-like. When juvenile foliage occurs on mature plants, it is most often found on shaded shoots, with adult foliage in full sunlight. In some species, such as *J. communis*, all the foliage is of the juvenile needle-like type, with no scale leaves. The hard, sharp, prickly needles of junipers help to identify seedlings, as the otherwise similar juvenile foliage of cypresses (*Cupressus*, *Chamaecyparis*) and other related genera is soft and not prickly.

Juniperus, section *Juniperus*

The adult leaves are needle-like, in whorls of three, and jointed at the base.

Juniperus conferta (shore juniper)

Zones 5 to 9, fast growing, has blue green foliage, thrives in sandy soil, tolerates harsh seaside conditions.

Desired cultivar(s):

- 'Blue Pacific'
- 'Emerald Sea'

Juniperus, section *Sabina*

The adult leaves are mostly scale-like, similar to those of *Cupressus* species, in opposite pairs or whorls of three, and the juvenile needle-like leaves are not jointed at the base. They are further classified as Old World or New World.

Juniperus, section *Sabina*, Old World species

Juniperus chinensis (Chinese juniper)

Zones 3 to 9, highly adaptable, handsome, long lived, many cultivars.

Desired cultivar(s):

- ‘Keteleeri’ – broadly pyramidal, thrives in Midwest.
- ‘Spartan’ – fast growing, dense, and can reach 20 feet high.
- ‘Kaizuka’ aka ‘Torulosa’ aka Hollywood juniper – has a twisted form and can reach 30 feet high.
- ✓ ‘Hetzii Glauca’ and ‘Pfitzeriana Glauca’ – both have bluish foliage and dense, arching, spreading habit. My ‘Hetzii Glauca’, planted alongside my cedar fence in spring 2007, is growing slowly but looking healthy so far.
- ‘Mountbatten’ – hardy to zone 4, fast growing, columnar to pyramidal, symmetrical, compact, handsome, broad upright. Has dense, fine, silver-green foliage, often all the way to the ground, that turns purplish in the fall. Produces blue berries. Needs full sun. Prefers moist, well-drained soil.

I prefer cultivars that are blue-green or silvery-blue, have soft, non-prickly scales, and have plenty of blue berries. The ‘Mountbatten’ specimens that I saw at Hickory Hollow looked unrefined and scraggly, but they may look more elegant once they mature.

Juniperus, section *Sabina*, New World species

Juniperus horizontalis (creeping juniper)

Zones 3 to 9, spreads up to a foot per year, has intense silver blue foliage.

Desired cultivar(s):

‘Wiltonii’

‘Douglasii’ (Waukegan)

Juniperus scopulorum (Rocky Mountain juniper)

Zones 3 to 7, does well planted in its native range from BC to CA. **Should not be planted outside of native range; will not do well.**

Desired cultivar(s):

‘Tolleson’s Blue Weeping’

‘Skyrocket’ and ‘Moonglow’ – two tall, thin cultivars. I planted one of these in rocky, infertile soil in the shade of privet hedges at 26 Mountainview Road, but it died.

- Juniperus virginiana* (eastern juniper)

Zones 2 to 9, dense, slow growing, pioneer invader often found in disturbed soil alongside roads and highways, does well planted in its native range in the midwestern and eastern states. **Host to apple rust, so don’t plant near apple or crabapple trees.**

Desired cultivar(s):

- ‘Grey Owl’ – has soft, silvery gray foliage.

Pinaceae (pine family), consists of pines, spruces, firs, Douglas-firs, cedars, larches, golden larches, and hemlocks. All are evergreen except for larch and golden larch.

Pinaceae | Abietoideae subfamily

✓ *Abies balsamea* (balsam fir)

Beautiful, delicate tree. Mine struggled initially, with many brown needles each spring, and not much upward growth. Now it is growing fast, but it is still less than 5 feet high. Planted alongside intermittent stream. Maybe I planted it too close to water, and maybe there is too much heat and humidity in GL for this tree?

✓ *Abies concolor* (white fir)

Zones 3 to 7, fast growing, dense, medium to large height, with long, upward-curved, silvery-white needles that have excellent contrast between old growth and new growth in spring. Tolerant of drought and wet soil.

Desired cultivar(s):

‘Violacea’ – extra long needles.

Abies fraseri (fraser fir)

Zones 4 to 8, similar to balsam fir, but grows further south. Medium height. Prefers moist soil. Excellent Christmas tree.

Abies koreana (Korean fir)

Has dense, dull needles that are almost white on their undersides, and purplish cones.

Desired cultivar(s):

✓ ‘Horstmann’s Silberlocke’ – dwarf that has curled needles, showing their silver undersides from every angle, and has regular-sized cones that look gigantic (optical illusion resulting from dwarf form).

Abies nordmanniana (Nordmann fir)

Dirr calls this species magnificent, and suggests its use in place of balsam and fraser fir. I’ve never seen one for sale anywhere.

Cedrus (cedar)

These are the “true” cedars. They tend to grow fast when young and slower once they mature. They require full sun and great amounts of space to reach their potential (except for the cultivars?). Paraphrased from Wikipedia: Cedars are native to the mountains of the western Himalaya and the Mediterranean region. They can reach up to 150 feet high, sometimes even higher, but often spread wider than they do high. Leaves are evergreen and needle-like, arranged singly in an open spiral on long shoots, and in dense spiral clusters on short shoots. They vary from bright grass-green to dark green to strongly glaucous pale blue-green, depending on the thickness of the white wax layer which protects the leaves from desiccation. The shoots are dimorphic, with long shoots that form the framework of the branches and short shoots that carry most of the leaves. They have spicy-resinous scented wood, thick ridged or square-cracked bark, and broad, level branches. As in *Abies*, the seeds have resin blisters, containing an unpleasant-tasting resin thought to be a defense against squirrel predation. They transplant with difficulty, taking time to establish themselves.

Cedrus deodara (deodar cedar)

Has dense, bright green leaves. Native to the Himalayas. Has wide swooping branches, and the tip of the tree often dips and bobs in the wind. Mature specimens are elegant and imposing, and eventually can reach gigantic proportions. I gave my sapling plenty of room to spread out so this won't be a problem, at least not for a decade or two. I fell in love with this species after I saw a large specimen in Morristown, NJ.

Desired cultivar(s):

- ✓ ‘Shalimar’ – according to Dirr and other sources online, this is much more cold hardy than ‘Kashmir’. Planted sapling in back yard in spring 2007. Tiny so far. Eager to see whether sapling endures winter with no protection whatsoever.

Cedrus libani (Lebanon cedar, cedar of Lebanon)

Native to mountains of the Mediterranean region, from Turkey west to Morocco.

There are four varieties (some consider them subspecies, or even separate species):

Cedrus libani var. *libani* (Lebanon cedar)

Native to mountains of Lebanon, western Syria and south-central Turkey. Leaves dark green to glaucous blue-green, 10–25 mm.

□ *Cedrus libani* var. *stenocoma* (Turkish cedar)

Hardier than the other varieties, hardy to zone 5. Native to mountains of southwest Turkey. Leaves glaucous blue-green, 8–25 mm.

Cedrus libani var. *brevifolia* aka *Cedrus brevifolia* (Cyprus cedar, Cyprian cedar)

Native to mountains of Cyprus (island in eastern Mediterranean, south of Turkey).

Leaves glaucous blue-green, 8–20 mm. Unique looking, like a var. *libani* in which all of the needles have been crinkled and singed down to a smaller size.

Cedrus libani var. *atlantica* aka *Cedrus atlantica* (Atlas Cedar)

Zones 6 to 7. Native to the Atlas Mountains of northern Africa (Morocco and Algeria).

Leaves dark green to glaucous blue-green, 10–25 mm.

Desired cultivar(s):

- *Cedrus libani* subsp. *atlantica* ‘Glauca’ (blue atlas cedar) – I think this is the pyramidal cultivar that people like to plant one centimeter away from their house.
- *Cedrus libani* subsp. *atlantica* ‘Pendula’ (weeping atlas cedar)
- *Cedrus libani* subsp. *atlantica* ‘Glauca Pendula’ (weeping blue atlas cedar)
- *Cedrus libani* subsp. *atlantica* ‘Argentea’ – has silvery, almost white, needles.
- *Cedrus libani* subsp. *atlantica* ‘Fastigiata’ – narrow, columnar growth.

Beware of grafts. Some nurseries graft the cultivar onto another rootstock, which may have different cold hardiness than desired.

Pseudolarix amabilis (golden larch)

Slow growing, deciduous, can grow 40 feet high and wide, similar to larches in appearance, but more closely related to firs and cedars. Has few pests.

Tsuga canadensis (Canadian hemlock, eastern hemlock)

Beautiful, medium to large, graceful, pyramidal tree. Has soft needles with rounded tips.

Often has drooping leader. Small cones hang at end of twigs and persist through winter.

Tolerant of shade and sun, but does not like heat and dry winds. **Susceptible to woolly adelgid**, which is decimating forests in the eastern USA. Mine were pre-existing around my Norway maple and one specimen at northeastern border of property. Olga Svendsen probably planted the ones around the maple, and the one in the back yard was probably naturally-occurring. Need to protect from woolly adelgid however possible.

Pinaceae | Laricoideae subfamily

Larix (larch)

Deciduous, needles turn golden in autumn, transplants easily in early spring, tolerates shallow soils, does not tolerate shade, pollution, or drought. Difficult to find at nurseries because they're difficult to grow and maintain from a nurseryman's perspective.

Larix decidua (European larch)

Zones 2 to 6, bright green in spring, golden yellow to amber in autumn. Beautiful when young, but can look ratty and scraggly when mature. Susceptible to pests.

Larix kaempferi (Japanese larch)

Zones 5 to 7, fast growing, can reach 90 feet high and 50 feet wide, has drooping branchlets of whorled leaves. Needs full sun and sustained moisture.

Desired cultivar(s):

- 'Diane' (contorted Japanese larch) – Wow! The branches and the needles are contorted. Makes excellent specimen. Discovered in Germany.

- *Larix x eurolepis* (Dunkeld larch, cross between *L. decidua* and *L. kaempferi*)

Do more research on this.

Larix laricina (tamarack)

Medium to large, pyramidal tree with soft, slender leaves that grow in bunched clusters on drooping branchlets. Leaves turn golden yellow before dropping in autumn. Prefers upland bogs and swamps in cool climates. Native to northern North America. **Too hot for this tree in GL?**

- ✓ *Pseudotsuga menziesii* (Douglas-fir)

Zones 4 to 8, tall, narrow tree with pointed top. Has soft, flattened leaves spread in two complex rows along each side of shoot, and drooping cones with spiky brown bracts. Cones start green and turn brown. Widely planted. Likes to grow on moist mountain slopes. There are two subspecies:

- Coast Douglas-fir, native to the Pacific coast.
- Rocky Mountain Douglas-fir, native to the interior west, with two varieties:
 - 'Blue Douglas-fir' or 'Colorado Douglas-fir' (var. *glauca*) in the southern Rocky Mountains – keeps well-shaped pyramidal form. Excellent in multiple plantings as a windbreak; sometimes called Douglas-fir hedge.
 - 'Gray Douglas-fir' or 'Fraser River Douglas-fir' (var. *caesia*) in the northern Rocky Mountains.

I have no idea which subspecies or variety I have.

Pinaceae | Piceoideae subfamily

Picea (spruce)

Long lived, can reach 60 feet high, has shallow, spreading root system, prefers open, airy locations with full sun and moist soil, transplants easily. Some spruces tend to lose their lower branches as they mature. Many spruces have sharp needles, but *P. orientalis* has relatively soft needles compared to other spruces. I prefer conifers with soft, blunted, delicate, flattened needles and dull, blunted cone scales.

Pinaceae | Piceoideae subfamily | *Picea* section

Cones with thickish scales; leaves quadrangular in cross-section.

Picea abies (Norway spruce)

Hardy, easy to grow, makes good windbreak. Commonly planted.

Picea orientalis (Oriental spruce, Caucasian spruce)

Zones 4 to 7, slow growing, large, can reach 120 feet high, graceful, pyramidal, dense, dark green. Needles are attractive, short, rigid, and stubby, not prickly. Male cones look like little strawberries. Can grow on a wide range of soils. Excellent specimen tree.

Native to the Caucasus and northeast Turkey.

Desired cultivar(s):

- ✓ 'Aurea' and 'Aureospicata' (golden Caucasian spruce) – bright yellow new needle growth contrasts sharply from existing, green, hardened-off needles. I have tiny, slow growing, but healthy 'Aureospicata'.

Picea torana aka *Picea polita* (tigertail spruce)

Viciously sharp-pointed, curved needles stick up like a tiger's tail. Native to Japan.

Pinaceae | Piceoideae subfamily | Omorika section

Cones with thickish wavy scales, leaves slightly to strongly flattened.

Picea omorika (Serbian spruce)

Zones 4 to 7, slow growing, tall, elegant, imposing. Branches droop and then curve upward like those in Norway spruce, but Serbian spruce looks more dignified and more graceful. Makes absolutely gorgeous specimen, with purplish cones and thin white stripes on each needle, making the needles appear silvery on the underside, unlike most other spruces. Planted alongside my wooden retaining wall, midway along the length that parallels Ursa Avenue. Tip of leader burnt off during 2007 drought, in spite of my nearly constant watering. I'm hoping that new leader forms next spring.

Picea mariana (black spruce)

Zones 3 to 8, has cones that grow in clusters, is common in woods and mountain bogs, easy to grow.

Pinaceae | Piceoideae subfamily | Casicta section

Cones with very thin, wavy scales.

Picea engelmannii (Engelmann spruce)

Tall, narrow, conical tree with soft, blue-green, prickly needles pointing out all around the twigs except the undersides, flaky, grayish orange bark, and cones that hang at the ends of the twigs. There are cultivars with pale blue-green foliage.

