Summer Meander

Discover the dazzling variety of flowers and leaves in the Arboretum during summer visits!



Summer blossoming Mountain Laurels in the Legacy Garden

Age: All Time: 45+ minutes

The Arboretum is glorious in summer! So much to see along every path! This Summer Meander explores the Arboretum from west to east, and discovers highlights in these gardens:

- 1. Woodland Garden
- 2. Perennial Garden
- 3. Legacy Garden

Come see flowers of every description along with the hummingbirds and butterflies they attract. Trees that had bare branches all winter are leafcovered. Take time to notice the many different leaves on this tour: you will see leaves of many sizes, colors, shapes, textures, and edges in our Arboretum! The below photos show the variety of leaves in the Arboretum. How many of these leaves can you find on your tour today? Check them off as you see them. Whatever leaves you miss seeing on this visit, you can look for the next time you come. And you will likely see some very interesting leaves that aren't shown below.



To begin this tour, walk west across the Meadow and enter the Woodland Garden.

1. Woodland Garden



The Woodland Garden has developed over time under the cover of native Douglas firs; it highlights plants that thrive in Northwest woodlands.



You will be in the midst of more than 50 Japanese Maple trees. These are some of the most beautiful trees in the Woodland Garden! In early spring they leaf out after being bare-branched during winter months.

Our Arboretum is home to many different kinds of Japanese Maple trees. You will notice that each tree has distinctive height, shape, and leaves of different shapes, colors, and textures. Take some time to walk the paths among the Japanese Maples. The first one on your

left is the Anniversary Japanese Maple, which was planted in 1990 to commemorate the Arboretum's 25th anniversary.

Here are a few of the Japanese Maple leaves you will see in the Woodland Garden, very different, but all are Japanese Maple tree leaves:



Maybe you already have a favorite Japanese Maple leaf. Today, find some new favorites!

Here's how:

- Choose a Japanese Maple tree and find a comfortable place to sit or stand nearby and observe it for a few minutes. Notice the height and shape of the tree, and the shapes, colors, and textures of the leaves.
- Then observe another Japanese Maple tree. Observe it for a few minutes. Notice its height and shape, and the shapes, colors, and textures of its leaves.
- Think about how the two trees and their leaves are similar and different. If you are with a friend, tell them what you think. Listen to their ideas about the two trees they compared.
- If you have paper and pencil, you can sketch the leaves to help you remember them and describe them.

Follow the trail west through the Woodland Garden beyond the Japanese Maple trees to where it ends at a Douglas Fir tree with a mound at the base.

Western Thatch Ant Mound



Stay on the trail and do not touch the **mound, which is home to about 40,000 ants** who fiercely guard their home by biting intruders. Their habitat can extend 4 feet below ground. You can observe multitudes of worker ants bringing vegetation and insects to feed their larvae in their nest.

Ants create thatch mounds by collecting grass, leaves, and twigs, and then weaving them together using silk produced from glands on their bodies. They also bring leaves and grass inside their nest where they break it down and mix it with the soil. This improves soil structure and regulates air circulation, temperature, and moisture levels within the nest. Thatch ants keep the area around their mound clear of insect pests. Numerous thatch ant mounds are in the Arboretum.

Turn around and walk east into the Meadow. Just before you reach the gazebo, turn right onto the path that will take you into another part of the Woodland Garden. The woods are filled with beautiful summer-blooming Hydrangeas.

Hydrangeas

Hydrangeas are an old-fashioned favorite! Flowers can be shaped like a big pom-pom (mophead), a flat, lacy top (lacecap) or a panicle (cone-shaped cluster). Leaves can be solid green or **variegated (different colors)** with white or yellow. Most are shrubs (3 – 9 feet tall), while some are small trees, and other hydrangeas climb up trees. **The five main types of hydrangeas are Bigleaf, Panicle, Smooth, Oakleaf,** and **Climbing.** Look for each of the following in the Woodland Garden as you read the descriptions:

Bigleaf Hydrangeas include these categories:



Mopheads feature large round flowerheads that resemble pom-poms or the head of a mop.



