

Garden Conifers: The Bones of Every Garden

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Gardening is one of the most accessible and rewarding ways not only for expressing yourself in an artistic manner but also for presenting your artwork to other people. When creating a palette of plant forms, colors, and textures, it is the conifers that provide gardeners the main structure on which the rest of the artwork depends. We've been collecting conifers for 30 years, and are still amazed at how much strength conifers add to gardens during all the seasons of the year. We think they should be the "bones" of every garden.

The diverse attributes of conifers enable the gardener to create a rather amazing landscape. For example, conifers come in every shape: there are conifers that are rounded (globose), weeping, narrow upright (fasigate), broad upright, prostrate, spreading, irregular, pyramidal, or mounding. Conifers also come in just about every color: green, yellow, blue, orange, and purple. Some have bicolor needle or stripes; others offer spots or patches. Some conifers are feathery; others have stiff needles; all except the Junipers and Yews (which produce berries) bear pinecones in an incredible assortment of colors and shapes. Add their seasonal changes, and you have a garden with pizzazz all year.

Nonetheless, many gardeners are daunted by the sheer number and diversity of conifers and are unsure how to design with any but the most common evergreens. However, we are encouraged that more and more people are breaking away from creating a single straight line of one species of conifers as a hedge or fence line. While we agree that large-scale conifers are really the most useful plant in your gardener's palette for screening or windbreaks, they are far more interesting when planted in irregular triangles using more ornamental or slower growing forms in the foreground.

We really love the American mixed perennial border and encourage siting gardens on a low, slanting presidium, which faces the windows and other straight-lines of the house. Why give the neighbor across the street the best plants to see? Site your gardens where you can enjoy them when looking out from your kitchen table or from your favorite chair. Slope adds interest to a flat surface and gives you an opportunity to stage the dwarf plants toward your house rather than toward your neighbor. Your design should also protect any positive viewing lines into the neighbor's property; in contrast, large and intermediate conifers can be used to block unwanted sightlines.

Once some of the larger design concepts are identified, it is important to look at each conifer individually. Like sculpture, each one offers a unique art form, which must be handled with some care and a good eye. We've seen some great combinations and some really nasty ones. To protect yourself, we recommend contrasting one pendulous or very unusual shape with a geometric (or globe) form and a pyramidal form. That combination almost always seems to look good. One example of this arrangement is to combine the weeping form of *Pinus strobus* 'Pendula' with the pyramidal *Picea abies* 'Clanbrassiliana Stricta' and the globose *Picea pungens* 'Glauca Globosa'. Another pleasing arrangement can be created using a globose *Pinus strobus* 'Blue Shag', a weeping *Picea abies* 'Pendula', and a pyramidal *Picea pungens* 'Montgomery'. Whoever said that we'd never use geometry!

What You Need to Know Before You Plant Conifers

Regardless of how well you can design with shape and color, you need to be sure that your property is suitable for conifers. Before planting them, you must be able to answer several critical questions regarding your garden's drainage situation, the amount of sun your garden receives during the summer, and the growth rate of the conifer you think you might like to include in your garden.

What Kind of Drainage Does Your Soil Have?

Most conifers thrive in well-drained sandy-clay loam soil in full sun. Many gardeners are blessed with this situation, but sadly, many others are faced with trying to landscape around houses in new subdivisions. This is like trying to garden on a strip mine: all the good topsoil has been removed and only the poor subsoil and bad drainage remains. Actually, Chicago is such an urbanized region (which historically was wetland anyway) that soil often needs help, especially where drainage is concerned.

Test your soils drainage by digging a 2' deep hole with a posthole digger. Fill the hole with water, let it drain and fill it again. If the hole does not drain in two hours, the soil is limited for conifers. In heavy clay, raise half the root ball out of the clay layer and surround the protruding half with good topsoil. We also recommend removing narrow channels of soil leading away from the plant (like spokes of a wheel) and replacing that soil with sand or pea gravel. With conifers, water must drain away easily or the roots will rot.

If your soil is heavy, wet and can't be amended, there are some conifers that are naturally predisposed to such conditions. You should choose a deciduous conifer such as a larch [*Larix*], baldcypress [*Taxodium*], or dawn redwood [*Metasequoia*]. A conifer such as arborvitae [*Thuja*], which is often found along stream banks in the wild, might be tried but will probably not grow to full height. While some conifers, such as junipers [*Juniperus*], are tough enough to withstand just about anything, others such as the yews [*Taxus*], pines [*Pinus*], spruce [*Picea*], and fir [*Abies*] demand good drainage and will die or become stunted without it.

One more thing: if you are planting under or near larger (overstory) trees, remember that they consume most of the available water. Make sure the conifers that you plant underneath large trees receive enough water.

How Much Sun Falls on Your Garden?

The second major consideration for conifers is the amount of sun your garden receives in the summer. Most conifers want to live in full sun. If you must plant conifers in the shade, the conifers, which will tolerate it the best, are arborvitae [*Thuja*], hemlocks [*Tsuga*], and yews [*Taxus*]. If your site receives some shade but at least 4-5 hours of sun each day in summer, then we would recommend species that can tolerate partial shade such as Douglas fir [*Pseudotsuga menziesii*], Eastern white pine [*Pinus strobus*], Swiss stone pine [*Pinus cembra*], and Norway spruce [*Picea abies*].