Picea glauca (white spruce)

Zones 3 to 7, straight, tall, has stiff, blue-green needles curved upwards around twigs. Has beautiful color. Like *P. abies*, easy to grow and makes a good windbreak. Common in woods, but not often sold except for 'Glauca'.

Desired cultivar(s):

'Glauca' – dwarf cultivar, sold as "dwarf Alberta spruce".

Picea pungens (blue spruce)

Zones 3 to 8, prefers the colder zones, slow growing, can live hundreds of years.

Desired cultivar(s):

'Glauca'

'Hoopsii'

Pinaceae | Pinoideae subfamily

Pinus (pine)

Prefers full sun and sandy, medium-dry soil. Does not like heavy, clay soil, and does not like pollution. Transplant carefully in early spring. Pines are generally divided into soft pines and hard pines.

Pinaceae | Pinoideae subfamily | *Strobus* subgenus (soft pines)

Pinus flexilis (limber pine)

Zones 4 to 7, tolerates high winds and cold, native to western USA. Adaptable to GL?

✓ *Pinus strobus* (eastern white pine)

Zones 3 to 8, fast-growing, tall, wide-spreading, can reach 80 feet high. Has soft needles in bundles of 5. Prefers full sun. Excellent specimen or windbreak, and good for softening sharp lines in nearby architecture. I transplanted two saplings from Pete and Evelyn's property in Kingston to opposite sides of my property in 2004. One died quickly, probably from lack of sunlight. The other survived but grew slowly until spring of 2007, when it started growing rapidly. Took time to establish its root system first?

Desired cultivar(s):

- ✓ 'Pendula' (weeping white pine) – Keith recommended this wispy, graceful tree for the border area near the neighbors' bathroom window. Dense enough for privacy, but not so dense as to cast their house in eternal shade and create problems with mildew on their siding. Tree will soften the corner of their house.

✓ *Pinus wallichiana* (Himalayan pine, blue pine)

According to Dirr, some consider this to be the most beautiful pine species. Even more graceful and elegant than *P. strobus*. Grows in high-altitude mountain valleys stretching from Afghanistan to China, in a temperate climate with dry winters and wet summers. Has exceptionally long, blue-green needles. I planted a sapling practically underneath my October Metasequoia in 2006, thinking the two would do well together. I found out afterwards that pines don't like clay, but so far, it looks fine, and is slowly growing.

Pinus cembra (Swiss stone pine, arolla pine)

Zones 4 to 8, slow growing, can reach 40 feet high, dense, narrow, handsome, uniform. Needs full sun. Excellent specimen. Can withstand sea salt spray.

Pinaceae | Pinoideae subfamily | Ducampopinus subgenus

Pinus bungeana (lacebark pine)

Zones 5 to 8, mosaic-like bark, can reach 50 feet high. Prefers medium to dry soil and full sun. Susceptible to damage from heavy snow and ice.

Pinaceae | Pinoideae subfamily | Pinus subgenus (hard pines)

Harder lumber and more resin than the other two subgenera. Keith at Hickory Hollow advised me to “avoid two-needled pines” because of their susceptibility to beetles, pinewood nematode, and fungus. (I think that this subgenus has all two-needled pines.)

Pinus densiflora ‘Umbraculifera’ (Japanese red pine cultivar, Tanyosho pine)

Dirr says this tree is adaptable and heat-tolerant, but mine struggled, never grew at all, and suddenly died in 2007, almost simultaneously with my dwarf Scots pine.

Pinus mugo (mountain pine)

Yet another attractive, two-needled pine **susceptible to pinewood nematode**.

Pinus nigra (Austrian pine)

Zones 4 to 7, can reach 60 feet high. Has very stiff, large, dark green, sharp, densely set needles. Excellent windbreak. Easily transplanted. Tolerant of heat, drought, salt including sea salt spray, grime, clay soil, and alkalinity. **Unfortunately, it is particularly susceptible to pinewood nematode.**

Pinus sylvestris (Scots pine)

Zones 3 to 8, has stiff, blue-green needles, makes excellent windbreak and winter accent. Easily transplanted. Hardy and adaptable. **Susceptible to pinewood nematode?**

Desired cultivar(s):

‘Edwin Hillier’ – has leaves with a silvery tinge.

My dwarf cultivar, ‘Glauca Nana’, never grew at all and suddenly died in 2007, when all of its needles turned brown, almost simultaneously with my Tanyosho pine. Seems like something girdled the trunk. Infected with some bacteria, fungus, or virus? Pinewood nematode? Phytophthora root rot?

Pinus thunbergii (Japanese black pine)

Can reach 30 feet high, has rugged scaly bark, can withstand sea salt spray, also tolerant of pollution. Paraphrased from Wikipedia: **In North America, the native American pinewood nematode, *Bursaphelenchus xylophilus*, spread by means of beetle vectors, causes widespread death of this tree. The nematode allows blue stain fungus to invade the plant, leading to a rapid decline and death.** This nematode has also been accidentally introduced to Japan, leading to the species becoming endangered in its native area.

Podocarpaceae (yellow-wood family)

Podocarpus (southern yew)
Zones 8 to 11, out of range in GL.

Cephalotaxaceae (plum-yew family, closely related to yews)

Cephalotaxus harringtonia (Harrington plum-yew)

Taxaceae (yew family), formerly treated in their own order, Taxales, but now part of Pinales as the result of DNA research which show that yews are closely related to other conifers, particularly those in Cephalotaxaceae.

Taxus (yew)

The berries are poisonous. European and Japanese yews can slowly grow into trees when left to their own devices and never pruned (even the cultivars?).

Taxus canadensis (Canadian yew, American yew)

Sprawling shrub, can reach 6 feet high and 8 feet wide over time. Prefers cool, moist, shady conditions. Thrives in swampy woods, ravines, riverbanks, and on lakeshores. Grows slowly as an understory plant in the wild. I think my giant, decades-old yew alongside the intermittent creek near the north corner is this species. If so, I should plant some tall trees to cast it in cool shade as it had been originally.

Taxus baccata (European yew, English yew, common yew)

There are many cultivars for specific needs.

Taxus cuspidata (Japanese yew)

Taxus x media (selected from cross between *T. baccata* and *T. cuspidata*)

Various cultivars are commonly sold at Home Depot.

Desired cultivar(s):

- ✓ ‘Densifomis’ (dense spreading yew) – I planted this near the north corner. Large but not quite as potentially large as ‘Brownii’.
- ‘Brownii’ – largest cultivar of *T. x media*.

Angiosperms clade (from here to end of document)

Angiosperms (“vessel seeds”) are flowering plants, with seeds born in a matured ovary known as a fruit. The Cronquist system put all angiosperms in division Magnoliophyta aka Anthophyta. Because everything is currently in flux as the result of DNA studies, with species, genera, and sometimes entire families moving around, APG II does not use formal, scientific names above the level of order. Instead, APG II uses informal clades.

Austrobaileales order – members of this order are basal angiosperms, and do not belong to any further clade.

Illiciaceae

Illicium (anise shrub)

Illicium verum, native to southern China and Vietnam, is the source of star anise used in seasoning. Some of the species are native to southeastern USA. **Out of range in GL.**

Basal angiosperms | Magnoliids clade, analogous to Cronquist subclass Magnoliidae

Magnoliales order

Magnoliaceae (magnolia family)

Magnolia

Is this the “oldest woody flowering plant on earth”? (*Illicium* looks to be the same evolutionary age, perhaps even older, on <http://tolweb.org>.) Has beautiful flowers, prefers full sun, needs sustained moisture, and does not tolerate dry soil. Deciduous magnolias should be planted in a cool microclimate on one’s property to suppress flowering until after late winter cold snaps pass.

Desired species or cultivar(s):

- ✓ ‘Butterflies’ (selected from cross between *M. acuminata* and *M. denudata*) – has yellow flowers. I planted this in the moist area at the top of my property.
- ‘Galaxy’ – escapes most late frosts.
- *Magnolia macrophylla* (bigleaf magnolia) – has the largest leaves and flowers of any native tree in North America. Do not plant in windy spot.
- ✓ *Magnolia stellata* ‘Royal Star’ – planted alongside wooden retaining wall.
- *Magnolia virginiana* (sweetbay) – zones 6 to 9, deciduous in colder zones, requires constant moisture, grows near streams, ponds, and other water sources, can grow into a giant shrub.

Liriodendron tulipifera (American tulip tree)

Zones 4 to 9, majestic, fast growing shade tree, can reach 90 feet high, largest native hardwood in North America. Has distinctively-shaped leaves that turn yellow in autumn, aromatic yellow flowers, and cone-like fruits consisting of many narrow-winged seeds. Needs full sun. Transplant carefully in early spring. **Warning: Aphids feast on the tree's honeydew and create a mess on houses and cars below.** Plant far from houses and cars.

Desired cultivar(s):

'Aureo-marginatum' (Majestic Beauty) – stunning variegated cultivar from Monrovia.

Liriodendron chinense (Chinese tulip tree)

Smaller than American tulip tree.

Annonaceae (custard apple family)

Asimina triloba (pawpaw)

Unusual. Has malodorous flowers and, after the tree is about five years old, ugly, irregular fruit, edible when ripe (causing nausea when unripe). Some say that the taste is like banana custard or vanilla, but others say that the taste is disgusting. Need two trees for pollination. Tree has cult following. I've had mixed success. Initially, 'Mango' prospered while 'Sweet Alice' looked dead. Now 'Mango' is struggling. Pawpaw tolerates some shade, does not like harsh winds, and prefers moist, well-drained soil.

Laurales order

Calycanthaceae (strawberry-shrub family)

Calycanthus floridus (sweetshrub, spicebush, Carolina allspice)

Zones 5 to 8, native to USA, closely related to sassafras. Hickory Hollow carries the straight species.

Desired cultivar(s):

- ❑ 'Edith Wilder'
- ❑ 'Michael Lindsay'
- ❑ x *Sinocalycalycanthus raulstonii* 'Hartlage Wine' – the crème of the crop, and the most expensive cultivar.

Chimonanthus praecox (wintersweet)

Zones 6 to 8, native to China, widely grown as an ornamental plant for its scented winter flowers, prefers part shade and light, acidic, well-draining soil. Susceptible to aphids, mites, and leaf beetles.

Lauraceae (laurel family) includes many plants with aromatic leaves, twigs, and bark, providing cinnamon, camphor, and various fragrant oils.

Cinnamomum camphora (Camphor tree)

Source of camphor, grows wild in the southern USA, sometimes becomes invasive, **out of range in GL**.

Laurus nobilis (bay laurel)

Aromatic, evergreen tree or large shrub, native to Mediterranean region, source of bay leaves used for flavoring in cooking, **out of range in GL**.

✓ *Lindera benzoin* (northern spicebush)

Easy to grow, naturalized on my property border. I also planted one that I ordered from Forest Farm, to provide some genetic variability.

✓ *Sassafras albidum* (sassafras)

Three leaf shapes (hand, glove, mitten). Leaves are colorful in fall, have odor of vanilla when crushed. Dark blue shiny berries. Once used for tea (not recommended anymore; contains possibly harmful chemicals). Need two for pollination. I have several saplings that may have come from sassafras seeds that I scattered in early 2005, or they may have arisen naturally.

Umbellularia (Oregon myrtle, California bay laurel, pepperwood, headache tree)

Hardy to zone 7, native to coastal forests of western USA, has aromatic evergreen leaves, strongly scented when crushed, and nut-like fruit. **Out of range in GL**.

Canellales order

Winteraceae

Drimys winteri (mountain pepper, winter's bark)

Hardy to zone 8, evergreen, slender tree native to the Magellanic and Valdivian temperate rain forests of Chile and Argentina, cultivated in gardens for its bright green leaves, handsome and fragrant mahogany-red bark, and its clusters of creamy white jasmine-scented flowers. **Out of range in GL**.

Piperales order

Aristolochiaceae (birthwort family)

Aristolochia macrophylla aka *Aristolochia durior* (pipevine, Dutchman's pipe)

Basal angiosperms | Monocots clade, analogous to Cronquist class Liliopsida aka Monocotyledones (monocotyledonous angiosperms). Most monocots are evergreen, with no annual rings. Some are further classified as commelinids.

Asparagales order

Agavaceae (agave family)

Yucca aloifolia (aloe yucca)

Source of aloe. Grows in coastal regions of Southeast. There are about 10 other species of yuccas that reach tree size. **Out of range in GL.**

Iridaceae (iris family)

Crocasmia x crocosmiaflora (montbretia, selected from cross between *C. aurea* and *C. pottsii*, first bred by Victor Lemoine in 1880)

Supposedly hardy in zone 6. Has red, orange, or yellow flowers, depending on cultivar, and grows from corms. I love the descriptions of this plant, but it has steadfastly refused to grow on my property from corms. I need to find a mature, potted plant.

Basal angiosperms | Monocots clade | Commelinids clade

Arecales order

Arecaceae (palm family) consists of about 2600 species. Palms grow in diverse climates, from rainforests to deserts. **Most grow in a tropical or subtropical climate.** Most have large, compound, evergreen leaves arranged at the top of an unbranched stem, but there are some exceptions.

Poales order

Poaceae (true grass family) includes bamboos. All bamboos belong to the Bambusoideae subfamily, but they are in different supertribes, tribes, and subtribes within that subfamily. For example, subfamily Bambusoideae, supertribe Bambusodae, tribe Bambuseae has 91 genera and about 1000 species. Bamboos grow in diverse climates, from cold mountains to the tropics. Some species can reach 100 feet high! They are classified as either clumpers or runners, according to their root systems. Some runner-type bamboos are invasive. A few bamboo genera:

Bambusa – hardy to zone 8, clumping bamboos.

Chimonobambusa – hardy to zone 8, running bamboos.

Chusquea – hardy to zone 6, Chilean bamboo with solid core.