Lacecaps bear round, flat flowerheads with a center core of subdued, small flowers surrounded by outer rings of larger flowers. **Mountain Hydrangea** is similar to a lacecap except it is smaller and more compact with smaller flowers and leaves.



Panicle Hydrangeas feature large cone-shaped flower clusters. Florets may open pale green, aging to white.



Smooth Hydrangeas are known for their large creamy white flowers. When the shrub first blooms, it is a light green color and as it matures it turns to a creamy white. The leaves are typically heart-shaped and dark green. Look for an example of a Smooth hydrangea planted near the gazebo.



Oakleaf Hydrangeas have lobed, oak-like, dark green leaves. They have cone-shaped flower clusters that can be up to 12 inches tall. The flowers begin white and age in color to pink. In fall the blooms will be dry, papery, and rusty-brown in color, and their leaves will be red, bronze, and purple.



Climbing Hydrangeas climb by twining and by using their small aerial roots along the stems. Their white lacecap flowers bloom all summer.



Another hydrangea of note is the **Rough-leaved Hydrangea** that has broad oval leaves with a downy lower surface. This shrub is 10 feet tall and has bluish-purple lacecap flowers.

Now that you are familiar with Hydrangeas, you will notice them in other gardens in the Arboretum. For example, **when you visit the Legacy Garden**, look for a Panicle Hydrangea as tall as a tree.



After you enjoy the Hydrangeas in the Woodland Garden, **return to the Meadow and head east**. Make a stop at the **Ginkgo Biloba Tree** standing alone. The Ginkgo is a descendant of trees that first appeared on the earth more than 290 million years ago. The unique leaves are fan shaped. So fun to sketch! Return in autumn to see the nowgreen leaves turn gold and then fall to the ground.



Walk east through the Meadow to get to the next stop: the Perennial Garden with its many garden beds.

2. Perennial Garden



The summer Perennial Garden is full of colorful blossoms, butterflies, and hummingbirds! **Guess how many butterflies and hummingbirds you will see today**. Now count them while you wander amongst the Perennial Garden beds and see how close your guess came to the number you counted.

Explore the Perennial Garden beds to see flowers of many colors and shapes. **Play the Find the Flower Game**. **Here's how:**

- > Walk around the Perennial Garden beds and look closely at the flowering plants to become familiar with the flowers.
- > Choose three clues from the list below.
- Read a clue and look carefully at the beds to find a plant and flower that best matches the description.
- > See the photos below to check your guesses.
- Choose three more clues and try to match the flowers with the clues. Note that some flowers may be early summer bloomers and are no longer in blossom when you visit the Arboretum; choose another clue!

Clues:

- A. Look for a plant about 2 feet tall. Its green leaves are pointed like a spear at the narrow end and can be several inches long. The flowers look like fireworks—they have thin dark blue petals that shoot out from a purple center. The flowers have a sweet fragrance.
- B. This plant is about 3 feet tall. Its green leaves are pointed and have serrated (toothed) leaves. The flowers hang like pendants and have four long red sepals (outer petals) and four purple inner petals. This flower is in nearly every Perennial Garden bed and blooms all summer long. Perhaps you can find other color combinations of this same flower.
- C. These shrubs are tall and have many branches. The flowers are fragrant and white or pink in color. Be careful, some of the stems have thorns. Deer like to eat this entire plant: flowers, stems, and thorns!

