## Trees of the Bloedel Reserve

original text 1992 by Arthur Lee Jacobson original illustrations by Michael Lee

Below is the text *without* original illustrations, map or layout by Virginia Hand. Some of the trees mentioned are long gone, as this version is being shared in 2017.

Trees of about three hundred kinds grow at the **Bloedel Reserve**. They span the range of treedom, from maples of centurial stature, dripping with mosses and ferns, to the slender, shrub-like angelica trees luxuriating in the understory. You can vividly feel the importance of trees by simply imagining them *gone*. The bleak and bare result is a shockingly different scene of raw desolation. But the trees *are* here. As with millions of other acres in the maritime Pacific Northwest, the trees enjoy a generous climate and an adequate soil. It is, however, the artfully planted beautiful foreign species fringing the native woodlands, that have made the Bloedel Reserve a unique combination of natural and human creative forces; an ever-evolving work of art whose changes in the seasons are marked mostly by the trees.

So Japanese maples glow against the deep green firs of the West Coast, and English yew trees enclose a pool that reflects images of Washington natives. This thoughtful blending of the best exotic species planted tastefully in a lowland Washington forest, enriches the native beauty like a turquoise set in leather. Lovers of our native woods, please don't be offended at the comparison—because of this area's untold millennia of volcanic, glacial past, our present forests are dark, subdued and low in diversity. Although beautiful and moving nonetheless, for us to enliven or "spice" the drab acres of alders and close-packed ranks of swarthy firs, without thereby ravishing the forest's delicate ecology, is to give ourselves still greater pleasure.

**Red Alder** (*Alnus rubra*) labors under a constant rain of disdain. People frequently call it a weed tree. Thumbing its nose at our general contempt, it spites us with rampant fecundity. "Ugly" we may term it, but very successful it is, too. Commonest of our native trees, it owes its abundance to definite strengths lacking in other natives: it thrives in soils too poor for more demanding species; holds its leaves longer in fall than do its associates, reluctantly dropping them, still green, in November and December; it grows with astonishing speed. Plain-appearing in leaf, in floral catkins and little brown cones, alder has a relatively handsome slender trunk of smoothish, silvery-gray bark, which reveals its hidden *red* color if damaged.

Many are at the Reserve, most obviously all around the Bird Marsh.

Quaking Aspen (*Populus tremuloides*) Like the murmur of a stream, strumming of a guitar, or comforting hum of a reliable machine, the leaves of the aspen flutter gently. Alive with movement, they make the tree, especially when seen in groves, a cooling, restful presence—the opposite of a stiff, prickly spruce. So, for millions of humans in northern lands, aspens have conferred comfort.

The slender gray or white trunks grow tall and narrow, often in groups fluttering harmoniously. The leaves are round, deep green above, paler beneath. Dangling limp catkins in late spring are the flowers. Look at the leafstalk closely, feel it, and you will learn why it lets the leaves quiver in the slightest breeze, and rustle noisily in stronger wind. Aspens in autumn make the landscape into untarnished gold, a world-famous and never old celebration. Native over much of North America, the aspens miss Bainbridge Island, though grow when planted here, albeit without the perfection attending them in Nature's chosen sites. The Reserve meadow has dozens.

**Purple Beech** (*Fagus sylvatica* f. *purpurea*) Looming large on the lawn near to the house, stands a great, dark tree. With a trunk like a giant elephant's foot, the tree absorbs all light and casts amazing shade. This European of massive impact is, oddly, a newcomer to the Bloedel Reserve, having been planted in 1972. Every year its presence grows more powerful, as it proceeds towards its ultimate size of over one hundred feet tall. In winter its tracery of sharp-tipped twigs is stark and clean-looking. The unfolding spring leaves are rich red, shimmering softly with fine hairs. Small nuts are borne in late summer, and the foliage turns rusty in October.

Beeches are generally as green as any forest trees. But the European beech, not content to be monotonous, has sported numerous variants much prized by whimsical people besides the dark-leaved marvel seen here, others in the nursery trade include fern-leaved, yellow-leaved, weeping, and columnar.

West-Himalaya Birch (*Betula Jacquemontii*) White-bark birches must have a reason for their vivid, rare rind. Who can explain such mysteries? Actually, most birch species bear yellow, red, brown or gray bark—but humans cherish especially those that are white. Although several kinds grow at the Bloedel Reserve, the grove of young Himalayan whitebark birches by the clearing above the Christmas Pool is most compelling. Nineteen such trees were planted in 1978 and the early 1980s. Eventually they will tower 70 feet, their pillars of chalky white making the walk an eerie delight. In purity of whiteness, climatic adaptability and insect-resistance, this strain of birch surpasses its more frequently seen North American and European whitebark kindred. It comes from the remote mountains of Afghanistan, and its scientific name commemorates the French naturalist Victor Jacquemont (1801–1832).