Fargesia – hardy to zone 5, clumping mountain bamboo.

✓ *Phyllostachys* – Running bamboo. Most of the species spread aggressively by underground rhizomes and some are considered invasive species in areas outside their native range, particularly in North America. This is what I planted in front of the neighbors' bathroom window (heh heh heh!).

Semiarundinaria – hardy to zone 7, running bamboo, tall, dense, slow spreading.

Angiosperms | Eudicots (from here to end of document)

APG II eudicots clade, analogous to Cronquist class Magnoliopsida aka Dicotyledones, consists of dicotyledonous angiosperms. Most are deciduous and have annual rings.

Buxaceae (boxwood and pachysandra family) – unplaced in order, belongs with basal eudicots, Buxales order suggested and proposed.

Buxus (boxwood)

Dense, slow-growing, evergreen shrub that can be sheared and trimmed, good for borders and hedges, prefer rich soil in full sun to deep shade, protect shallow roots with mulch, protect from cold wind and sunscald.

Desired species or cultivar(s):

- ✓ *Buxus sempervirens* (common box)
- ✓ Sheridan hybrids (selected from cross between *Buxus microphylla* var. *Koreana* and *Buxus sempervirens*) – I have ‘Green Mountain’ and ‘Green Velvet’. They are alive but not growing very fast. Do they need more organic matter?

Sarcococca (sweet box)

Prefers moist shade. Plant near ash tree in north corner of property. Looks superb when planted with *Rhododendron* and *Mahonia*.

Desired cultivar(s):

- *S. hookeriana* var. *humilis* (Himalayan sweet box)
- *S. confusa*

Proteales order

Proteaceae

Banksia

Hardy to zone 8, native to Australia.

Gevuina

Hardy to zone 9, native to Chile.

Platanaceae (sycamore or plane-tree family)

Platanus occidentalis (American sycamore)

Zones 4 to 9, fast growing, massive, tall. Distinctive hanging, buttonball-like catkins.

When mature, bark naturally peels into white-and-brown sections that some people find attractive. Prefers moist soil.

Ranunculales order

Berberidaceae

Berberis (barberry)

Dense, thorny shrub. Some are deciduous and some are evergreen.

Desired species or cultivar(s):

Berberis thunbergii 'Aurea' (golden Japanese barberry) – Plant in full sun, because golden color turns to yellow-green in shade. Has thorns; makes good hedge. Are there any cultivars without thorns?

Nandina domestica (heavenly bamboo, not a true bamboo)

Barely cold hardy in zone 6, has drooping clusters of red berries, looks unkempt and weedy in my opinion.

Mahoberberis (hybrid between barberry and Oregon grape)

Hardy to zone 6.

Mahonia aquifolium (Oregon grape holly)

Zones 5 to 8, can grow 6 feet high, dense, evergreen shrub. Some selections are upright, while others are low-growing. Has spiny, holly-like leaves, yellow flowers, and edible, blue-black, grape-like fruit. Good for borders, as accent, or naturalized in wooded area. Prefers moist, humusy, well-drained, slightly acidic soil in light shade (loves shade!). Protect from cold wind.

Lardizabalaceae

Akebia (chocolate vine).

Most are hardy to zone 5.

Decaisnea (blue bean shrub, dead man's fingers)

Hardy to zone 5, grown as an ornamental plant for its bold foliage and decorative fruit, which are bright blue in many of the cultivated plants. Most plants in cultivation derive from Chinese seed and are commonly grown under the name *D. fargesii*.

Angiosperms | Eudicots | Core Eudicots (from here to end of document)

Caryophyllales order

Cactaceae (cactus family)

Cereus giganteus (saguaro)

Tall, single trunked. One of the only species of cacti in the USA that grows as a tree. **Out of range in GL.**

Simmondsiaceae

Simmondsia (jojoba) – **hardy to zone 8**, evergreen, grows in dry areas of Southwest, **out of range in GL.**

Saxifragales order

Altingiaceae (altingia and sweetgum family)

✓ *Liquidambar styraciflua* (American sweetgum)

Zones 6 to 9, large, fast growing, handsome tree with star-shaped leaves and unusual, burr-like, prickly, spiky seed balls hanging on long stems. Spectacular autumn color; leaves turn shades of red and gold. Transplant carefully in early spring, but be patient. Tree takes time to establish itself. Prefers full sun, and does not like pollution.

Desired cultivar(s):

- 'Lane Roberts' – has consistently good color.
- 'Moraine' – more cold hardy and more red in autumn than the species.

Straight species is spectacular. I planted one in the extreme northern corner of my property alongside the intermittent creek. Struggled for the first year, probably because of excessively dry, shady conditions behind the giant oak tree. Now that the giant oak tree is gone, the sweetgum is starting to thrive, growing more in October than it did all of August and September!

Cercidiphyllaceae (katsuratree family)

✓ *Cercidiphyllum japonicum* (katsuratree)

Gorgeous, dense, fast growing, wide spreading shrub. My only complaint is the tight angled branching. Will this cause branches to grow weakly and break in a storm?

Hamamelidaceae (witch-hazel family)

Corylopsis (winter hazel, gotoana)

Zones 6 and 7, shrubs that often grow wider than tall, native to eastern Asia, they're too airy and not dense enough for my taste.

Disanthus cercidifolius

Gorgeous, resembles miniature katsuratree. Not as exciting as witch-hazel or witchalder?

Distylium (winter hazel)

Hardy to zone 7, evergreen, native to Asia, out of range in GL.

Fothergilla (witchalder)

Hardy to zone 5, smaller and slower growing than witch hazel, flowers appear before leaves, leaves have good fall color, prefers rich, moist, well-drained, acidic soil in full sun, good for borders.

Fothergilla gardenia (dwarf fothergilla)

Low-growing shrub native to southeastern USA

Desired cultivar(s):

✓ 'Mount Airy'

Fothergilla major (large fothergilla)

Can grow 10 feet high.

Hamamelis (witch-hazel)

Named because foliage resembles that of *Corylus* (hazel). Tall shrub or small tree, some species can grow 20 feet high, has beautiful autumn color, prefers consistently moist, well-drained soil, but adapts well to other conditions. Prefers full sun in zone 6, partial shade in warmer zones.

Desired species or cultivar(s):

- Keith recommended 'Arnold Promise'.
- I prefer the red or copper flowering species and cultivars (do more research).
- Hamamelis virginiana* (American witch-hazel) – blooms in autumn.
- Hamamelis vernalis* – blooms in late winter.

Loropetalum (white witch hazel)

Need to do more research on this.

✓ *Parrotia persica*

Amazing, gorgeous, stunning autumn color. Mine has two different leaf sizes for some reason; the original leaves are small, and the newly growing leaves are twice as large.

Iteaceae (sweetspire family)

Itea virginica (Virginia sweetspire)

Desired cultivar(s):

- ✓ 'Henry's Garnet' – I'm not too impressed. Takes a long time to leaf out in spring. Looks perfectly healthy, but hasn't grown much and is more of a groundcover.

Grossulariaceae

Ribes (currant)

Do not plant; host for white pine blister rust!

Saxifragaceae

Corokia

Hardy to zone 8, evergreen shrub or small tree, zigzag branches, native to New Zealand, grows in forests and rocky areas, **out of range in GL**.

Angiosperms | Eudicots | Core Eudicots | Rosids

The rosids on this page are basal rosids. The fabids start on the next page. The malvids start several pages after that.

Myrtales order

Lythraceae

Lagerstroemia indica (crape myrtle, crepe myrtle)

Zones 7 to 9, out of range in GL.

Desired cultivar(s):

One of the newer, disease-resistant hybrids such as 'Natchez' or 'Zuni'.

Myrtaceae (myrtle family) includes eucalyptus, clove, allspice, and many large, aromatic, evergreen plants, typically from Australia.

Callistemon (bottlebrush)

Zones 7 and 8, slow growing shrub or small tree, red spiky flowers, native to Australia.

Eucalyptus pauciflora (snow gum)

Hardy to zone 7, the most cold tolerant eucalyptus.

Leptospermum (tea tree)

Used as hedges on west coast of USA.

Luma (Chilean myrtle)

Hardy to zone 8, evergreen.

Myrtus (dwarf myrtle)

Hardy to zone 8, evergreen, prefers well-drained soil in partial shade, good as screen or hedge.

Angiosperms | Eudicots | Core Eudicots | Rosids | Eurosids I (Fabids)

Celastrales order

Celastraceae

Celastrus scandens (bittersweet)

Hardy to zones 3, climbing, scrambling, rampant-growing shrub that can kill trees, must keep under control. Eeeek!

Euonymus (spindle)

Hardy to zone 4, some species can grow 20 feet high.

Euonymus alatus (burning bush, winged spindle)

Can grow 10 feet high, dense, rounded or vase-like upright form, has fiery, glowing crimson foliage in autumn, prefers well-drained soil in full sun or bright partial shade, adaptable for many landscape uses including border, hedge, screen, or accent. **Invasive in some parts of eastern and Midwestern USA. Some plants are susceptible to scale.**

Oxalidales order

Cunoniaceae

Eucryphia

Zones 7 and 8, mostly evergreen large shrubs or small trees, flowers produced in late summer and autumn when few or no other trees are in flower. Native to temperate Southern Hemisphere. **Cultivation is restricted to areas with mild winters, cool summers and good rainfall; away from native areas, this restricts them to Atlantic coastal regions of Europe, Pacific Northwest of North America, and New Zealand. Out of range in GL.**

Fabales order

Fabaceae (pea family) includes trees with long seedpods (legumes); the trees are also called “legumes”. Almost all legumes support nitrogen-fixing bacteria in their root nodules, which enrich the soil. Exceptions include species in the *Styphnolobium* genus. Drawbacks of legumes: Seedpods can be messy and look ugly. Many legume trees have thorns, but thornless cultivars exist.

Caragana (pea shrub)

Hardy to zone 3, native to eastern Europe and Asia.

Carmichaelia (New Zealand broom)

Hardy to zone 8, evergreen, branchlets take place of leaves in some species, **out of range in GL.**

Colutea

Hardy to zone 5, native to Mediterranean region, **won't do well in GL.**

Cytisus (broom)

Zones 5 to 8, mostly shrubs, adapted to dry soil, tolerate (and often thrive in) poor soils and growing conditions. They need little care, but they need good drainage and perform poorly on wet soils.

Halimodendron (salt tree)

Hardy to zone 3, from dry salt fields of Siberia, **won't do well in GL.**

Genista tinctoria (woadwaxen)

Needs dry, sandy, infertile, alkaline soil in full sun, difficult to transplant, resembles *Cytisus*, **won't do well in GL; soil too acidic.**

Lupine

Has spiky flowers. Includes bluebonnet, state flower of Texas.

Cercis (redbud)

Shrub or small tree usually with pink flowers. Needs warm summers (the opposite of mountain laurel's requirements); plant redbud in a warm microclimate.

Desired species or cultivar(s):

C. canadensis (eastern redbud) – attractive shrub or small tree, but has pink flowers.

- *C. canadensis* var. *alba* ‘Royal White’ – white-flowering cultivar.

C. chinensis (Chinese redbud)

- *C. gigantea* – redbud with larger leaves than normal.

C. siliquastrum (Judas tree)

Cladrastis kentukea (Kentucky yellowwood)

Has compound, alternate, almost tropical-looking leaves, drooping clusters of white, scented flower panicles, and smooth, beech-like bark that is susceptible to injury (like that of beech). Tends to have weak branches that break in storms. Native to limestone ridges of Appalachia. **Don't prune in winter or spring because it will bleed profusely.**

Gleditsia triacanthos (honey locust)

Fast growing, and is more graceful than black locust. Straight species has long, sharp thorns (sometimes single, other times branched or clustered) extending from the trunk and branches. Thornless forms are occasionally found growing wild, and there are thornless cultivars. Open and airy structure, popular as shade tree, casts light shade. Tolerant of urban conditions such as compacted soil, heat, drought, salt, and alkalinity. Transplants easily, and easily grown from seed.

Gymnocladus dioica (Kentucky coffee tree)

Zones 4 to 8, moderate growing, does not usually live more than a century, prefers full sun, tolerant of drought, pollution, and alkalinity, easy to transplant.

Laburnum x watereri 'Vossii' (golden chain tree cultivar, selected from cross between *L. alpinum* and *L. anagyroides*)

Has golden chains of flowers in spring. Likes sustained moisture but not wet feet. Doesn't like noon sun.

Robinia pseudoacacia (black locust)

Ugly, scraggly, weedy tree, very easy to grow from seed.

Styphnolobium japonicum, formerly *Sophora japonica* (Pagoda tree, scholar tree)

Zones 4 to 7, dense, large tree that can grow enormous. Has pea-like flowers in panicles. Tree does not form symbiotic association on roots with nitrogen-fixing bacteria, unlike other legumes. Long pods change from green to brown. I think the pods are ugly. Prefers full sun but tolerates partial shade. Normally pest and disease free, tolerant of heat, drought, and pollution. There is a specimen in downtown Greenwood Lake alongside Windermere Avenue.

Fagales order

Betulaceae (birch family)

Alnus glutinosa (European alder)

Most alders grow in the western USA. This is an exception.

Betula (birch)

Can grow on nutrient-poor soils where no other trees can grow, after a forest fire burns away organic matter, for example. Some birches have severe insect problems.

Betula alleghaniensis (yellow birch)

Has yellowish bark that peels into narrow, curled strips. Bark flammable even when wet. Twigs have wintergreen flavor. Native to USA.

Betula nigra (river birch)

More heat tolerant than the white-barked birches. Stunning appearance in winter.