- D. Can you find a plant that spreads out to cover lots of space? It has gray-green foliage that smells minty. Very small lavender-colored tubular flowers grow on spikes beginning in early summer.
- E. This plant grows in a clump with very long narrow leaves that have pointed ends. Each yellow or orange flower is on a long stem. The flower has three sepals (outer petals) and three inner petals of similar color.
- F. Find a plant that has leaves that grow low to the ground and delicate blue flowers extending on stems above the leaves. The leaves have separate lobes with scalloped edges. The flowers have five petals
- G. Can you find a plant that grows in a clump of long stems 2 or more feet tall? The leaves grow along the lower third of the stem and tiny flowers grow along the upper two-thirds. Each pair of leaves grow opposite each other on the stems. Tiny dark blue tubular flowers grow on small shoots along the stem; each blossom has an upper and lower lip.
- H. This plant should be easy to find. It is a climbing vine with stems that twist and curl around supporting structures to anchor the plant as it climbs. The blue four-petaled flowers grow on the ends of stems.
- Can you find a plant that is about 3 feet tall and has very long tubular light yellow flowers, often appearing in clusters? The leaves are narrow with pointed tips and serrated edges. Hummingbirds like these flowers, so don't be surprised if you see one flitting around.
- J. This bushy plant is about 3 feet tall. Its shoots and stems are reddish-brown, and its green leaves have serrated edges. The lovely white flowers have five thin petals and sit in a red calyx. The flowers hover above the foliage like little stars.
- K. Look for a plant that is a sturdy slender stem 5 6 feet tall. It has clusters of small, five-petaled, tube-shaped purple flowers sitting atop. Is this plant taller than you?
- L. These low-growing plants have beautiful green and silver heartshaped leaves with serrated edges. The magenta flowers have little hoods or caps that cover their "throats." Bumblebees especially like these flowers.

Answers:



Follow the Arboretum main trail past the Perennial Garden. Legacy Garden is on your left and Smith-Mossman Garden is on your right. We will explore the Legacy Garden.

3. Legacy Garden



A legacy is something left behind to remember and commemorate someone's contribution. The Legacy Garden celebrates two well-known PNW gardeners by preserving plants from their personal gardens. There are so many spring treasures in this garden: come and see!

Deciduous Conifers

Some people may not know that conifer needles are leaves. And some people think that all **conifers (needle-leaved trees)** are **evergreen (hold onto their needles during the winter).** But, some conifers are **deciduous, meaning they drop their needle leaves and are bare-branched all winter**. There are five known deciduous conifers in the world; we have three growing here in the Legacy Garden. Meander the paths to find them.



Tamarack Tree

The **Tamarack** has clusters of needles arranged along the stems and branches. The needles are blue-green during spring and summer. You will also see light brown seed cones in summer. The needles will turn dazzling yellow in the fall before dropping.





Golden Larch

In spring, the **Golden Larch** tree has clusters of soft star-like yellow-green needles along with clusters of erect pollen cones. In summer the needles are emerald green, and artichoke-shaped seed cones emerge. In fall, the needles turn goldenyellow to rich copper, and the seed cones turn tan and dry, and disintegrate releasing the seeds.







Dawn Redwood

Fossil records indicate that the **Dawn Redwood** existed on earth as many as 50 million years ago. Egg-shaped seed cones and sprays of soft feathery golden needles emerge in spring. The cultivated variety (cultivar) in our Arboretum has yellow needle leaves; a regular Dawn Redwood has green needles. The needles remain golden yellow through summer. In fall, the needles turn orange-brown and the cones shed winged seeds.



Magnolias

Our Arboretum has several Magnolia trees, some of which you may have seen blossom in spring. Now enjoy two stand-out summer-blooming Magnolias in the Legacy Garden.



Southern Magnolia

The stately **Southern Magnolia** is evergreen (holds its leaves over winter). The lemonyscented creamy-white 12-inch cup-shape flowers grow on the ends of stems in summer. Its 8-inch leaves are leathery and shiny green; they can be dried and used in decorations. In fall, the tree produces large cone-shaped brown seed pods. The pods will open to reveal bright red seeds hanging by silken threads.





Big Leaf Magnolia

Big Leaf Magnolia is deciduous (loses its leaves). Look at those leaves! They are 12 inches long or longer—up to 3 feet long! How long is the biggest leaf you see? The fragrant white flowers are big as well, 8 – 14 inches across! Flowers give way to cone-like open seed pods 10 inches in length and have a velvety texture; the seeds mature to red in late summer. We have two Bigleaf Magnolia trees in the Legacy Garden.



Interesting Leaves!