**Young's Weeping Birch** (*Betula pendula* 'Youngii') This is the birch equivalent to weeping willows. It is a small, densely rounded tree, unmistakable for any other because of its distinctive growth form. Arching, drooping branches let the fine twigs dangle limply to the ground. About 125 years ago the nursery of Maurice Young in Surrey, England, first distributed this pendulous sport of the common European White (or Silver) Birch. The variety is propagated exclusively by grafting starts of it onto ordinary birch trunks. Usually the result is a mop-head form, just like Camperdown Elm, Weeping Mulberry and the like. The largest in Washington is 27 feet tall and wide. But some nurseries playfully twist the trunks into eyecatching snakelike curves. And still others graft it so low that it flops and sprawls as an undulating bushy groundcover.

Most prominent of those at the Reserve is by the entry stream feeding the Middle Pond below the Japanese Garden. One is by by the entrance drive near the Leyland Cypress; three are on the Japanese Garden slope below the guest house.

**Cascara** (*Rhamnus Purshiana*) A plainer tree cannot be found. But the Cascara has its due. Not only is this boring-looking native globally famous as the source of an excellent laxative, it is also an arthritis remedy of rare efficacy. Over 100 years ago a New Orleans medical doctor accidentally discovered this fact. While routinely treating some arthritic patients for constipation, the doctor was startled to find their arthritic pains decreased markedly. The patients, needless to say, were thrilled. The doctor determined that Cascara in a sufficiently small dose could help relieve arthritis, yet would not cause bowel chaos.

The tree is an otherwise unglamorous, uncommon woodland wallflower, with nondescript bark, minuscule flowers, and it only asserts itself when the leaves turn yellow in fall. Beat the birds in August and you can verify that the black berries taste like coffee. Dozens of Cascaras are at the Reserve, but few are noticed near where most visitors stroll. An unusual, half prostrate specimen is in the Moss Garden, right next to the trail.

Atlas Cedar (*Cedrus atlantica*) In our region this is the only commonly planted African native tree. From mountainous Algeria and Morocco, it delights in our climate, and has responded to cultivation by producing many seedlings, some of them distinctive enough as to have been named and sold by nurseries. Best is Blue Atlas Cedar ('Glauca'), with baby blue color. Two shade the guest house, and a youngster is just inside the entry gate.

The weeping, golden, columnar and other Atlas Cedar garden varieties do not grace the Reserve. However, the famous Cedar of Lebanon, as well as Deodar Cedars from rugged northern India, are present. These cedars all bear needles an inch or so long, and their fistsized cones disintegrate upon maturity. Though numerous tree species are called cedars, the *first* so-called was the Lebanese, and it is so closely similar to Atlas Cedar that people trying to distinguish the two "tear their hair out" in frustration. Western Red Cedar (*Thuja plicata*) This is *the* cedar to those of us living in western Washington or adjacent lands. Even so, it was the tree of trees to Northwest Coast Indians. Dwellings, totem poles and dugout canoes were fashioned from its trunks. The red-brown, fibrous bark was peeled to be made into water-tight cloth and other woven materials. The branches, boughs and greenery all had utilitarian roles in the daily domestic affairs of the people.

Nowadays, we view cedar wood as a rot-resistant roofing, decking or fencing lumber. All of the tree's other uses have fallen into minor visibility—such as carving—or are extinct with the people who revered the tree above all others.

Landmark stumps in the woods of the Reserve, suggest how large some cedars grew. The tree's base is usually greatly buttressed and fluted. The branches curve downward from the trunk in sections, like waves one after another, gradually smaller. The cones, only the size of a raisin, are small for such a huge tree.

Japanese Flowering Cherries (*Prunus serrulata* derivatives) Hundreds of varieties of colorful Japanese cherries exist. Three at the Reserve are here singled out:

Like a dragon-fish outshines guppies, 'Shogetsu' outclasses the others. It has not only floral beauty, but a lightness and grace that is unhappily scarce in most of its peers. Its name means "Moon hanging low by a Pine." The flowers are white or palest pink-tinged, borne in elegantly drooping clusters later in spring than those of the other cherries. Two broad, low specimens are on the terraced hillside of azaleas below the house, facing the woodland garden.