Desired cultivar(s):

- ❑ 'Heritage' (Heritage birch) – fast growing, with attractive, salmon-colored bark. Has larger leaves, and is more disease resistant than the species. I wanted this, but Hickory Hollow's specimens were old and worn out. They might order more next spring.
- ✓ 'Dura-Heat' – supposedly an improvement over 'Heritage', but I'm skeptical. Still, I'm impressed with this cultivar. Mine has grown into an enormous, sprawling shrub with no signs of slowing down.

Betula papyrifera (paper birch)

Bark on mature trees peels into long white strips.

Betula platyphylla var. *japonica* 'Whitespire'

Do more research on this.

Betula utilis (Himalayan birch)

Desired cultivar(s):

Var. *Jacquemontii*, 'Grayswood Ghost'

Var. *Jacquemontii*, 'Silver Shadow'.

Carpinus betulus (European hornbeam)

Desired cultivar(s):

- 'Pendula' – weeping.
- 'Fastigiata' – columnar to pyramidal. Planted alongside wooden retaining wall.

Carpinus caroliniana (American hornbeam, ironwood, musclewood)

Zones 2 to 9, small understory tree, smooth, blue-gray, muscular-looking trunk, excellent autumn color. Native to eastern USA. I think this is growing on Darrell's property.

Corylus (hazel)

Zones 4 to 9, small to medium height, prefers full sun or light shade. Source of hazelnuts. Need two trees for pollination.

Corylus avellana (common hazel)

Desired cultivar(s):

- I have *C. avellana* 'Casina' and 'Barcelona' grafted onto *Corylus colurna* rootstocks. 'Barcelona' is for the nuts, and 'Casina' is the pollinator.

Corylus colurna (Turkish hazel)

Zones 5 to 7, handsome tree, tolerates dry summers and cold winters once established.

Ostrya virginiana (American hophornbeam, sometimes called ironwood)

Another native species, closely related to *Carpinus*.

Casuarinaceae

Casuarina equisetifolia (horsetail casuarina)

Unusual looking tree, quite different from everything else in Fagales order, has evergreen whorled scales, wiry drooping branches, and cone-like fruit. Grows in FL and CA, **out of range in GL**.

Fagaceae (beech family)

Castanea (chestnut)

Chestnuts in general are messy trees, and require plenty of space.

Castanea dentata (American chestnut)

Susceptible to chestnut blight, rarely grows into tree anymore. Various introduced chestnuts or Allegheny chinkapin are used as replacements, but none rival the majestic appearance of the American chestnut. American Chestnut Foundation is working on restoring the species.

Desired cultivar(s):

- Fully blight resistant cultivar in 50 years?

Castanea sativa (Spanish or European chestnut)

Edible nuts. Too cold for this tree in GL?

Fagus grandifolia (American beech)

Zones 3 to 9, can grow into enormous, long lived tree with exceedingly smooth bark. Attractive leaves persist through winter and rustle in the wind. Produces beechnuts. Needs sustained moisture and full sun (tolerates shade?). One of my favorite trees.

Drawbacks:

- Shallow root system tends to wick up all surface moisture and preclude other plant life from growing underneath or nearby.
- Low drought tolerance (even lower tolerance than picky trees like sugar maple).
- Easily-damaged bark.
- Susceptible to diseases and insects.
- Difficult to transplant.

There are HUGE beech trees in the Great Swamp National Wildlife Refuge in Chatham, NJ, near where I grew up in Green Village.

- ✓ *Fagus sylvatica* 'Asplendiifolia' (fernleaf European beech)

Purchased as small, container-grown specimen from Hickory Hollow, and planted in back yard. Alive, looks healthy, but not growing much or at all.

Fagus sylvatica var. *atropunica* (European beech)

Do more research on this.

Lithocarpus (tanbark oak)

Do more research on this.

Quercus (oak)

Fast growing, tall, wide spreading, and makes excellent, long lived shade tree, but the yearly acorns and leaves can be a nuisance. Red oaks have pointy leaf shapes and the leaves tend to turn red in autumn, thus the name. White oaks have rounded leaf shapes and sweet acorns. Oaks are too common for my taste; I only like the unusual species.

Quercus macrocarpa (bur oak, burr oak)

Zones 3 to 8, has very large leaves, acorns in deep cups with fringed edges.

Quercus palustris (pin oak)

Attractive, commonly planted oak with branches that sweep downward.

Quercus phellos (willow oak)

Grows tall and broad with willow-like leaves.

Quercus stellata (post oak)

Has distinctive leaves with deep lobes.

Juglandaceae (walnut family) – its members grow best in the Southeast.

Juglans nigra (black walnut)

Zones 4 to 8, large, rounded tree, has long compound leaves and edible nut in thick shell. Need two trees for pollination. Prefers deep, rich, well-drained soil. Messy tree that drops large compound leaves and nuts. Allelopathic (toxic) to many other plants; avoid mulch made from discarded walnut branches and leaves.

Juglans regia (English walnut)

Zones 5 to 8, medium to large tree with open, spreading crown. Prefers deep, dry soil. Self-pollinating. Sometimes difficult to grow, or doesn't produce nuts.

Carya ovata (shagbark hickory)

Zones 4 to 9, slow to medium growth, large, narrow tree, can reach 70 feet high, large compound leaves. Mature trees have shaggy, peeling bark and produce dozens of edible, sweet nuts (once you extract them from the thick husk). Squirrels love the nuts. Messy tree; the nuts and falling compound leaves can be a nuisance each year, especially when squirrels contribute to the mess. Needs full sun and sustained moisture. Plant carefully in early spring. Excellent naturally-occurring tree on the Trescas' property, but I'd like my own in the front yard for shade.

Carya illinoensis (pecan)

Zones 5 to 9, large, symmetrical tree, one of the tallest native trees. Edible nuts. Need two trees for pollination. Prefers moist, well-drained soil. **Too large for my property?**
Desired cultivar(s):

- 'Cape Fear' and 'Stuart' – need both for pollination.
- Make sure any cultivar is winter hardy and scab resistant.

Myricaceae (bayberry family)

Myrica gale (sweet gale, bog myrtle)

Do more research on this.

Myrica pensylvanica (northern bayberry)

Female plants have clusters of grayish drupes. Need one male and one female for proper pollination. Prefers acidic soil with mulch, but tolerant of salt and infertile soils. Mine is doing excellently, planted on the property border near the corner of the Herons' house. Need to find out whether mine is male or female, and plant the other sex somewhere.

Malpighiales order

Clusiaceae

Hypericum (St. John'swort)

Mostly zones 6 and 7, low-growing shrub, can reach 4 feet high, has small yellow flowers producing reddish fruit, prefers somewhat dry, well-drained soil in full sun. Looks weedy in my opinion.

Euphorbiaceae

Mallotus (Japanese spurge shrub)

Hardy to zone 7, native to east Asia and Australia, out of range in GL?

Ricinus communis (castor oil plant)

Fast growing, suckering, perennial shrub or small tree, can reach 30 feet high in tropical regions, much less in colder regions. Its seeds are the source of castor oil, and also contain the poison ricin, mainly in their seed coats. Plant can vary greatly in its growth habit and appearance. Widespread in tropical regions, often grows as a weed in wasteland, but also planted in crops or as an ornamental. Not cold hardy, sometimes grown as an annual in non-tropical regions. Can any cultivars be grown as herbaceous perennials in zone 6?

Desired cultivar(s), information taken from Wikipedia, and heights refer to plants grown as annuals:

'Gibsonii' – has red-tinged leaves with reddish veins and pinkish-green seed pods, can reach 1.5 m high.

'Carmencita Pink' is similar, with pinkish-red stems, can reach 1.5 m high.

- 'Carmencita Bright Red' has red stems, dark purplish leaves and red seed pods, can reach 1.5 m high.

'Impala' – compact, only reaches 1.2 m high, with reddish foliage and stems, brightest on the young shoots.

- 'Red Spire' – tall, can reach 2 to 3 m high, with red stems and bronze foliage.
- 'Zanzibarensis' – tall, can reach 2 to 3 m high, with large, mid-green leaves (50 cm long) with white midribs.

Salicacea (willow family) includes aspens, cottonwoods, poplars, and willows, all of which are fast growing and relatively short lived. Most have very strong and invasive root systems, so they must not be planted too close to houses or water pipes as they will crack walls and pipes in their search for water. Aspens and poplars are common across wide swaths of western North America – often, all of the trees in an area are clones!

Populus (poplar)

Desired species or cultivar(s):

Populus tremuloides (quaking aspen) – grows across large swaths of western USA, **won't do well in GL.**

Populus grandidentata (bigtooth aspen) – has large leaves.

Populus nigra 'Italica' aka var. *italica* (Lombardy poplar) – Zones 3 to 9, tall, slender, columnar form, medium height, with very narrow crown. Cultivar is male clone selected in Lombardy, northern Italy, in the 1600s. Makes excellent windbreak, but looks scraggly. Would look great alternated with columnar conifer. Native to Mediterranean region, and adapted to hot, dry summers. **Outside of its Mediterranean climate, grows poorly and quickly succumbs to fungal diseases resulting from high humidity.**

Salix (willow)

Fast growing, leafs out early, loves moisture, and needs sustained moisture to thrive.

Prefers full sun. Easily transplanted in spring.

Drawbacks:

- Invades water pipes, so do not plant near house or septic system.
- Has shallow root system and can topple in a storm.

Salix discolor (pussy willow)

Small, sometimes shrubby and weedy, but beautiful. Flowers in winter, fruits in early spring. M and F catkins on separate trees. Male catkins are silvery and furry. Female catkins are white and fluffy.

✓ *Salix gracilistyla* 'Melanostachys' (black pussy willow)

Has purplish-black catkins in late winter to early spring. Thriving in the east corner of my property, alongside the intermittent creek.

Weeping willows:

Salix babylonica – zones 6 to 8, can reach 40 feet high.

Salix alba 'Tristis' aka *S.* 'Chrysocoma' aka *S. x sepulcralis* – zones 4 to 9.

Salix alba var. *vitellina* – zones 4 to 9.

I don't like any weeping willow because their bark is ugly, their branches are weak, they invade septic systems, they tend to topple over in strong storms, and they are overused.

Rosales order

Elaeagnaceae

Members of this family tend to be adapted to dry soil; some also tolerate high salinity.

Elaeagnus angustifolia (oleaster, Russian olive)

Zones 3 to 7, large shrub or small tree, has silver green, willow-like leaves, fragrant flowers, and yellowish, olive-like fruits. Prefers full sun. Tolerant of drought and salt. Widely planted in the USA, but is **considered invasive in some western states**.

Hippophae (sea-buckthorn)

Reminder for myself: Do more research on this plant.

Shepherdia (buffaloberry)

Hardy to zone 3, small shrub with bitter berries, native to western USA. Suitable for GL?

Moraceae (mulberry family) includes mulberries, figs, hops, hemp, and marijuana.

Maclura pomifera (Osage orange)

Produces large, inedible, ugly fruit and has thorny twigs. On the other hand, the tree is resistant to diseases and insects, and tolerant of drought, poor soil, salt, and pollution.

Morus rubra (red mulberry)

Has edible fruit, and leaves with different shapes, similar to sassafras but not as varied. Birds, squirrels, and some humans love the sweet red fruit, but fruit mess and bird droppings tend to accumulate under the tree's branches. I planted two saplings in 2006. One died, and the other struggled at first but is now thriving, almost growing *too* fast.

Rhamnaceae (buckthorn family)

Ceanothus (the blue-flowering species are sometimes known as blue blossom)

None of the blue-flowering cultivars of *Ceanothus* are hardy in zone 6, but *C. americanus* (New Jersey tea) is hardy in zones 4 to 8. *C. americanus* tolerates dry, sandy soil.

Rhamnus (buckthorn) – *R. frangula* 'Fine Line' is non-invasive and fern-like.

Rosaceae (rose family) includes apples, quinces, loquats, pears, strawberries, rose, blackberries, raspberries, apricots, cherries, plums, peaches, and almonds! Several introduced species of cherries and plums, including the peach, are naturalized in the eastern USA. *Alchemilla* (lady's mantle) also belongs in Rosaceae.

Rosaceae | Maloideae subfamily

Amelanchier (serviceberry)

Has soft white hairs on undersides of young leaves. Some hybrids have tasty, edible purple berries.

Desired species or cultivar(s):

- A. alnifolia* (serviceberry)
- A. arborea* (downy serviceberry)
- ✓ *A. canadensis* (Canadian serviceberry) – planted at property border.
- ✓ *Amelanchier* x *grandiflora* ‘Autumn Brilliance’ (Autumn Brilliance apple serviceberry) – conflicting information on parentage. Some websites say the parents are *A. arborea* (downy serviceberry) and *A. laevis* (Allegheny serviceberry). Other websites say the parents are *A. canadensis* (Canadian serviceberry) and *A. laevis*. Planted at property border.

Aronia (chokeberry)

Zones 3 and 4, upright growing shrub, bright red fruit are edible but bitter, good autumn color, prefers wet woods and swamps, makes good woodland edge or understory plant, not fussy about soil, resistant to disease and insects, tolerant of drought and pollution, easy to grow.

Desired species or cultivar(s):

- A. arbutifolia* ‘Brilliant’ – selected for striking autumn color.
- A. melanocarpa* ‘Viking’ and ‘Nero’ – selected for their larger fruit, suitable for jam-making.

- ✓ *Chaenomeles* (quince)

Linda Tresca has two on the property border in between her forsythias and lilacs. They look great for two weeks in spring, and look like tangled masses the rest of the year.

Cydonia (quince)

Do more research on this. Hardy in zone 6? Compare with *Chaenomeles*.

Cotoneaster

Zones 4 to 7, mostly shrubs but some can grow as small trees, looks like *Chaenomeles*, various species, some creepers, some tall enough to use as hedges.

Crataegus (hawthorne)

Zones 3 thru 8, grows as shrub or small tree, often has thorns or spines on their branches, many of the European species are susceptible to disease south of zone 4.