While you are in the vicinity of the Magnolias, there are several trees and shrubs nearby that have beautiful **variegated (different colors)** leaves you must see! **Variegation is caused by the lack of the pigment chlorophyll** (which reflects green to our eyes) in cells of portions of a leaf.



Next to one of the Bigleaf Magnolias you will find the showy **Eskimo Sunset Sycamore Maple** tree. From a distance, the leaves look red, but get closer. How would describe the color of its leaves?

New spring leaves emerge orange-pink, maturing in summer to shades of deep green splashed with cream, tan, and pink on the top, with rich red undersides. We see green where the pigment chlorophyll is being reflected to our eyes; we see red where the pigment anthocyanin is reflected; we see white where no pigment is being reflected. Nature is a very good artist, don't you agree!



Along the path on the right side as you face the Southern Magnolia you will see shrubs with beautiful variegated leaves. There are more than five different shrubs and plants with variegated leaves. Come observe! Here's how:

> Fill in the below table with your observations.

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Lear name and photo	Description of Leaf	Description of
	(shape, size, edges,	Variegation (colors,
	etc.)	location of markings)
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Variegated Rhododendron Variegated Rhododendron		
Variegated False Holly Image: State of the s		

Our Arboretum is glorious in summer! So many colors and shapes and textures of flowers and leaves! Do you have a favorite flower? A favorite leaf? **Thank you for coming to the Arboretum today!**

The Back Story

Leaves at Work



Leaves-broadleaf and needleleaf-are busy! Cells in the leaves have chloroplasts in them, which are like little engines that make food for the plant. Chlorophyll, a pigment that gives leaves their green color, is in the chloroplasts. The chlorophylls in the chloroplasts absorb light energy from the sun and use that energy to combine water (absorbed through roots) and carbon dioxide (from the atmosphere) to make food (sugar) and oxygen. Sugar feeds the plant by traveling through transport vessels, and oxygen is released to the atmosphere for us to breathe. This process when plants use light energy to make food is called photosynthesis (photo=light and synthesis=combine).

Wait! How does carbon dioxide and oxygen get into and out of the leaf? Tiny holes (stomata) in the leaves allow the leaves to breathe. Carbon dioxide enters through the holes and oxygen leaves through the holes. It is a great plan! Thank you, trees, for making food and oxygen!

Variegation

Variegation is the appearance of differently colored zones in the leaves and sometimes the stems and fruit of plants. Variegation is caused by lack of the pigment chlorophyll, which reflects green to our eyes, in portions of the leaf. Gardeners use variegated plants to give variety to their green gardens.

A common cause of variegation is the masking of green pigment by other pigments, such as anthocyanins. If the pigment anthocyanin is throughout the leaf, the leaf looks red or purple.

Some variegation is due to visual effects caused by reflection of light from the leaf surface. This can happen when an air layer is located just under the epidermis resulting in a white or silvery reflection. It is sometimes called blister variegation. Pulmonaria is an example of a plant that shows this effect. Leaves of most Cyclamen species also show such patterned variegation.

Venal variegation occurs when the veins of the leaf are white or yellow and the rest of the leaf is green. This is due to lack of green chlorophylls in the tissue above the veins.



Hydrangeas



Nothing flaunts old-fashioned charm like the immense flower heads of *hydrangeas*. These irresistible, unrivaled shrubs are native to southern and eastern Asia and the Americas. Most are shrubs (3'-9' tall) while some are small trees and others climb up trees. They can be either **deciduous or** evergreen, though the most common species are deciduous. Flowers can be

white, pink, red, purple or blue. The acidity level of the soil can affect the color.

There are **five main types of hydrangeas**: Bigleaf (Hydrangea macrophylla, H. ssp. serrata), Panicle (H. paniculata), Smooth (H. arborescens), Oakleaf (H. quericifolia) and Climbing (H. petiolaris). The Woodland Garden features at least one example of each type.

The most widely grown type of hydrangea is the Bigleaf Hydrangea (*Hydrangea macrophylla*) with over 600 named cultivars. There are three categories of Bigleaf Hydrangea: Mophead, Lacecap, and Mountain (*H. ssp.serrata*).