The connoisseur's taste for 'Shogetsu' is dismissed by a vote of the masses, who choose 'Kwanzan' as the favorite. Cotton candy tree it is, with opulent profusion of massive, dense pink flowers in April. The young leaves then come forth, colored burgundy before turning to their summer green. Several are by the house's garage area. A burly one has a young native huckleberry bush growing from its trunk.

'Amanogawa' is easily distinguished year-round by its peculiarly narrow shape: like an exclamation point. It stands right next to and towers awkwardly above the gutters at the back of the house; a cable holds it together. Its mildly fragrant pale pink or nearly white flowers make a poor contrast for the light background.

As a group, these trees are like love songs of the tree world. Their glory is in a brief blast of bright charm in spring, followed by a plain presence the rest of the year. Since they are so limited, plus disease-prone and not long-lived, their popularity has sagged lately. But they still rank high and symbolize Japan, even as the plaid and bagpipes bring to mind Scotland, or the olive tree represents the balmy, sunny Mediterranean region. American Chestnut (*Castanea dentata*) Arboreal tragedy sometimes strikes. Early in this century an Asiatic fungal blight devastated the American Chestnut population. A major forest species, abundant, gigantic, a valuable wildlife tree, the chestnut tree had served humans well with its shade, wood and sweet nuts. This species should not be confused with the commoner Horse Chestnut (*Æsculus Hippocastanum*). The American Chestnut's flowers are small, yellowish-white in long slender spikes borne in July; they are more curious than beautiful. Its nuts are in husks perfectly guarded by countless needlelike spines. Though small, the nuts are choice in flavor, delicious raw or roasted.

Alas, most so-called American Chestnuts in the Pacific Northwest are hybrids or European Chestnuts, with larger, less delectable nuts. Purebred American Chestnuts have markedly slender, tapered leaves, coloring brighter earlier in fall, as well as sweeter, smaller nuts. The Bloedel pair flank the stairs leading from the house to the woodland garden below. Note their elegant leaf-tips and jagged marginal teeth.

Golden Chinquapin (Chrysolepis or Castanopsis chrysophylla) A bit like an evergreen chestnut tree, but partly like an oak, the Golden Chinquapin is the Pacific Coast's resident nonconformist tree. Although common enough in northern California and western Oregon, in Washington it is scarcely known except to the keenest of tree lovers. "Chinquapin" is a name derived from American Indians, and the *gold* of the tree is explained in an instant when you turn over a leaf. Warm, bright sulphur-golden rewards your glance at the twigs and leaf undersides. During July, fluffy spikes of heavy-smelling whitish flowers, worthless to people, do please less discriminating insects, and give rise to small, flavorful nuts in the fall. Encased in spine burs, the nuts may repulse you—but to *taste* them is to know why they are so well guarded.

The Golden Chinquapin is also called Giant Chinquapin, but in Washington none are known even 75 feet tall. For landscaping purposes it is regarded as a dense, dark, slow-growing tree, of neat, conical form, valuable for its ability to thrive in dry areas and for the wildlife benefits its flowers and nuts afford. The Reserve has 15 in dry, open, grassy areas.

Hinoki Cypress (*Chamacyparis obtusa*) "Hi-noki" or Fire-Tree is this tree's Japanese name, appropriate since it occurs only in Japan except for a variety on Taiwan (both forms present at the Reserve). Like many cedars and cypresses, it has lightweight resinous wood, enclosed by bark that is more or less reddish and fibrous. The scaly, slightly resinous evergreen foliage is borne in shortish sprays, making a more dense and rounded tree than usual. The cones are round, pea-sized, and in their height of ripeness are a heart-warming rich red-brown. The number of garden varieties of Hinoki is vast, and their distinctive colors, shapes and growth rates a splendid example of Nature's infinite ability to vary a theme: golfball-sized dwarfs; screaming yellow; twisted and cordlike; etc.

There are examples of both the 'Gracilis' variety and normal Hinoki seedlings on the slope of *Liriope* below the house, and on the bluff above the Christmas Pool. 'Gracilis' specimens are darker, more compact, and less narrow.

**Leyland Cypress** (×*Cupressocyparis Leylandii*) Few trees grow faster than Leyland Cypress. A hybrid, it possesses amazing vigor, and channels its energy more into size than coneproduction. The Reserve specimen grows near a Sierra Redwood and four native Western Hemlock trees, but although it is very large, it is not eyecatching. It can pass for a native tree easily in its shady setting by the entrance drive, leaning toward the Middle Pond. It was planted in the 1960s, but is already over 60 feet tall, 50 feet wide, with its trunk almost  $2\frac{1}{2}$  feet thick.