Desired species or cultivar(s):

C. laevigata 'Gireoudii'

C. phaenopyrum – native to USA.

C. viridis 'Winter King'

Eriobotrya (loquat)

Hardy to zone 8, evergreen, native to Asia, *E. japonica* has edible fruit.

Rhaphiolepis (hawthorn)

Has thick, dark evergreen leaves and dark blue fruit. Closely related to *Eriobotrya*. **Out of range in GL.**

Desired species or cultivar(s):

R. indica (Indian hawthorn) – has pink flowers.

R. umbellata (Yeddo hawthorn) – hardiest species, but even this is only hardy to **zone 7**. White flowers.

Heteromeles (Christmas berry, toyon)

Hardy to zone 8, evergreen, native to southwestern CA, **out of range in GL.**

Malus (apples and crabapples)

Zones 5 to 7, has showy clusters of flowers and fruit that birds and other animals love.

Prefers heavy loam. Most are susceptible to diseases and pests like other members of Rosaceae. Look for resistant cultivars. Easy to transplant. **Warning: Do not plant near junipers to avoid transmission of apple rust from the juniper to the *Malus* species.**

Desired cultivar(s):

- 'Centurion'
- 'Donald Wyman'
- 'Harvest Gold'

These three are highly resistant to disease and do not have pink flowers.

Photinia (red tip)

Some species are cold hardy in zone 6. Tall shrubs with white flowers and red fruit.

Pyracantha (firethorn)

Evergreen shrub with white flowers producing numerous red, orange, or yellow berries. Many species and cultivars. *Osteomeles* is closely related.

X *Pyracomeles vilmorinii* (cross between *Osteomeles* and *Pyracantha*)

Do more research on this.

Pyrus (pear)

The flowering pears have showy clusters of white flowers in spring, and good autumn color, but avoid 'Bradford', which tends to split in snowstorms. Look for improved disease resistant and split resistant cultivars.

Pyrus calleryana (Bradford pear, Callery pear)

Zones 4 to 8, medium height, looks like white cloud when in bloom, prefers full sun, tolerates pollution. **Warning: Has genetic flaw. Branches break in snowstorms.**

Sorbus (mountain ash)

Has clusters of small, orange fruit and good autumn color, but is susceptible to diseases and pests like other members of Rosaceae.

Rosaceae | Neillieae tribe (sister to Maloideae)

Physocarpus opulifolius (eastern ninebark)

Nearly indestructible shrub once established.

Desired cultivar(s):

- ✓ 'Diablo' – I'm quite impressed with this cultivar.
- 'Dart's Gold' – can grow 9 feet high, but more compact than the species, has bright yellow leaves, is durable and tough, easy to transplant.

Rosaceae | Rosoideae subfamily

Kerria japonica ‘Pleniflora’ (Japanese kerria cultivar)

Vigorous, upright, bushy shrub that grows 6 to 8 feet high, has profuse golden yellow flowers, and blooms about the same time as forsythia. Looks weedy in my opinion.

Potentilla fruticosa (bush cinquefoil)

Low-growing shrub or groundcover that prefers rich, moist soil in full sun, but tolerates poor soil, drought, and partial shade. There are many cultivars. I have some kind of naturally growing *Potentilla*, probably *P. simplex* (oldfield cinquefoil) or *P. sterilis* (barren strawberry) growing around a tree stump alongside Stellar Drive. *Fragraria* (strawberry) and *Waldsteinia* (also called barren strawberry) are closely related.

Rosa (rose)

Desired cultivar(s):

Meidiland cultivars – more disease resistant and carefree than most roses.

Rubus

Raspberry and blackberry. There are many cultivars, including some that are thornless.

Rosaceae | Dryadeae tribe (sister to Rosoideae)

Cercocarpus (mountain-mahogany) – zone 4 thru 6, native to arid, high altitude regions of western USA and Mexico, **won't do well in GL.**

Rosaceae | Spiraeoideae subfamily

Spiraea

Can grow 6 feet high and 10 feet wide, has arching branches with white flowers that hug the length of the branches, adapts well to most soils.

Desired species or cultivar(s):

- S. nipponica* ‘Snowmound’
- S. thunbergii*

Rosaceae | Amygdaloideae or Prunoideae subfamily

Exochorda (pearlbush)

Deciduous shrub with white flowers.

Oemleria cerasiformis (osoberry, Indian plum)

Hardy to zone 6, native to Pacific coast.

Prunus (cherry, plum, peach, almond)

Some varieties look good but have fruits that don't taste good. Some varieties, such as the commonly planted red flowering plum and Bradford pear, have weak limbs that snap in the first storm. Most are susceptible to diseases and pests like other members of Rosaceae, so be sure to plant resistant cultivars.

Prunus | subgenus *Amygdalus* (those members of *Prunus* with a corrugated seed shell, such as almonds and peaches)

Prunus persica (peach or nectarine, depending on cultivar)

Do more research on this.

Prunus dulcis (almond)

Zones 5 to 8, small tree, pretty blossoms in spring, need two for pollination, bears fruit in 3 to 5 years.

Desired cultivar(s):

Prunus x persicoides (Hall's hardy almond, cross between almond and peach)

Highlights:

- Hardy to zone 5, and larger than average peach tree.
- Fast growing ornamental tree with dense foliage and many pink flowers.
- Bears heavily about 2 to 3 years after planting.
- Late blooming for an almond, escaping late spring frosts.
- Early ripening, and self-fruitful.
- One person says "intense almond flavor rarely found in regular almonds".

Drawbacks:

- Kernel is tiny, and shells are harder than a regular almond's shell.
- Hassle to remove seed from peach, and to then extract tiny almond kernel from the seed. Too much effort involved. Often have to crack nuts with a vise.
- Many people say the nuts are bitter, unsatisfactory, and less flavorful than regular almonds. Need to boil nut before roasting to remove the bitter taste.
- Tree is not as easy to pollinate as a regular peach tree.
- Smooth skin of the fruit attracts insects more so than a regular peach, and any insect-attacked fruits fall off early.

Prunus | subgenus *Prunus* (plums and apricots) is further split into three sections.

Prunus | subgenus *Prunus* | section *Prunus* (Old World plums)

The following two are flowering plums. They both have purple leaves:

Prunus cerasifera ‘Thundercloud’ (cultivar of Myrobalan plum)
Zones 5 to 8, can grow 18 feet high, has pink-white flowers.

Prunus x cistena (purpleleaf sand cherry – I’m not sure if this belongs here. Might belong with *Lithocerasus* subgenus)
Zones 4 to 8, has fragrant pink-white flowers.

Prunus domestica (plum)

Desired cultivar(s):

‘Methley’

‘Bluefre’

Prunus | subgenus *Prunus* | section *Prunocerasus* (New World plums)

Prunus maritima (beach plum)

Makes an excellent hedge. Another good *Prunus* hedge is *P. laurocerasus* in the *Laurocerasus* subgenus, below.

Prunus | subgenus *Prunus* | section *Armeniaca* (apricots)

Prunus armeniaca (apricot, Armenian plum)

Small tree with dense, spreading canopy. Native to continental climate region. Slightly more cold-hardy than the peach, tolerating winter temperatures as cold as $-30\text{ }^{\circ}\text{C}$.

Limiting factor in apricot culture is spring frosts. They tend to flower very early, around the time of the vernal equinox even in northern locations, meaning spring frost often kills the flowers. The trees need some winter cold to bear and grow properly, and do well in Mediterranean climates where spring frosts are less severe, but there is some cool winter weather to allow a proper dormancy. The dry summer climate of these areas is best for good fruit production.

Prunus | subgenus *Cerasus* (cherries)

Prunus avium (sweet cherry)

Medium height tree, white flowers, peeling striped bark, and sweet red fruit that turn purple unless birds eat them first. There are many cultivars. Often require two cultivars for pollination.

Desired cultivar(s):

‘Stella’ – this cultivar is self-pollinating.

The following are flowering cherries, all in subgenus *Cerasus*:

Prunus sargentii (sargent cherry)

Can grow 50 feet high, has spreading branches and deep pink flowers, excellent autumn color, long lived.

Desired cultivar(s):

‘Columnaris’

Prunus serrulata ‘Kwanzan’

Can reach 20 feet high and nearly as wide, deep pink flowers, long lived.

Prunus serrulata ‘Tai Haku’

Medium height. Many varieties (narrow, weeping). White or pink flowers.

Prunus subhirtella ‘Pendula Plena Rosea’ (cultivar of higan cherry)

Gorgeous, weeping Japanese cherry.

Prunus ‘Accolade’ (selected from cross between *P. sargentii* and *P. subhirtella*)

Both of the parent species, sargent cherry and higan cherry, are long-lived and resilient, so this hybrid should, theoretically, have the best of both worlds. My only complaint is the pink flowers; I hate the color pink.

Prunus tomentosa (Nanking cherry)

Do more research on this.

Prunus x *yedoensis* (Yoshino cherry, cross probably between *P. speciosa* and *P. subhirtella*)

Do more research on this.

Prunus | subgenus *Lithocerasus* (dwarf cherries).

Prunus | subgenus *Padus* (bird cherries) includes *P. serotina* (black cherry) and *P. virginiana* (chokecherry).

Prunus | subgenus *Laurocerasus* (cherry laurels)

Prunus laurocerasus (European cherry laurel)

Tall shrub, makes good hedge.

Desired cultivar(s):

- 'Schipkaensis'
- 'Otto Luyken'

Rosaceae, disputed placement

Holodiscus discolor (creambush, ocean spray)

Hardy to zone 5, native to western USA, gracefully arching shrub, has hairy, dull green, coarsely toothed leaves, creamy white flowers in dense panicles, fine root system that remains near the surface, and stems with reddish brown shedding bark. Sweet aromatic odor in autumn. Seeds cling to clothing.

Holodiscus dumosus (rock spiraea, cliff spiraea, mountain spray)

Hardy to zone 3, hardier than *H. discolor*, and tolerant of drought.

Ulmaceae (elm family) includes elms and zelkovas.

Ulmus glabra var. *camperdownii* (camperdown elm)

This is a variety of Wych elm with pendant branches.

- ✓ *Ulmus americana* (American elm)

Grows fast, looks weedy in my opinion, may reach medium tree size but eventually succumbs to Dutch elm disease. I've tried to prune my naturally-occurring, originally weedy looking specimen into a more graceful shape.

Angiosperms | Eudicots | Core Eudicots | Rosids | Eurosids II (Malvids)

Malvales order

Cistaceae

Cistus (rockrose)

Zones 7 and 8, needs full sun, grows on dry, rocky soil, native to Mediterranean region, and requires alkaline soil. Out of range in GL.

Thymelaeaceae (mezereum family)

Daphne

Sweetly scented shrub, prefers full sun and neutral pH loam that is moist but not soggy.

Desired species or cultivar(s):

- Daphne x burkwoodii* 'Somerset'
- Daphne cneorum*

Dirca palustris (eastern leatherwood)

Do more research on this.

Malvaceae *sensu lato*, including former Sterculiaceae and Tiliaceae

Fremontodendron (flannel bush) – hardy to zone 8, native to southwestern USA and Mexico, out of range in GL.

Firmiana simplex (Chinese parasol tree)

Can grow up to 40 feet high. Has unusual-looking, deeply-lobed leaves. Native to Asia, and naturalized in southeast USA. Closely related to *Theobroma cacao* (chocolate tree), source of cocoa. Formerly in Sterculiaceae (chocolate family), but all of its members have been moved into Malvaceae *sensu lato*. Out of range in GL.

Hibiscus syriacus (rose-of-Sharon)

Easy to grow, can be trained into tall shrub or small tree, reseeds freely, all of my neighbors have this, too vigorous, weedy, and coarse-branched for my taste, not graceful.

Tilia (linden)

Slow growing, excellent, eventually massive shade tree, needs full sun and sustained moisture, transplants easily in early spring, easy to care for, tolerant of pollution.

Tilia americana (American basswood)

Tree has unusual attachment of flowers and fruits to leaf bract. The flowers produce honey with wonderful flavor.

Tilia ‘Harvest Gold’ (Mongolian linden cultivar, selected from cross between *Tilia mongolica* and *Tilia cordata*)

Hardy to zone 3, has attractive, serrated, golden leaves in autumn. Is Zone 6 too warm for this tree?

Tilia tomentosa (silver linden)

Zones 4 to 7, medium-fast growing, can reach 60 feet high, has silvery leaves that look gorgeous when the wind rustles them, smooth, beech-like bark.

Desired cultivar(s):

- ✓ ‘Sashazam’ aka ‘Satin Shadow’ – broad pyramidal, with uniform, symmetrical growth, can reach 50 feet high and 40 feet wide, good as street tree or lawn tree. Has attractive leaves that shimmer in the wind, showing their silvery undersides. Early reports indicate resistance to disease and Japanese beetles.
- ‘Sterling Silver’ – neat, large-growing, can reach 90 feet high, with dense crown and ascending branches, leaves emerge silvery and retain their blue-silver undersides all season, resists Japanese beetles and gypsy moths, and tolerates heat, drought, and pollution.

Sapindales order

Anacardiaceae includes such varied plants as cashew, mango, pistachio, poison ivy, and sumac, the last of which is one of the most ugly shrubs, in my opinion. Another exceedingly ugly shrub in the Sapindales order is *Ailanthus altissima* (so-called tree of heaven), in the family Simaroubaceae. Both sumac and ailanthus naturalize in urban areas, growing out of cracks in concrete, for example. Some members of Anacardiaceae, especially those in the *Toxicodendron* genus, such as cashews, poison ivy, and poison sumac, produce acrid, caustic, or poisonous juices or oils (cashews contain urushiol in their nut shells). Mango and pistachio are exceptions.

Cotinus (smoke tree)

Hardy to zone 5, can grow as large shrub or small tree, flowers look like plumes of smoke from a distance. Plant in dry, infertile soil to keep tree compact and prevent wilt.