Panicle hydrangeas, otherwise known as peegee hydrangeas, (H. paniculata) feature large conical, terminal flower panicles containing both fertile and sterile flowers that bloom from mid-summer into fall. Florets may open pale green, aging to white, thus creating a pleasing "two-tone" effect. The Woodland Garden features a handful of panicle hydrangeas including 'Pink Diamond', 'White Moth' and 'Limelight.'

Smooth hydrangeas (H. arborescens) are known for their large creamy white flowers. When the shrub first blooms, it is a light green color and as it matures it turns to a creamy white. You cannot change the color of these flowers, like you can with mopheads. The leaves are typically heartshaped and darker green than other hydrangeas. The species name "arborescens" comes from "arbor" meaning tree in reference to the similarity of this shrub to a small tree. One of the most popular cultivars of the smooth hydrangea is 'Annabelle' which is planted near the gazebo.

Oakleaf hydrangeas (H. quercifolia), with their lobed, oak-like, dark green leaves are native to woodlands of the Southeastern United States. Their pyramidal panicles of white flowers, that can be up to 12" tall, age in color from creamy white to pink and by fall are a dry, papery rustybrown. Oakleaf hydrangea leaves turn rich shades of red, bronze and purple in the fall. Oakleaf hydrangea and Panicle hydrangeas are the only hydrangeas with cone-shaped flower clusters; all the others have their flowers in ball-shaped or flat-topped clusters. The Woodland Garden has two oakleaf hydrangeas, one standard and one cultivar, Hydrangea quercifolia 'Snowflake', which has intricate blossoms that resemble magnified snowflakes.

Climbing hydrangea (H. anomala var. petiolaris) does exactly as its name suggests, it climbs. This sprawling, deciduous, woody vine clings and

climbs by twining and small aerial roots along the stems, maturing to 60' long. It grows up trees and rock faces in its native Asian habitats. It can be slow growing and shrubby until established and then becomes vigorous. The lush green foliage is blanketed with white lacecap blooms in summer. Growing near the climbing *hydrangea* in the Woodland Garden is another climbing plant commonly called the Japanese hydrangea vine (*Schizophragma hydrageoides* 'Roseum') because it has flat-topped, lace cap hydrangea-like flower clusters. You'll notice the species name "*hydrageoides*" which means like the genus *Hydrangea* because of its resemblance.

One hydrangea that seems to stand out on its own is the Rough-leaved Hydrangea (H. aspera) with its broadly oval leaves that impart a velvetsoft tropical aspect which is reflected in its name; in Latin, "aspera" means "rough-textured" and refers to the downy lower surface of the leaves. This large (10' tall and wide) shrub headlines good-sized bluishpurple lace cap flowers in the summer.

The Color of Hydrangeas

Can you change the color of *hydrangeas*? There is a lot of information available about this topic but the easy answer is "it depends." **Not every** *hydrangea* changes color, some bigleaf *hydrangeas* (*H. macrophylla*) – especially mophead and lacecap types – and *H. serrata* cultivars change color based on the pH of your soil. Blues are best grown in acidic soil (pH of less than 5.5); pinks and reds do best in alkaline (pH greater than 5.5) or neutral soil.

But the relationship between color and pH is more complex than just numbers on a scale. It is the availability of aluminum ions – and the degree to which a particular cultivar can absorb them – that influences color. And color change is not instantaneously but can take weeks or months for the desired change. It is easier to change blue flowers to pink than to change pink flowers to blue, and some cultivars are more prone to color variability than others.

If you want to change your white hydrangea, you are out of luck. White *hydrangea color is not affected by the soil pH and will stay white*. They do usually prefer the same conditions as the pinks and reds but will be happy staying white and can never be changed.

Perennials

Put simply, **a perennial plant is one that lives for more than two years** as opposed to shorter-lived annuals, which complete its life cycle in one year, and biennials, which bloom in their second year and die. Technically speaking, trees and shrubs are perennial plants because they grow for more than two years. But horticulturists usually categorize perennial plants into two types: woody plants and herbaceous perennials. Trees and shrubs are categorized as woody plants.