How Fast Will the Conifer Grow?

One more critical factor: How fast will the conifer grow? Studying growth rates will help you in properly selecting and siting plants. We've all seen (and too often!) the results of planting fast-growing trees too close to buildings and to each other. Like baby raccoons, conifers are cute when they're small but can quickly grow up into monsters! By using slower-growing plants, gardeners can cut the growth rate in half and double the life of the planting-before the plants outgrow the available space.

The American Conifer Society [ACS] has changed its emphasis from "dwarf conifer" because the word "dwarf" is such a relative term. Therefore, ACS has adopted the following four size categories * for garden conifers.

Sizes of Garden Conifers

Category	Growth Per Yr.	Size at 10-15 years
Miniature (M)	< 3"	2-3'
Dwarf (D)	3-6"	3-6'
Intermediate (I)	6-12"	6-15'
Large (L)	12"+	15'+

Intermediate and large conifers have growth rates that compare to those of typical deciduous trees. They can be expected to grow from 6-12" per year. At our nursery, most of the conifers are dwarf, or slow-growing, varieties, but on a separate page at the end of the article, we have indicated the growth rate (M, D, I, L) of each conifer described here. You can therefore tell that the intermediate 'Golden Splendor' hemlock is a pyramidal tree that will grow about 6" a year, resulting in a 6' tree in ten years. If you want a slower growing, pyramidal golden hemlock, look to the dwarf hemlock 'New Gold': it will only be 4' high in ten years. That's a big difference in ultimate size in a garden!

Selecting Conifers for the Upper Midwest

At our nursery, you will see over 50,000 plants and 2,500 cultivars of garden conifers from all over the world, but, alas, you won't see every conifer type. Some, such as Hinoki falsecypress [Chamaecyparis obtusa], which is so often featured in gardening books, is not generally hardy in Zone 5a (although these and other tender trees such as Japanese maples might survive closer to Lake Michigan: see footnote). We also don't grow too many junipers, arborvitae, or yews because we don't like them as much as other species. Our collection even includes conifers so rare that there's only one in the world.

By the way, our fondness for collecting interesting trees means that you'll see other dwarf or slow-growing deciduous trees. We now carry twenty cultivars of ginkgo, fifteen selections of European beech, along with other cool rarities like Siberian pea shrubs, paperbark maples, magnolias, daphnes, weeping katsuras, and koelruterias. Also, any plant that is fastigate has a home here. Actually, you don't buy a plant from us, you adopt it!

Conifer Forms

Conifers come in a wide variety of forms. Out of hundreds of selections on the market, we list here some of our favorites in each shape category.

Pyramidal forms: The pyramidal conifers we particularly like are the blue Colorado spruce 'Montgomery' [Picea pungens 'Montgomery'], the green Norway spruce 'Clanbrassiliana Stricta' [Picea abies 'Clanbrassiliana Stricta'], and the green Norway spruce 'Compacta Asselyn' [Picea abies 'Compacta Asselyn']. These are all considered dwarfs, for they grow only between 3-6' each year. By the way, Picea pungens 'Montgomery' is one of our Top 10 favorite conifers. Our specimen of Picea pungens 'Montgomery' is 35 years old and is now 6' tall and 8' wide. It is dark blue and a perfect pyramid.

Footnote: You can create a microclimate in your yard for these plants by creating a protected "courtyard" effect away from exposure to prevailing southern winds. Surprisingly, the north side of your house is superlative to tender plants because it keeps plants in dormancy (shade) longer into the springtime. The plant is therefore protected from freeze damage until the sun rises higher in the summer sky. Farmers plant orchards on north facing slopes, for examples, to assure that the fruit trees don't bloom so early that they are damaged by late spring frosts.

The tiniest (aka slowest growing) pyramids are Norway spruce 'Mucronata' [Picea abies 'Mucronata'] and the white spruces 'Jean's Dilly' and 'Pixie' [Picea Glauca 'Jean's Dilly'; Picea Glauca 'Pixie']. They grow less than 3" a year!

For shady areas, seek out these pyramidal hemlocks: Tsuga canadensis 'Lewis', 'Geneva', or 'Jervis'. They will only grow to 4' in ten years- probably 8-10' in 20 years- so they are very good for a small yard.

Some economical, compact, low green spreaders are also Norway spruces. We think Picea abies 'Pumila', 'Repens', or 'Elegans' are terrific choices if you want plants that grow 3' wide and less than 2' tall in ten years. Combine any of these with dwarf perennials and some choice boulders and you've got a winning combination for your foundation garden. One great boulder is worth ten good trees, you know.

Slow-growing globe-shaped (globose) conifers include the blue Colorado spruce 'Glauca Globosa' [Picea pungens 'Glauca Globosa'], the Eastern white pine 'Blue Shag' [Pinus strobus 'Blue Shag'], or the very slow growing P.s 'Horsford', which grows in the shape of a very tight ball. These trees are "gardeners delights" because no pruning is required to maintain their round shape.