Desired species or cultivar(s):

- ❑ One of the purple cultivars of *Cotinus coggygria* (European smoke tree)

Rutaceae (rue family) includes citrus trees. Some have naturalized in Florida.

Choisya (Mexican orange blossom)

Zones 7 and 8, evergreen aromatic shrub native to southwest USA and Mexico, **needs mild winters, out of range in GL.**

Poncirus (trifoliolate orange)

Reminder for myself: Do more research, sounds interesting, might be hardy in GL.

Skimmia japonica (Japanese skimmia)

Hardy to zone 7, native to warm temperate regions of Asia, evergreen, low-growing, compact, can reach up to 4 feet high, has red fruits. Doesn't like heavy (clay) soil. Prefers rich, humusy, moist, well-drained, acidic soil and shade. Tolerates drought once established. **Does not do well in eastern and midwestern USA, where prolonged summer droughts often occur. Out of range in GL?**

Phellodendron amurense (cork tree)

Zones 4 to 7, can reach 40 feet high, beautiful medium height shade tree, resembles oak when mature, broad spreading, open rounded, has clusters of blue-black fruits and deeply furrowed bark. Prefers full sun and sustained moisture, but tolerates drought.

Desired cultivar(s):

- ❑ 'Macho' – this cultivar does not produce any fruit.

Sapindaceae (soapberry family) includes maples, horsechestnuts (from Europe), buckeyes (from North America), and golden raintree.

✓ *Acer griseum* (paperbark maple)

Exfoliating bark. I planted one near the west corner.

Acer japonicum (full moon maple)

Has more lobes than usual, and lobes are shallower than usual, except for cultivars such as 'Aconitifolium'.

Desired cultivar(s):

✓ 'Aconitifolium' (fernleaf full moon maple) – I planted one near the west corner.

Acer palmatum (Japanese maple)

Dozens (perhaps hundreds?) of cultivars. I prefer the scarlet red, finely dissected, tall, open-branched cultivars. I don't like the purplish cultivars, and I don't like that this species tends to grow slowly, often taking years to reach tree size, if ever.

✓ *Acer pensylvanicum* (moosewood)

I transplanted two naturally occurring saplings from Peter and Evelyn's property in Kingston to my property. One died, but the other is doing extraordinary, and is now more than six feet tall.

Acer saccharum (sugar maple)

Leaves of sugar maple turn gorgeous colors in autumn. You can tap this species, as well as *Acer nigrum* (black maple), for their sugary sap. Needs acid, moist, well-drained soil. This species is particularly susceptible to 'maple decline', which is due to human-caused conditions such as acid rain and compacted soil. Keith at Hickory Hollow warned me that this tree grows quite large, but isn't that the point of a shade tree, to grow large?

Drawbacks:

- Shallow root system tends to wick up all surface moisture and preclude other plant life from growing underneath or nearby (just like *Fagus grandifolia*).
- Low drought tolerance (not as intolerant as *F. grandifolia*).

Desired cultivar(s):

✓ 'Legacy' – fast growing and more heat tolerant than the species. I planted two of these; one in the front yard for shade and one in the back yard for privacy from the neighbors.

Aesculus (horsechestnuts and buckeyes)

Horsechestnuts and buckeyes, formerly in their own family, Hippocastanaceae, have seeds that are edible for animals, but inedible or poisonous for humans. Some species have spiny seed capsules, or leaves and twigs with an unpleasant odor when bruised. Their dark, palmate leaves, spiky flowers ranging in color from red to white, and dense shade make them attractive. Pick cultivars that are disease and pest resistant.

- ✓ *Aesculus x carnea* 'Briotii' (ruby red horsechestnut, selected from cross between *Aesculus hippocastanum* and *Aesculus pavia*)

I planted one of these next to my driveway and near the road, because of its tolerance of drought and salt. Striking, dark green, palmate leaves, dark canopy, and red flowers in large upright panicles in mid-spring. Suffered trunk damage from one of my stray cat's claws, and has powdery mildew every year, but otherwise doing fine.

Aesculus hippocastanum (common horsechestnut)

The species is stunning on its own merits. There are mature specimens alongside Route 17A in Warwick. Too massive for my property?

Desired cultivar(s):

- ✓ 'Baumannii' (double-white horsechestnut) – planted in spring 2007, but suffered extreme damage from deer browsing and high winds that tore and shredded most of its leaves off. Transplanted to more sheltered location. Buds and twigs still look alive, and sapling may resuscitate itself next spring. If not, try again.

Aesculus octandra (yellow buckeye, sweet buckeye)

More rugged than the other species in *Aesculus* genus, with yellowish panicles.

- ✓ *Aesculus pavia* (red buckeye)

Prefers cool, moist areas. I planted one alongside a weakened section of the concrete block wall that separates my property from the Trescas' property; technically, one inch onto their side of the property line. They won't notice; there are too many forsythias hiding the view. Tree is still alive, but not growing much. Too much shade?

- ✓ *Aesculus turbinata* (Japanese horsechestnut)

I planted one near my weeping blackgum at the top of the property. The leaves are supposed to grow larger than the leaves of any other *Aesculus*. Mine are still tiny because they're on a tiny sapling.

Aesculus glabra (Ohio buckeye)

I think this is native to the Midwest. Will this grow well in the Northeast?

- ✓ *Aesculus parviflora* (bottlebrush buckeye)

I planted one along the border between my property and the Herons' property.

The “bastard stepchild” or the “proud king” of Sapindaceae, depending on what you think of this species set off by itself:

Koelreuteria paniculata (golden raintree)

Zones 5 to 9, fast growing, medium-high tree, yellow flowers in summer, then papery seed capsules. Prefers full sun. Resistant to diseases and pests, and tolerant of wind, heat, drought, pollution, and alkalinity. Looks weedy-looking and “demonic” up close, but looks beautiful from a distance when in flower. There are several young golden raintree specimens at a property near the intersection of Cromwell Hill Road and Lakes Road (behind Bocci’s Restaurant) in Monroe. There is also a beautiful, mature specimen near the hardware store lumberyard and the sharp curve in Route 210 at the northern tip of Greenwood Lake.

Cornales order

Cornaceae (dogwood family)

Cornus (dogwood)

Zones 3 to 6, many cultivars, some are shrubs and some are trees. Most dogwoods have flowers with four petals.

Cornus alba (Tatarian dogwood, Siberian dogwood)

Can reach 10 feet high, multistemmed, blue-white berries, red bark in winter.

Cornus sericea (American dogwood)

Zones 2 to 7, similar to *C. alba*, tolerant of wet soil.

Cornus controversa (giant dogwood)

Do more research on this.

Cornus florida (flowering dogwood)

Large shrub or small tree, often has pink flowers.

✓ *Cornus kousa* (Korean dogwood)

Has creamy, star-like flower bracts and edible, red, miniature strawberry-like fruit.

Disease and pest resistant.

Desired cultivar(s):

- 'Elizabeth Lustgarden' – weeping form of *kousa*.
- *Cornus* 'Porluck' – selected from cross between *C. capitata* and *C. kousa*.

Nyssaceae (tupelo family)

Davidia involucrata (dove tree)

Zones 6 to 8, prefers light shade, needs sustained moisture. Two different varieties.

Look for var. *vilmoriana*.

Nyssa sylvatica (blackgum, black tupelo)

Zones 4 to 9, slow to medium growing, can reach 50 feet high, makes excellent shade tree, has glossy, leathery leaves, has male and female flowers on separate trees, dark blue-black fruit in small clusters on long stalks, excellent, deep crimson autumn color, but leaves drop quickly. Simply gorgeous; the only other large trees with such deep colors are sassafras, sugar maple, and sweetgum. Prefers deep, rich, moist soil. In the wild, grows in swampy forests or near ponds or streams. Difficult to transplant because of its long taproot, so plant as young sapling in early spring. Tolerates heavy clay soil and pollution. I planted both the straight species, near the baldcypress in the north corner, and 'Pendula', near the river birch at the top of the property. The straight species never grew and eventually died. Try again? Note tupelo is pronounced 2-puh-low with accent on the "2".

Desired cultivar(s);

'Pendula' – planted in moist area at top of property. Thriving but growing slow.

Hydrangeaceae (hydrangea family)

Carpenteria (tree anemone)

Hardy to zone 7, evergreen shrub native to CA, closely related to *Philadelphus*, out of range in GL.

Deutzia

Zones 5 and 6, most are deciduous, most have white flowers.

Desired species or cultivar(s):

- Anything besides *D. gracilis*, which is too commonly planted.
- Deutzia x lemoinei* (Lemoine deutzia) - hybrid, difficult to find online.

Jamesia

Hardy to zone 5, native to interior western USA, out of range in GL.

Philadelphus (mock orange)

Zones 4 to 6, large, fast growing shrub, can grow up to 12 feet high and wide, has long branches and white flowers that smell like orange blossoms, good as border or informal hedge, prefers rich, well-drained, slightly acidic soil, relatively carefree, easy to grow.

Desired cultivar(s):

- Philadelphus x virginalis* 'Natchez' (large size).
- Philadelphus x lemoinei* 'Innocence' (medium size, more fragrant than species).

Hydrangea

Most hydrangeas do well in zones 5 and 6. Fast-growing shrub, large flower clusters in many shapes (mounded, globular, lacecap, or spiked) and colors (shades of white, pink, and blue, depending on the soil acidity and the cultivar). The “lacecap” hydrangeas have flat flower heads, each flower head consisting of both sterile, lacy, showy florets and fertile, non-showy florets. The “hortensia” hydrangeas have rounded flower heads. Hydrangeas prefer rich, moist, well-drained, somewhat acidic soil in full sun (especially in the colder part of their range) or bright partial shade. Mulch to keep roots moist. Good for borders. Enormous number of cultivars. Some are pH sensitive, having flowers that change colors depending on the soil acidity.

Hydrangea macrophylla (French hydrangea)

Desired cultivars:

- ‘All Summer Beauty’ – pH sensitive hortensia.
- ‘Alpengluhen’ – blue-flowered hortensia regardless of pH.
- I’d also like to try one of the blue-flowered, lacecap cultivars.

- Hydrangea arborescens* (smooth hydrangea, sevenbark) ‘Annabelle’

Has white, globular flower heads. Prefers cool, moist shade. Flowers are spikier than those of *H. paniculata* ‘Grandiflora’.

- Hydrangea paniculata* (panicked hydrangea, peegee hydrangea) ‘Grandiflora’

Has white, globular flower heads. Prefers cool, moist shade. Flowers are more rounded than those of *H. arborescens* ‘Annabelle’, and can look like giant snowballs that weigh down the branches.

Hydrangea quercifolia (oakleaf hydrangea)

Has long-lasting, white flowers in spikes, and unlike other hydrangeas, grows well in wooded areas in partial shade. Do not confuse with mapleleaf viburnum.

Desired cultivar(s):

- ‘Snow Queen’ (cultivars ‘Alison’ and ‘Snowflake’ are very similar).

Ericales order

Clethraceae (clethra family)

Clethra (summersweet)

Zones 4 to 6, can grow 6 feet high, has sweetly fragrant flower racemes (flower spikes) similar to catnip flowers, tends to grow as suckering shrub, leaves turn golden in autumn. Adaptable, tolerant of heat and drought, but prefers moist soil.

Clethra alnifolia (coastal sweetpepperbush)

Desired cultivar(s):

- 'Ruby Spice' – has red and white flowers, mine isn't growing much and has never flowered, try again in front yard where there's less shade?

- Clethra barbinervis* (Japanese clethra)

Ebenaceae (ebony family)

Diospyros virginiana (American persimmon)

Native to eastern North America, rugged, tolerates dry soils, but not a handsome tree. Has edible fruit that turn orange when ripe.

Ericaceae (heath family) includes blueberries, cranberries, heathers, andromedas, azaleas, rhododendrons, and mountain laurels. Members of this family tend to require acidic, moist, well-drained soil (not heavy clay) that is rich in organic matter. They can tolerate full sun as long as they can stay cool and moist; otherwise, they need part shade. They tend to grow as thick, sprawling shrubs. All do well with mulch. Some gardeners plant them directly on top of the soil, cover their roots with mulch, and keep them consistently moist. They should be planted in a cool microclimate.

All plants on the next two pages are members of Ericaceae.

Arbutus (strawberry bush, madrone) – grows in Southwest, out of range in GL.

Arctostaphylos uva-ursi (bearberry) – creeping groundcover.

Calluna vulgaris (Scotch heather)

Needs sustained moisture.

Desired cultivar(s):

Anything that does not have pink flowers.

Erica carnea (heather, spring heath)

Zones 6 to 8, low-growing, evergreen shrub or groundcover, has showy flower clusters, prefers moist, acidic soil in full sun or part shade, native to mountainous areas of Europe, grows in the wild as an understory plant under conifers or on rocky slopes. *Erica vagans* is similar to *E. carnea*.

Desired cultivar(s):

Anything that does not have pink flowers.

Enkianthus (red bells)

Zones 5 and 6, shrub or small tree with red, dangling, bell-shaped flowers.

Kalmia latifolia (mountain laurel)

Evergreen shrub, has beautiful clustered pinkish-white flowers and sticky seeds, easily transplanted, but can be difficult to grow because of its constellation of requirements.

Needs acidic, humusy soil, needs consistent moisture, needs excellent drainage, needs shade, and needs to stay cool in summer. There are several gorgeous cultivars, including exciting new cultivars with red flowers or fleckled corollas.

Desired cultivar(s):

‘Carousel’

‘Ostbo Red’

Leucothoe racemosa (swamp doghobble, sweetbells)

Zones 5 and 6, low-growing, evergreen, can grow six feet high and wide, arching branches droop from weight of its small, waxy, white, bell-shaped flowers, resembles *Pieris* (andromeda), prefers rich, moist, well-drained, acidic soil in shade, not drought tolerant, mulch to keep roots moist, protect from cold wind and sunscald.