The first Leyland Cypress originated in England in the 1880s; now plentiful garden varieties exist, and the trees are widely planted. C. J. Leyland was one of the first growers of these hybrids. Mother of the hybrid was the Washington State native Alaska Yellow-Cedar *(Chamacyparis nootkatensis);* the father was a Californian known as Monterey Cypress *(Cupressus macrocarpa).* 

Devil's Walking-Stick (Aralia spinosa and A. elata) From the eastern U.S., this is a gaunt, shrubby tree of slender trunks beset with thumbtack-like thorns. Throughout the Moss Garden it can be seen, along with its East Asian cousin Aralia elata, the Japanese Angelica-Tree. In winter you cannot tell them apart. But it is easy to do so in summer: the leaves of the American are distinctly stalked, letting more light filter through, thus diluting the rich foliar effect. The Asian species is denser in foliage, as well as having thicker, more hairy leaves; it is slightly less spiny. The cluster arrangement shown by the flowers is quite distinctive; on both species the blossoms appear in late summer. They are creamy-white, small, numerous, and followed by dark, small berries. These trees sucker from their roots, and can form colonies of prickly plants. "Hercules' Club" is another folk name. Actually, the stems are pithy-centered and so comparatively light, making neither good walking sticks nor clubs.

Kousa Dogwood (*Cornus Kousa*) "Kousa" is the Japanese name of this tree, which grows not only in Japan, but also in China and Korea. Unlike our native Pacific Dogwood, the Kousa is small, sometimes merely a large shrub. People prize it because of an enviable set of qualities. First, its white or pink starry blossoms are borne in lavish abundance from June through mid-July. Then appear fascinating red fruits that resemble round raspberries: edible, it is a pity they are not really worth eating. But they feed us visually. The fall color is excellent, sometimes as red as rhubarb. Older Kousa Dogwoods display a pretty, flaking bark that gives them exceptional winter interest. All things considered, it is one of the first-rate ornamental small trees for general usage. It can be seen near one end of the Japanese Garden guest house. And several are in a wooded setting by the Swan Pond closest to the main house; a very large Atlas Cedar also marks their vicinity. **Pacific Dogwood** (*Cornus Nuttallii*) Unparalleled in floral beauty when it whitens the woods in April and May, our native Dogwood is likewise superior to other trees in its finickiness. A fussy prima donna, it disdains transplanting, pruning, watering, and prefers to be left in the wild undefiled. Even then it doesn't live for many decades. Even then it is attacked by a disfiguring leaf fungus. Deeply engaged in being so hard to please, it seems to delight chiefly in tempting us. We see it, love it, desire it, acquire it—only to watch it wither away. There are some, a paltry fraction of the whole, that perform with uncharacteristic strength, and blithely shrug off ill-usage and trying conditions. It is our job to discover and propagate these less wimpy strains.

At the Bloedel Reserve, a named variant with gold-spotted leaves is 'Eddiei' (from Eddie's nursery, Vancouver, B. C.). It graces the lawn by the north road, above Rhododendron Glen, right next to the powerful Bigleaf Magnolia. The Reserve has regular Pacific Dogwoods here and there, such as near the Zen Garden's tori gate. Sometimes they flower again in September. Like butterflies, they live bright, dainty lives, tender in beauty, brief in their glory, easily sullied.

**Camperdown Elm** *(Ulmus* 'Camperdownii') Most elms are stately shade trees; Camperdown Elm is a dwarf, weeping version. A case of genetic confusion, the original of this odd sport appeared before 1850 as a chance seedling in Scotland. Ever since, it has been reproduced solely by grafting onto regular elm trunks; its seeds won't "work," being sterile. Thus handled, the weird elm contorts its branches, remains small, and weeps, its long zigzag shoots hidden densely by large, bold leaves, prominently veined and toothed, as raspy as sandpaper to the touch. Preceding the leaves in spring are conspicuous wafer-like seeds, first pale yellowish-green, then tawny-centered and textured like waxpaper. Fortunately, the dread Dutch Elm Disease is not present at the Reserve, and so the matching pair of 50-year old Camperdown elms behind the house may be amusing visitors for decades yet.

**English Elm** *(Ulmus procera)* Two English Elms greet visitors at the main gate, one is by the Middle Pond, and two dominate the lawn in front of the house. Great is their presence; those by the house are the largest and most prominent non-native trees at the Reserve. Their 60-year old trunks, like many native maples, are covered with mosses, lichens and even licorice fern. The huge branches have extensive stout branchlets which bear the dark, lopsided leaves. It is in November that the leaves finally drop. In spring, millions of wafer-like winged seeds are a sight for two months.