Herbaceous perennials grow and bloom over the spring and summer, die back every fall and winter, and then return in the spring from their rootstock. There are also evergreen, or non-herbaceous, perennials including plants like Bergenia which retain leaves throughout the year. Another class of plants is known as subshrubs because a woody structure remains in the winter (such as Penstemon). The local climate may dictate whether plants are treated as shrubs or perennials. For instance, many varieties of *Fuchsia* are shrubs in warm regions, but in the PNW climate may be cut to the ground every year as a result of winter frosts. The gardening world will often divide perennials into categories based on their characteristics such as, herbaceous, evergreen, sun-loving, shade-loving, long-lived, short-lived, and flower color.

Perennials typically grow structures that allow them to adapt to living from one year to the next through a form of vegetative reproduction rather than seeding. Many perennials that create structures are referred to as bulbs. There are five kinds of bulbs and one true bulb. Daffodils and tulips are true bulbs. Other bulb types are corms (*Crocosmia*), tubers (*Cyclamen, Dahlia*), tuberous roots (tuberose begonia), rhizomes (*Iris*) and bulbets/bulbils (*Allium*). The Lake Wilderness Arboretum perennial garden has examples of corms, tubers, and rhizomes. The Legacy Garden has bulbs (Tulips and Daffodils) and bulbets (*Allium*).



This *Iris* is a "Rhizome"-type bulb perennial.



A Geranium is a deciduous perennial.



This *Crocosmia* is a "corm"-type bulb perennial.



The Bergenia is an evergreen perennial.

Old Garden Roses



Old Garden Roses, also called Heritage Roses or Historic Roses, belong to a class that existed before the introduction of the first modern rose in 1867. Some of these roses date back to the time of the Roman Empire, where they were revered for their beauty and fragrance. Old Garden Roses have highly disease-resistant foliage; they are easy to grow and winter-hardy.

Most Old Garden Roses are classified into one of the following groups: alba, gallica, damask, Provence, moss, Portland, China, tea, bourbons, noisettes, hybrid perpetuals, hybrid musk, hybrid rugosa, and Bermuda mystery.

Fuchsias



Some say fuchsias are shrubs, some say perennials: we say they are both. There are almost 110 species of *Fuchsia* that are recognized; the vast majority are native to South America, with a few occurring north through Central America to Mexico, and also several from New Zealand to Tahiti. In these warm climates, *Fuchsias* grow as woody shrubs. In the Pacific Northwest, *Fuchsias* are grown as herbaceous perennials, although we have had an occasional winter where the *Fuchsias* have acted more like shrubs.

Taxonomists have arranged the almost 110 species of *fuchsia* into 12 sections based on native area and plant characteristics. The variety in the species is fascinating. Some grow in the northern part of South America, Central America and Mexico and like warmth. They have long tubes, some up to 4", and often are shades of orange. Others, with red sepals longer than their tubes and purple corollas, are winter hardy in the Pacific Northwest and have parented many hardy hybrids.

What exactly is a hybrid? A hybrid is the offspring of two plants of different species. Hybrids are often created by humans to produce improved plants that have some of the characteristics of each of the parent species.

The Lake Wilderness Arboretum's Perennial Garden has a handful of different species of *Fuchsias* along with a large assortment of hardy *fuchsia* hybrids. The garden is alive with blooming fuchsias all summer and fall until frost. Hardy *fuchsias* (hybrids) grow best and will flower more in full sun, although light or open shade is okay. In the spring watch for the new leaves to emerge and cut back any deadwood. If the winter was particularly cold, this may mean cutting the branches from the previous year to the ground. In the fall when the frosts have started, do not prune back the branches (except to neaten things up a little), the stems do help protect them from the cold.

The NW Fuchsia Society has an excellent website with great information about different hybrids and care.

Another wonderful thing about the *fuchsias* in the garden is that they create a hummingbird heaven.