Oxydendrum arboreum (sourwood)

Zones 6 to 9, slow growing (slower in northern part of range), can reach 50 feet high in southern part of range, native from Pennsylvania southward, graceful, wispy-looking shade tree, unusual appearance, excellent autumn color, prefers to grow alongside streams, transplant carefully into relatively infertile soil, tolerates dry soil and partial shade, but does not tolerate pollution.

Pieris (andromeda)

Hardy to zone 6, can grow 6 feet high, evergreen shrub, leaves turn bright red in spring, drooping flower clusters, prefers rich, well-drained, acidic soil in bright partial shade, protect from cold wind.

Desired cultivar(s):

- ✓ 'Mountain Fire' or 'Red Head' (I'm not sure which one I have)

Rhododendron (azaleas and rhododendrons)

Evergreen, has showy flowers, some species grow into tall, wide shrubs. This species includes azaleas, which are rhododendrons with smaller, less leathery leaves and have flowers spread more evenly across the bush. Prefers rich, moist, well-drained, acidic soil in full sun or bright partial shade, mulch to keep roots moist. There are several species, and dozens (hundreds?) of cultivars. Make sure chosen cultivar is hardy in zone 6; otherwise, plant may survive but not rebloom.

Desired species or cultivar(s):

I prefer those with yellow-orange flowers, such as:

- *Rhododendron calendulaceum* (flame azalea) – Forest Farm sent a tiny sapling, which quickly died. Too much sun? Try again, maybe from another source.
- ✓ *Rhododendron*, one of the Exbury or Knap Hill hybrids (I think these are all considered azaleas) – I planted 'Gibraltar'. Looks weak and unhealthy, hasn't grown beyond its original size, and still only has two or three leaves, no matter how much I apply compost and water. Maybe location on retaining wall is too dry and sunny? Try again in shadier location? Try different cultivar or species?
- ✓ *Rhododendron* 'Hino Crimson' (azalea) – suffered extreme transplant shock immediately after planting and lost nearly all of its leaves within the first week (even though I amended the soil with pine fines and compost, added Mycor Tree Saver, and watered deeply). Seems to have recovered slightly, with some new leaves on new branches. See if it recovers fully in the spring. I'm thinking one of three possibilities for its transplant shock: Either the pine fines wicked up too much moisture from this already-moist north corner, so their well-draining characteristic was moot, or the soil mixture that I created simply wasn't acidic enough for this cultivar, or the giant oak tree blocked too much sunlight.

Vaccinium

Genus includes blueberry, bilberry, lingonberry, huckleberry, and cranberry. Blueberry grows up to 5 feet high, prefers similar conditions as rhododendrons, and thrives at the edge of woodlands. As long as soil is acidic, *Vaccinium* transplants easily and grows as low-maintenance groundcover (lowbush) or shrub (either lowbush or highbush). Leaves turn shades of red in autumn. Blueberries are sweeter in the lowbush species.

Zenobia pulverulenta (dusty zenobia, honeycup)

Suckering shrub, bluish-green leaves, prefers moist soil in full sun.

Sapotaceae (sapote family) includes *Achras zapota* (sapodilla), a long-lived, tropical, evergreen tree that provides the chicle for chewing gum. Some members of this family have thorns. None of its members are hardy in zone 6, as far as I know.

Styracaceae (snowbell family)

Halesia teraptera aka *Halesia carolina* (Carolina silverbell, snowdrop tree)
Zones 4 to 8, native from West Virginia southward, use in front of an evergreen, as it is not very noticeable when not in bloom.

Styrax japonicum (Japanese snowbell)
Zones 5 to 8, open, wide spreading, can reach 30 feet high, small, bell-shaped flowers, prefers rich loam and full sun, but tolerates clay and shade.

Styrax obassia (fragrant snowbell)
Much more fragrant than *S. japonicum*, but leaves do not have good autumn color.

Symplocaceae (sweetleaf family) does not include *Stevia*, another plant that is also called sweet leaf.

✓ *Symplocos paniculata* (sapphireberry) – planted alongside puddingstone boulder on border between my property and Herons' property.

Theaceae (tea family)

Camellia – this genus includes the plant that tea comes from, *Camellia sinensis*.

Zones 7 to 8, evergreen shrub or small tree, flowers white, pink, red, prefers rich, moist, well-drained, acidic soil in partial shade, mulch to keep roots moist, protect from cold wind and sunscald, **out of range in GL**, but hardier cultivars are in development.

- Franklinia alatamaha* (Ben Franklin tree) – try again?

Zones 5 to 8, native to Georgia, can reach 30 feet high where it is hardy, slow to medium growth, transplant in early spring, shallow-rooted, prefers full sun and sustained moisture, can be difficult to keep happy. Species fled south during last ice age, then had difficulty re-adapting when ice retreated and almost went extinct. (Species has been extinct in the wild since 1803; humans saved species from complete extinction). Mine struggled, died to the ground each winter, backtracked each spring, and never grew much beyond its original size. I pulled it out and discarded it in 2007. Maybe a second one would thrive in another location on my property?

Stewartia

Difficult to transplant, transplant in early spring, prefers full sun, needs sustained moisture, excellent autumn color, mosaic-like bark.

- Stewartia sinensis* (Chinese stewartia)

Dirr raves about this species for its bark.

- Stewartia pseudocamelia* (Japanese stewartia)

Zones 5 to 7, medium to fast growing, can reach 40 feet high, most colorful bark in the genus, but smallest flowers, the flowers resemble camellias. Planted in shady area behind my spreading yew in 2006. Suffered transplant shock, but recovered in spring 2007.

- Stewartia koreana* (Korean stewartia)

Zones 5 to 7, smaller than *S. pseudocamelia*, can reach 30 feet high, more tolerant of heat, larger flowers.

Ternstroemia

Hardy to Zone 7, evergreen, slow growing, good hedge or screen, native to Asia, some botanists place this in its own family, Ternstroemiaceae.

Angiosperms | Eudicots | Core Eudicots | Asterids | Euasterids I (Lamiids)

Garryales order

Garryaceae

Aucuba japonica 'Variegata' (gold dust tree)
Shade tolerant, survives under densely rooted trees.

Garrya (silk tassel) – mostly zone 7 and 8, native to southwestern USA and Mexico, out of range in GL.

Gentianales order

Rubiaceae (madder family) includes coffee plant and cinchonas, source of quinine.

Gardenia (cape jasmine) – zones 8 to 11, extraordinarily fragrant, well out of range in GL.

Apocynaceae

Asclepias tuberosa (butterfly weed)

I planted four of these. Three are thriving, the fourth is hanging on.

Desired cultivar(s):

'Hello Yellow' – I planted this but it never germinated. Try again next spring?

Nerium oleander (rose bay) – zones 8 to 10, out of range in GL.

Solanales order

Convolvulaceae (morning glory family)

Ipomoea purpurea (common morning glory)

Desired cultivar(s):

'Grandpa Ott's'

'Star of Yelta'

I'm also looking for morning glories with sky blue flowers – different species, maybe?
Need to do some research.

Lamiales order

Bignoniaceae (bignonia family)

- ✓ *Catalpa speciosa* (northern catalpa)

Zones 4 to 8, has enormous leaves and long, thin green or brown seed capsules that look like legumes, but are not. Medium height. Widely planted. Scott Pender has one on his property, and that's good enough for me.

Chilopsis (desert willow) – native to Southwest, closely related to *Catalpa*, **out of range in GL.**

Lamiaceae (mint family) and **Verbenaceae** (verbena family) are very closely related. Some genera have shifted back and forth as scientists examine the DNA. Verbenaceae includes *Tectona grandis*, or teak. Many members of these families have the spiky appearance that I'm looking for on my wooden retaining wall.

- ✓ *Agastache* 'Blue Fortune'

Callicarpa (beautyberry)

Zones 5 to 7, plenty of fruit clustered at end of stems. They tend to grow fast and can look unkempt if not pruned. Some species of *Callicarpa* are less cold hardy and may die back to the ground in winter in NY.

Desired cultivar(s):

- 'Lactea' – white-fruited cultivar. I planted this in autumn 2006, but it died over the winter. Try again? Try different species altogether?

Caryopteris x clandonensis (bluebeard, blue-mist shrub, cross between *C. incana* and *C. mongolica*)

Small shrub with blue flowers (usually light blue, but some cultivars have dark blue flowers) attractive to butterflies and bumblebees, woody stems die back somewhat in the winter, prefers well-drained soil in full sun, but tolerates infertile soil and drought, doesn't need much care. Several cultivars exist.

Desired cultivar(s):

- ✓ 'Dark Knight'
- ✓ 'First Choice'
- ✓ 'Longwood Blue'

Clerodendrum (glory bower) – most are tropical but a few are temperate.

Colquhounia

Hardy to zone 8, from Himalayan region, **out of range in GL.**

✓ *Lavandula angustifolia* 'Munstead'

I have three of these. None died, but none grew much until September, when they suddenly started growing, albeit slowly. Took time to establish its root system first?

- *Monarda* 'Dwarf Fireball'
- ✓ *Monarda didyma* 'Gardenview Scarlet'

I have three of these, but only the one in full sun seems to have survived, and the two in partial shade withered away.

- *Nepeta cataria* 'Citriodora' (lemon catnip)

This barely grew and may have died.

- ✓ *Perovskia atriplicifolia* 'Filigran'

Strong performer.

- *Pycnanthemum* 'Eagle Rock'

- *Rosmarinus* (rosemary)

Most are hardy to zone 7 but some are hardy to zone 6. Native to Mediterranean region, can grow six feet high where hardy, but usually grows smaller, has pine-scented leaves, most species have bluish-gray flowers, easy to grow, prefers well-drained, somewhat dry soil, not fussy about soil fertility, but protect from cold wind.

Salvia nemorosa aka *Salvia x superba* (violet sage, meadow sage, woodland sage)

Desired cultivar(s):

- ✓ 'Blue Hill'
- ✓ 'Blue Queen'
- ✓ 'Caradonna'
- ✓ 'East Friesland'

- *Vitex* (chaste tree)

Grows tall, but as die-back perennial shrub in zone 6, similar to *Buddleja davidii*, has aromatic, palmately compound leaves similar to *Aesculus*, has profuse purple, lilac-like panicles (flower spikes), requires moist soil and full sun.

Oleaceae (olive family) includes ash, lilac, forsythia, jasmine, privet, and, of course, *Olea europaea*, or olive.

Chionanthus virginicus (fringe tree)

Slow growing, 12 to 20 feet maximum, wide spreading, tends to grow as a shrub, but can grow as a tree, especially if pruned up. Hanging clusters of delicate, white, aromatic flowers with narrow petals. Blue-black clusters of berries on long stalks. Needs full sun and moist conditions.

Forestiera (desert olive, swamp privet) – **hardy to zone 8**, native to Southeast, **out of range in GL**.

Fraxinus (ash)

Easy to transplant, adaptable, I have some type of ash in the north corner of my property.

Forsythia suspensa (weeping forsythia)

Attractive growing over low walls, but doesn't bloom much. Nearly everyone has regular forsythia, so I'm looking for something unusual.

Ligustrum (privet) – I have dozens of these on the 26MR property border.

Osmanthus americanus (devilwood)

Rugged hedge that prefers moist shade and acid soil, barely cold hardy in zone 6. Plant in warm, south-facing microclimate?

Syringa (lilac)

Zones 4 and 5, tall, upright shrub with lavender flowers, can grow 15 feet high and 12 feet wide, prefers neutral, well-drained soil in full sun or part shade, not very exciting after bloom, good as hedge. Linda Tresca has some type of lilac, probably *S. vulgaris* (common lilac), on her property along the border with mine. I hardly notice them except in spring when their smell is almost sickeningly sweet.

Syringa reticulata (Japanese tree lilac)

Can grow as large shrub or small tree. Has paniced flowers. Disease resistant. Makes excellent specimen.

Paulowniaceae (paulownia family)

Paulownia tomentosa (empress tree, princess tree)

Resembles catalpa, with vanilla-scented flowers, but **beware! This tree is adaptable, fast growing, and turns into a giant weed that produces thousands of seeds. Few redeeming qualities, according to Dirr.**

Plantaginaceae

Digitalis mertonensis (strawberry foxglove) – has spiky flowers.

Hebe – **hardy to zone 8**, native to New Zealand, attract butterflies, **out of range in GL.**

Veronica spicata (speedwell)

Desired cultivar(s):

✓ ‘Royal Candles’

Scrophulariaceae (figwort family)

Buddleja alternifolia (Alternate-leaf butterfly bush, fountain butterfly bush)

Hardy to zone 5, hardier than *daavidii* species, large shrub, can grow 15 feet high if left unpruned, can also train to grow as small weeping tree, has fine-textured, willow-like leaves and purple flowers on long, wispy, gracefully arching, pendulous branches, attracts butterflies, prefers rich, deep, light soil in full sun or light shade, resembles wisteria, but not as gaudy.

Desired cultivar(s):

□ ‘Argentea’

Buddleja davidii (butterfly bush)

Hardy to zone 5, can reach 8 feet high as a die-back perennial shrub in cold climates (zones 5 and 6). Cut dead stems down to live wood at end of winter. Flowers on long panicles (spikes) attract bees and butterflies, prefers rich, moist, loamy, well-drained soil in full sun, but can tolerate heat and drought once established. Many cultivars, most with flowers in shades of red and purple.

Desired cultivar(s):

✓ ‘Ellen’s Blue’ – I have two of these.

✓ ‘Black Knight’

Angiosperms | Eudicots | Core Eudicots | Asterids | Euasterids II (Campanulids)

Escalloniaceae – not yet placed in an order, but belongs in Euasterids II

Carpodetus (marble leaf) - **Hardy to zone 8**, resembles holly, **out of range in GL**.