The elm is a shade tree of commanding grandeur, but its timber is cross-grained and not valued highly. And even as an ornamental, the English Elm is not safe where many people often assemble beneath it, since it has a dangerous habit of dropping enormous limbs without warning; it also can send up corky-barked root suckers that can be a nuisance. Fortunately, its seeds are sterile. Empress Tree (*Paulownia tomentosa*) Let's begin with the names. While she was still a young woman, Anna Paulowna (1795–1865), hereditary princess of the Netherlands, daughter of Czar Paul I of Russia, was honored by having this outlandish tree named for her. Native in China and Korea, the Empress Tree is highly esteemed and much planted by the Japanese, who call it "Kiri."

What is more remarkable, Empress Tree's flowers, or leaves? Before the leaves, in April or May, blue blossoms appear, lusciously fragrant, as large as any tree flowers we have, making a display unmatched by any other trees, This floral impressiveness is not adequately summed-up by the names Foxglove Tree or Purple Catalpa. Then follow leaves that are so huge, thick, furry and dark that they have been dismissed as coarse and clumsy by some people. Others insist on reveling joyfully in spectacular scale, and sing praises of leaves so stupendous as to smother sixfold our customary drearisome little leaves. Boom! Take your choice of viewpoints.

The bark is smooth and gray over the swollen trunk; the branches and twigs are few and large. There is no fall color. Winter flowerbuds and seedpods are both pale brown and stand out. One Empress Tree is by the gatehouse. Two guard the ends of the main house the northernmost is a replacement for the original 1930s specimen that died in 1990.

**Douglas Fir** (*Pseudotsuga Menziesii*) Douglas Firs are plentiful at the Reserve. The monumental old-growth stumps and snags seen in the woods are larger than any trees still alive, although a *few* on the property are aged around hundreds of years. Now most of the giant stumps are supporting hemlock trees.

To a great degree, the might of modern American civilization has been based upon using a vast wealth of natural resources, such as forests of this tree. No forested area on earth has been so valuable as fir-clad western North America. The Douglas Fir's natural history makes it an ideal wood-producer, since the tendency is to form forests of even-aged, tall, straight-trunked trees—easily logged and turned into lumber. Economic supremacy aside, Douglas Fir is the dominant tree presence in Pacific Northwest ecology. Its visual role in our landscape is so omnipresent that it symbolizes the area; it is the first tree we should learn, understand, and respect.

**Grand Fir** (*Abies grandis*) What a name! Truth is, any number of other firs can be every bit as *grand* or even more so. However, to impress upon your memory this tree's essence in an unforgettable fashion—smell its needles after scratching them with your fingernails. A buoyant, mouth-watering aroma of fresh-squeezed tangerine fills the air! No mere "piney" smell, let alone "leafy," it is as richly citrus-scented as can be. Tangerine Tree is a fair name.

Grand Fir grows native in western Washington lowlands, but is vastly outnumbered by Douglas Fir. Unlike its better known peer, Grand Fir doesn't have rot-resistant wood, so cannot live as long. Its bark is thinner. Its needles lie perfectly flat on the twigs like the teeth on a comb. The tops of the trees are often misshaped and forked, standing out from afar with their distinctive rounded silhouettes. The cones break into fragments to release the seeds when ripe in late summer or fall. Although many are scattered at the Reserve, the most obvious is with a Western Red Cedar behind the clipped boxwood hedge to the left of the house. Smell it. Korean Fir (*Abies koreana*) This little tree is too rarely grown in our area. It is not clumsily large, being naturally dwarf in size; it has handsome, dark color; its needles are not messy or sharp; it is lavish in making pretty cones. The cones are blue with brown bracts and appear right before you at eye-level. Like the Grand Fir, the ripe cones turn brown and disintegrate. The tallest Korean Firs in nature are 60 feet. But as grown in the Pacific Northwest, about 25 feet is the record. Most seen are 5 to 10 feet. The Reserve has several around the pond below the Tea House. The largest, between two ponds, are a pair about 11 feet tall right next to one another, looking as one. Violets are the basal groundcover, and a weeping cutleaf Japanese Maple is nearby too. Farther away, beyond a Hinoki Cypress, is a much larger Himalayan Abies spectabilis, with big needles and cones.