Magnolias Southern Magnolia



Most of the evergreen magnolias are related to **Southern Magnolia** (*Magnolia grandiflora*) which is native to the southeastern United States. This drought tolerant tree stands out for its year-round beauty but it does require some space, growing 60-80' tall and as wide as 40'. The Legacy Garden has a *Magnolia grandiflora* 'Edith Bogue', a vigorous clone of the southern magnolia that is noted for its exceptional hardiness. It rates as one of the best southern magnolias for the Pacific Northwest. This cultivar does not grow as tall as typical grandifloras, reaching a mature height and

width of 25' but does feature the large, very fragrant, ivory-white flowers from late spring through midsummer.

Bigleaf Magnolia



Bigleaf Magnolia (*Magnolia macrophylla*) lives up to its name and produces leaves that can be almost 3 feet long, evoking a subtropical feel in your garden. You can't help but appreciate the enormous leaves but you will also love their 12- to 14-inch wide, fragrant, bowl-shaped, white flowers. Native to the southeastern United States and Mexico, the tree can grow up to 40' tall. Look for these wonderful trees in two different locations in the Legacy Garden.

Deciduous Conifers

If you grew up believing that deciduous trees are trees with broad leaves that drop their leaves in the fall and that coniferous trees are evergreen trees with fine needles, you might be surprised to learn that this is only partially correct. This common description, often found in grade-school textbooks, may be accurate, but it doesn't tell the whole story.

Most trees and shrubs fall into one of two categories: deciduous or coniferous. The deciduous trees have leaves that fall off yearly. Coniferous trees bear cones and have needles or scales that do not fall off. Another common name for these conifers is evergreens, although not all evergreens are actually conifers (i.e. some tropical trees and shrubs).

There are about 20 species, however, that straddle both worlds and are dubbed deciduous conifers. **Deciduous conifer trees form cones and sprout needles like conifer trees, but they also change colors in the fall and lose their needles every year like deciduous trees.**

Of the five genera of deciduous conifers (*Larix, Metasequoia, Psuedolarix, Taxodium* and *Glyptostrobus*), **three can be found at Lake Wilderness Arboretum**.

- Larix laricina 'Blue Sparkler' (Tamarack)
- Metasequoia glyptostroboides 'Ogon' (Dawn Redwood)
- Pseudolarix amabilis (Golden Larch)

Larch



The **Larches** are probably the best known of the deciduous conifers. They are found growing in the cooler climate of the temperate northern hemisphere and are one of the dominant species in the huge expanse of boreal forest in Canada and Russia. In autumn, they turn a lovely buttery yellow.

Larix laricina, commonly called **Tamarack**, eastern larch,

American larch or hackmatack, is a deciduous conifer whose green needles turn a showy yellow in fall before falling to the ground as winter approaches. This is a tree of very cold climates, growing to the tree line across North America. It is native to boggy soils, wet poorly-drained woodlands and some moist upland soils. The cultivar 'Blue Sparkler' (*Larix laricina* 'Blue Sparkler' puts on new blue needles in the spring that hint of sparklers as they burst on the scene. In the fall, the needles change to rich yellow.

Dawn Redwood



Dawn Redwood (*Metasequoia glyptostroboides*) is a deciduous conifer that can grow to a mature height of up to 150 feet, with a trunk diameter of more than 8 feet. The tree is characterized by a pyramidal habit, peeling reddish bark, and deciduous needles about ½ inch long. A native of the Sichuan and Hubei provinces in west-central China, dawn redwood grows in sunny sites with welldraining soil or soggy soils. The Arboretum has a cultivar, *Metasequoia glyptostroboides* 'Ogon' which features soft, linear, feathery, fern-like foliage that is

distinctively golden-yellow throughout summer. Foliage gradually turns orange-brown in fall.



Golden Larch

The name for this beautiful tree (*Pseudolarix amabilis*) translates into pseudo meaning false, *larix* meaning larch and *amabilis* meaning loveable. Although this tree is commonly known as the **Golden Larch**, it is more closely related to *abies* (conifers) and cedars. It is both rare in cultivation and in its native habitat of eastern China. The bright green needles turn beautiful golden yellow in autumn, hence the common name. Look for the

distinctive cones that resemble globe artichokes.