Escallonia

Zone 7 and 8, evergreen, reddish flowers, honey fragrance, can grow in coastal areas but doesn't like dry winds, **out of range in GL**.

Apiales order

Araliaceae (ginseng family) includes *Aralia spinosa* (devil's walkingstick), which has spiny stalks, grows rapidly, and looks like an out-of-control weed. Why would anyone plant this? *Eleutherococcus* looks much more desirable.

Eleutherococcus pentaphyllus aka *Acanthopanax sieboldianus* aka *Eleutherococcus sieboldianus* (hardy aralia)

Zones 3 to 6. Attractive, **but has sharp thorns**.

Desired cultivar(s):

'Variegatus'

Fatsyhedera (botanical wonder)

Hardy to zone 8, groundcover, vine, or small shrub with weak branches, hybrid between fatsia and hederas, **out of range in GL**.

Kalopanax septemlobus (castor aralia)

Branches have prickles. Leaves are large, with deep lobes. Planted in between white fir and Douglas-fir in 2006. Several leaves immediately wilted, darkened, and fell off. Sapling was stripped bare within a matter of days, but it resurrected itself in spring 2007, and it is now more than a foot high in autumn 2007. Common name castor aralia came from its leaves' resemblance to those of *Ricinus communis*, the castor bean plant.

Polyscias (formerly *Nothopanax*) – evergreen, **hardy to zone 8**, **out of range in GL**.

Pittosporaceae

Pittosporum (cheese wood)

Hardy to zone 8, dense, evergreen shrub or small tree, has flowers that smell like orange blossoms similar to those of *Philadelphus*, does not like shearing, does well as accent, screen, windbreak, or informal hedge. **Out of range in GL**.

Aquifoliales order

Aquifoliaceae (holly family) includes many varieties and cultivars for specific needs, for example, with no spines, or with variegated leaves.

Ilex (holly)

More suited to NW USA and western Europe than to eastern USA, needs sustained moisture, doesn't like wind. I've noticed that hollies frequently look weak, drought stressed, and wind burned at Hickory Hollow. The two hollies that I transplanted from my neighbor's yard are both dead. Not an easy to grow plant in the Northeast? Find out which hollies are native to the Northeast, and where they normally grow in the wild.

Desired species or cultivar(s):

I want holly cultivars that are dense, not slow growing, and that have spineless, dark green, yellow blotched, evergreen leaves and red or yellow fruit.

Ilex verticillata (winterberry, Michigan holly)

Hardy to zone 4, deciduous shrub with soft, spineless leaves, long-lasting red berries, prefers rich, moist, acidic soil in full sun or part shade. Native to Northeast?

Desired cultivar(s):

'Sparkleberry'

Ilex x altaclerensis (Highclere holly, cross between *Ilex aquifolium* and *Ilex perado*)

Zones? Requirements?

Desired cultivar(s):

I like spineless or nearly spineless cultivars such as:

'Lawsoniana' (yellow-splashed leaves)

'Golden king' (broad yellow-edged leaves)

'Belgica Aurea' (long yellow-edged leaves).

Ilex aquifolium (English holly)

Zones? Requirements?

Has more fruit than *Ilex opaca*. There are many cultivars.

Desired cultivar(s):

I like spineless or nearly spineless cultivars such as:

'Pyramidalis Fructo Luteo' (yellow berries).

Ilex opaca (American holly)

Zones? Requirements? Native to Northeast? Any spineless cultivars?

Has leathery, spiny-toothed, evergreen leaves with bright red fruits.

Asterales order

Asteraceae

Baccharis (coyote bush)

Supposedly hardy to zone 5 or 6, but **native to southern and southeastern USA**, white flowers, dense but flexible stems, makes good windbreak.

Olearia (daisy bush)

Hardy to zone 8, evergreen, most are native to Australia and New Zealand, **out of range in GL**.

Achillea (yarrow)

Zones 3 to 9 for *A. millefolium*, common wildflower, soft, feathery, finely toothed leaves, white flowers, attractive to butterflies, drought tolerant, can become invasive. There are many cultivars.

✓ *Artemisia schmidtiana* 'Silver Mound' aka 'Silver Brocade' (silver mound artemisia, satiny wormwood).

Tolerates dry soil. Good filler in between other perennials. Planted near mailboxes.

Dipsicales order

Adoxaceae (moschatel family) includes elders and viburnums.

Sambucus (elderberry)

Closely related to viburnums, look into!

Viburnum

I love viburnums and already have dozens of them.

✓ *Viburnum acerifolium* (mapleleaf viburnum)

Tolerant of dry shade. Good color in autumn. Black fruit persist into winter. Colonizes with suckers. Do not confuse with oakleaf hydrangea.

✓ *Viburnum carlesii* (Koreanspice viburnum)

Flowers look somewhat like snowballs. Excellent fragrance. Dense. Leaves turn reddish in autumn.

✓ *Viburnum dentatum* (arrowwood)

Hardy to zone 4, excellent choice for attracting wildlife, can grow 10 feet high, has blue berries that birds love. Flat-topped flowers, bluish fruit, and reddish leaves in autumn. Useful as hedge. Salt tolerant. Grows larger than Koreanspice. I have both the straight species, in the back yard, and the 'Blue Muffin' cultivar, in the front yard.

Desired cultivar(s):

✓ 'Christom' aka 'Blue Muffin'.

Viburnum dilatatum (linden viburnum)

Flat-topped flowers, bright red fruit that persist into winter, and reddish leaves in autumn. Grows larger than Arrowwood.

Desired cultivar(s):

✓ 'Erie'

✓ 'Michael Dodge' – yellow-fruited cultivar.

Viburnum lantana (wayfaringtree viburnum)

Tolerant of high pH clay soils. Adaptable. Fruit change color as they mature. Grows larger than linden viburnum. Looks coarse in winter.

Desired cultivars:

✓ 'Aureum'

✓ 'Mohican'

Viburnum opulus (European cranberrybush viburnum)

Two sets of white flowers, one surrounding the other (lacecap). Fruit are red when ripe. Grows about same size as linden viburnum. Tolerates wet soil. Looks coarse in winter. **Susceptible to aphids.** I think this is what Jessica has on her property.

Viburnum plicatum (Japanese snowball viburnum)

The white snowball-like flowers of this viburnum resemble those of *Hydrangea arborescens* 'Grandiflora'. Can grow larger than wayfaringtree.

Desired cultivar(s):

'Newzam' aka 'Newport'

Viburnum plicatum var. *tomentosum* (doublefile viburnum)

Shade tolerant. Needs sustained moisture. Do not allow plant to dry out. Textured leaves. Flowers are similar to those in *Viburnum opulus*. Red fruit change to black. Grows about same size as linden viburnum.

Desired cultivar(s):

'Mariesii'

'Shasta'

Viburnum x pragense (Prague viburnum, selected from cross between *V. rhytidophyllum* and *V. utile*)

Dark, waxy, evergreen leaves, but not as beautiful as leatherleaf's leaves. Fragrant white flowers. Grows about same size as wayfaringtree.

Desired cultivar(s):

'Decker'

Viburnum x rhytidophylloides 'Allegheny' (Allegheny viburnum, also spelled Alleghany viburnum, selected from cross between *V. lantana* 'Mohican' and *V. rhytidophyllum*)

I've never seen *V. x rhytidophylloides* without this cultivar name. Has leaves and fruit that just scream, "Touch me!" Superior to either parent species, according to Dirr.

Viburnum rhytidophyllum (leatherleaf viburnum)

Stunning, leathery leaves. I found this naturalized at the edge of the phone company property in Morristown, NJ. Hickory Hollow sells this.

Desired cultivar(s):

'Green Trump'

- Viburnum sieboldii* (siebold viburnum)

Possibly the only viburnum that can grow tree size. Excellent as a specimen.
The fruit of the straight species is supposedly tastier to birds than the fruit of 'Seneca'.
Since my 'Seneca' hasn't done well, I'd like to try growing the straight species.
Desired cultivar(s):

- 'Seneca' – but it isn't growing, and I may pull it out.

I have several more species and cultivars. These are three cultivars that I want and don't have yet:

- V. plicatum* var. *tomentosum* 'Shasta'
- V. nudum* 'Bulk' (Brandywine™ naked witherod)
- V. x* 'Select D' (Summer Reflection™)

Caprifoliaceae (honeysuckle family) – most members of this family attract hummingbirds and butterflies. Most members of this family are viny shrubs, but some are quite beautiful regardless of their viny, somewhat weedy growing habit.

- *Abelia x grandiflora* ‘Edward Goucher’ – glossy abelia cultivar, maximum 4 or 5 feet height, likes moist, acid soil, protect from cold wind.

Heptacodium (seven-sons plant)

Hardy to zone 5, native to China, “crepe myrtle of the north”.

Kolkwitzia amabilis (beauty bush)

Grows similar to spiraea and honeysuckle, but **looks excessively weedy in my opinion.**
Does not have any non-pink cultivars as far as I know.

Leycesteria (pheasantberry)

Native to Himalayas and southwestern China, popular in gardens in Britain.

Lonicera (honeysuckle)

Many are rugged, tangled, and somewhat weedy looking, but some are attractive nonetheless, because of their flowers or foliage, and some function well as hedges, screens, or borders. Some can become invasive pests.

□ *Lonicera fragrantissima* (winter honeysuckle)

Large, spreading shrub with inconspicuous, strongly scented flowers in late winter, amazing fragrance in early spring for several weeks, adaptable and tolerant, keeps leaves well into autumn, forms dense shrub that can grow 10 feet high and wide, prefers moist, well-drained soil in full sun.

∩ *Lonicera x heckrottii* 'Gold Flame' (gold flame honeysuckle, selected from cross between *L. sempervirens* and *L. Americana*)

Has fragrant, pink and yellow flowers. Cold hardy climbing vine. Planted in 2005 near the east corner, but I'm not sure if this is the one that's still there. Liz Heron may have pulled out one of my honeysuckles in 2006, thinking it was a weed. I'm not sure which one remains, either this one or 'Serotina' (below).

Lonicera periclymenum (European honeysuckle aka late Dutch honeysuckle aka woodbine honeysuckle)

Red fragrant flowers and red fruit. Prefers moist, shady woods. Climbing vine that can grow tall.

Desired cultivar(s):

- ∩ 'Serotina' – I'm not sure if this is what remains. Liz Heron may have pulled one of my honeysuckles out in 2006, either this one or 'Gold Flame'. I didn't take good notes in 2005 as to which one I planted where.
- ✓ 'Winchester' – planted along cedar fence next to driveway in 2007. Continued growing well into autumn, started sprawling outward in October.

- ❑ *Symphoricarpos albus* (common snowberry aka coralberry)

Zones 3 thru 5, arching branches, sometimes roots where the branches touch the ground, has attractive white fruit which are mildly poisonous, native to eastern North America, almost all species in genus are native to North and Central America.

Weigela florida (old-fashioned weigela)

Hardy to zone 5, prefers moist, well-drained clay or loam in full sun, arching branches similar to forsythia, purplish flowers are persistent.

Desired cultivar(s):

- ✓ 'Alexandra' aka 'Wine and Roses' – I'm quite impressed with this.
- ❑ 'Variegata' – variegated leaves.
- ❑ 'Minuet' – dwarf with ruby red flowers and purple-tinged foliage.

Notes for myself:

Conditions common everywhere on property: No large rocks in soil anymore. Removed all large rocks from 2002 to 2005. No mucky, heavy clay. Took hardest, rockiest clay away, wheelbarrow after wheelbarrow, to Ursa Avenue dump. Mixed the remaining clay with loam from front yard, and/or mixed with compost from woods and pine fines from Hickory Hollow, creating well-draining clay loam.

Conditions in my front yard are fairly uniform: loamy, slightly acidic, dry, relatively nutrient poor soil and full sun. I want tall, dense shrubs and trees along the front yard perimeter for privacy, and to filter out some of the intense summer sun. Mix compost, pine fines, and other organic matter into the dry, loamy soil before planting.

Conditions on top of wooden retaining wall in the front yard: Full sun to part shade, often dry, drains well, approx. 6 inches of good soil, rich in organic matter, fortified with pine fines and compost, on top of several feet of crushed stone.

Desired appearance in front yard: Trailing, creeping plants in foreground, growing on top of retaining wall closest to the road, with spiky, upright growing plants with bright flowers midway back, preferably red, bright orange, or deep blue, NOT pink. Shrubs behind and in between the spiky plants, any size OK, then trees along inner edge of retaining wall, then small or medium, septic-safe shrubs around border of leach field.

Trees in my back yard should be those that prefer cooler, moister, more acidic conditions, since my back yard is still, essentially, a mountain swamp with an intermittent creek running along the border. Soil and sunlight conditions vary, but there is generally more organic matter, more shade, and less wind than in the front yard. I transported great amounts of excess loam from the front yard into certain parts of the back yard, and there is also clay resulting from excavation activity, and \$500 worth of pine fines purchased from Hickory Hollow.

Write source keys next to desired species and cultivars. Write date of purchase, intended planting location, and any other useful information.

HH = Hickory Hollow in Tuxedo

FF = Forest Farm (www.forestfarm.com)

NHN = Nature Hills Nursery (www.naturehills.com)

BB = Rose Franklin's Perennials (www.butterflybushes.com)

JS = Jung Seeds (www.jungseed.com)

PDN = Plant Delights Nursery (www.plantdelights.com)

PGHF = Papa Geno's Herb Farm (www.papagenos.com)

WG = Wayside Gardens (www.waysidegardens.com)

SL = Seedland (www.seedland.com)

SR = Whatcom Seed Company (www.seedrack.com)

Ebay = be careful, seeds often mis-identified, plants sometimes packaged poorly.