Katsura (*Cercidiphyllum japonicum* and *C. magnificum*) A very large shade tree from Japan and China, Katsura is becoming increasingly less of an enigmatic mystery. Its virtues have caused us to plant it widely in recent decades. Unlike the majority of familiar large deciduous trees (*e.g.*, oaks, most maples, and elms) an individual Katsura tree is either a male or female. The flowers and seedpods are in both sexes inconspicuous. Nonetheless, we grow the tree for its shapely round leaves, which not only glow with bright autumn color, but also often smell of cotton candy or crushed strawberries during the fall! Add to this a handsome silhouette, rot and disease resistance, and the result is a first-class ornamental tree wherever there is sufficient room and moisture to support one. It is said to be the largest deciduous tree in China. In Washington, specimens are over 90 feet tall already.

The four Reserve examples are young and still petite; as far as we can tell they are all males. *Cercidiphyllum magnificum* differs from the commoner Katsura by having smooth bark and broader leaves of a deeper blue-green color. By the huge Portugal Laurel not far from the house is a Common Katsura that has a major graft of Magnificent Katsura on its trunk. The largest Reserve specimen is outside the tori gate's concrete path, across the entrance drive from the Moss Garden.

Mountain Hemlock (*Tsuga Mertensiana*) From high-altitude Pacific Coastal areas, we bring down to our level Mountain Hemlocks. The compact, full form, with lively spurts of branches, and passive blue-green color of this conifer make it a perfect garden accent. Few trees are so suited for alpine gardens. Mountain Hemlock differs from its familiar lowland cousin the Western Hemlock, by being craggier, in having needles whorled about the twigs, and in making larger cones, up to 3 inches long. Also, although it grows huge in nature, the largest seen in cultivation are usually less than 40 feet tall. Because of its needle arrangement and unaccountably large cones, it might have originated eons ago as a hybrid between a spruce and the Western Hemlock. The Reserve has a stout, prominent one in the Japanese Garden, on the slope below the guest house; it is near Young's Weeping Birches and a Korean Fir.

Western Hemlock (*Tsuga heterophylla*) Washington's State Tree is the world's largest hemlock. Still, as it grows in the intimate company of Douglas Fir, it comes across as comparatively small. Unlike the fir, it tolerates shade. Its needles are irresistible attractions, being short, not sharp, and borne on twigs of gentle pliability, nodding in the wind. The cones, too, are small and thin, the size of jelly beans.

To look at this hemlock tree is to see a dark conifer of long, supple, light boughs, gracefully dipping at the tips. Nothing about the tree is rigid or sharp. Its brown bark is much harder and thinner than corky Douglas Fir bark. Its wood is nearly as valuable. Unlike the stinking Poison Hemlock weed, the tree is altogether benign; a useful, attractive friend, good both in the forests and decorating planted landscapes. Many are at the Reserve, and are usually the trees seen growing upon old fir and cedar stumps. The parasitic Dwarf Mistletoe has deformed a few, such as one near the beginning of the Orchid Walk above the north road.

**Portugal Laurel** *(Prunus lusitanica)* The huge Portugal Laurel on the lawn by the drive in front of the house rests its lower branches on the ground. It bears very dark evergreen leaves like the scented Bay Laurel, but instead of smelling sweet, the crushed leaf is mildly offensive. However, when Portugal Laurel puts forth its floral show, it puts to shame the other, by making bounteous, showy white flowers held in 6- to 10-inch long clusters from late May into early July, pleasant in its fragrance.

In its native Portugal, Spain and the Azores, this is called Louro, and can be a shrub or a 60 feet tall tree. It thrives in our climate, and comes up wild sometimes, just like its more familiar cousin English Laurel—of larger, bright green leaves. Both species make cherry-like berries attractive to birds. Those of Portugal Laurel are purplish, small and bitter, ripening in late summer.

Madrona (Arbutus Menziesii) No other native tree is so flashy. The glossy, evergreen leaves of this Pacific Coast tree are like holly but larger and not prickly. Its flowers in April and May are creamy white and profuse, though small. Best of all, the *bark* is so thin you might say the sinuous, romantically curved trunks are naked. Red, peeling layers of papery rind come off in attractive tatters, revealing immaculately smooth greenish-yellow underneath. Only the old trees, near their bases, develop a chunky gray bark. Bright orange-red berries of pea-size and gritty texture are an autumn attraction.

We are fortunate the tree is so beautiful, because its wood is very hard, split-prone and none of the best. Although long-lived and a "survivor" generally, Madrona is susceptible to human rough-handling and to natural diseases. We don't know what its long-term health has been like, so it is presumptuous of us to exclaim "the madronas are dying!" Seedlings abound on exposed mineral soil. Madronas are uncommon at the Reserve, but some fringe drier, sunny margins of woods such as behind the gatehouse and along the drive above Rhododendron Glen. **Bigleaf Magnolia** *(Magnolia macrophylla)* With leaves as large as placemats and flowers the size of a head, the Bigleaf Magnolia is a most bold tree. You blink when beholding it. It handily shocks the complacency out of viewers, by standing in supreme contrast to the boring smallness of ordinary foliage. Not content to raise eyebrows with great size, its July flowers release a deep, sweet fragrance detectable from many yards away.

A forest denizen of the eastern United States, it succeeds admirably in our climate if not allowed to dry-out or get blasted by sunshine and strong wind. Rich soil it also greatly relishes and profits by. Altogether, a dinosaur of a tree to excite and inspire us. Note the ghostly pale color of the leaf undersides. There is a 40-foot tall Bigleaf Magnolia standing in plain view on the north road, above Rhododendron Glen, below the Orchid Walk.

**Dawson Magnolia** (Magnolia Dawsoniana) Flowers fit for royalty set this apart. Unless you see the tree in its March splendor of full bloom, words will fail miserably to do justice to its glory. Seeing the tree in summer, you can hardly stifle a yawn. The fall color is a mere half-hearted attempt to infuse a bit of weak yellow-brown into a faded, tired green. The winter aspect brings improvement, especially as the tree ages. But when the big flowerbuds burst, then all eyes rivet on the liberated, exquisite pink blossoms, huge and plump. Photographers drool, and loudmouths shut-up for a moment of respectful awe. There is no point going further—you can either experience it for yourself, or you can't. The tree is Chinese, and its name honors the memory of Jackson Dawson (1841–1916), a North American horticulturist, and one of the famous Arnold Arboretum's superintendents.

One, with groundcover *Epimedium* shading its base, is by the pond right next to where the north road dips beyond the house; another is in the lawn of mixed trees outside the Zen garden.

Saucer Magnolia (Magnolia ×Soulangeana) Unlike regal Sargent Magnolia, which few of us have, the Saucer Magnolia or Tulip Tree is a plant of the millions, occurring in many gardens and parks, in a multitude of cultivated variations. It is a swarm of delightfully varied hybrid offspring from the Chinese white Yulan tree (Magnolia denudata) and the purple Lily Magnolia shrub (Magnolia liliiflora). A bush to begin with, it gradually assumes small tree size. In April its furry big flowerbud scales are pushed off by the expanding blossoms. The petals are white, pink or purple, wholly mixed or sometimes just one color. Thick-textured, the petals make a solid show, then stain brownish and drop. Thereupon light green leaves of ho-hum shape cover the branches, often relieving their green monotony with a few scattered flowers during the summer. The fall color is shoddy. At the Reserve, three Saucer Magnolias stand on a little lawn in front of woods, to the right of the drive approaching the house, across from the prominent Persian Ironwood. They attract no notice except when blooming.

**Bigleaf Maple** (*Acer macrophyllum*) Big is the perfect word. As far as maples go, nothing about this native species is anything *but* big. Even in winter, the stout branches and large buds suggest exceptional size. The winged seeds produced so abundantly are the offspring of comparatively conspicuous yellow flowers, borne in April usually. Though not as sweet, nor as electrifyingly colorful as the sugar maples Back East, our Bigleaf Maple commands just as much attention in its own way.

Bigleaf Maples are all through Rhododendron Glen and are dispersed about elsewhere in the Reserve. Their hefty, often burled trunks, can be clothed green with mosses and licorice fern. There is an especially venerable example above the path by the Christmas Pool. Some of the tallest are more than 100 feet. In October, the great leaves turn dark yellow or pale brown, and are wafted down by wind or pelting rain.

Fernleaf Maple (*Acer japonicum* 'Aconitifolium') For fall color, this is among earth's best. Its dazzling *deep red* is a November furnace for eyes growing alarmed at winter's imminent cold darkness. Sometimes it's fiery orange, or beaming yellow in part; always it's gorgeous. The leaf is not really "ferny," and perhaps the Japanese name Maiku Jaku is more apt: dancing peacock maple. A large shrub or small tree, it is the only *Acer japonicum* variety at all commonly planted. We still need more of them, for their leaf shape is delicately beautiful even when wearing its summer green.

One at the Reserve was given a conspicuous setting by the Japanese pond below the guest house, to show its radiance most effectively; another is on a mossy bank below the Orchid Walk, with ten additional kinds of eastern Asian maples; a third is beyond the stone pathway leading to the tori gate.

Japanese Maple (*Acer palmatum*) During late October and early November the many varieties of Japanese Maples unveil a display of color so warm and exciting that no paintings done by humans can excel the beauty of the leaves. To *try* is human, to succeed, Nature's job alone. Phosphorescent reds, yellows, and oranges serve as counterpoints to the spring floral extravaganza six months earlier. Other times of year, it is the posture, balance and grace of these small trees that earns our accolades—although we are spoiled somewhat by knowing that the *best time* is either behind or ahead of us.

Since hundreds of varieties of these maples are known, it should be remembered that the Bloedel Reserve has in its collection just over a dozen. Nonetheless, they include some of the finest, and no visitor goes away feeling cheated. Besides *Acer palmatum*, several additional eastern Asian species color brilliantly and are present. Nearly all at the Reserve are found close to the liquid *heart* of the place—the three ponds between the guest house and Rhododendron Glen. Vine Maple (*Acer circinatum*) Native in Washington, but found only *planted* at the Reserve, this remarkable maple neither looks nor grows much like any other. It varies in form from a dense, twiggy bush on a dry hillside, to a snaky 60-foot tree in the lush Olympic Rainforest. Normally it is a very large shrub or small tree, always multitrunked, generally sprawling about, although not truly *vining*. Its roundish leaves, about as wide as a baseball, turn pure yellow or orange-red in autumn. Better still, the bark of undisturbed woodland specimens is impressively smooth, greenish-gray, thin and marked attractively with a few dark lines.

Unfortunately, as a landscape plant for general usage, this West Coast tree is inferior to the similarly-sized Japanese Maple—in terms of fall color, growth habit, and adaptability to less-than-ideal locations. You might think that the native would naturally perform better here, but it is a woodland tree that rarely appears as handsome in the open, nor can it easily stay "in bounds" because of its wayward growth inclinations.

Mountain Ash (Sorbus aucuparia and related species) The Rose Family, full of flowering cherries and crabapples boasting endless delightful floral variety, also includes in its broad compass the Mountain Ash clan, *Sorbus* species. Mountain Ashes, however, tend to be monotonously similar in their April or May blossoms—ho-hum flattish clusters of numerous, tiny whitish florets, exciting only to insects. On the other hand, for vindication of their floral weakness, return to the trees in late summer or fall and revel in a riot of colorful berries: white, pink, red, orange, yellow (even greenish-brown for those who prefer restraint of expression). Accompanying the fruit display is flaming leaf coloration. Thus, Mountain Ashes are preeminently autumn ornamentals.

The Bloedel Reserve, near its northern boundary, rejoices in a grove of 17 such trees on both sides of the road. Thirteen kinds make up this concentrated collection. The wellchosen dry, sunny site maximizes berry production and color intensity. Compare the different species and hybrids, and see in a wee bit of ground a great deal of variation, as here are brought together natives of Europe and all across Asia to Japan. The name "Mountain Ash" refers to the trees being high-elevation dwellers that in certain respects resemble regular ashes, which are towering lowland shade trees. **Oregon White Oak** (*Quercus Garryana*) Sixteen different oak species grow at the Reserve, including Washington State's only native. Compared to the Oregon White Oak, many elsewhere are more colorful, or produce superior timber, or grow larger, or are stronger or otherwise more noteworthy. But this is *ours* and we should love it and know it for that reason alone, regardless what the rest of the world thinks. "A living dog," Thoreau pointed out, "is better than a dead lion." Even so, our oak's attributes shall be heralded here: in its almost blackish-green darkness, the foliage stands out. The tough leaf texture is contrasted by a soft shape, with rounded gentle curves. The buds are especially large and hairy, on relatively stout twigs. The acorns are about thumb-sized. The bark is pale gray and deeply chunky, getting better-looking after decades. No doubt, the highlight of the Oregon White Oak is when it is centuries old, in hoary majesty, all its branches twisted and spreading widely, its pale bark and dark foliage contrasting perfectly.

Some day those at the Reserve may be so impressive. In the meantime, like numerous neighboring oaks in the dry meadow, it is biding its time, patiently growing bigger year after year.

Asian Pear (*Pyrus pyrifolia* var. *culta*) Familiar pears are pear-shaped and come from largegrowing trees of European ancestry. In contrast, Asian or Oriental pears are round and come from small trees. Another difference is that whereas most European pears are choicest in autumn, after storage to be soft and dripping with sweet juice, many Asian pears are ripe on the tree in summer and can be a crunchy delight, with their own delicious flavor. The Asian species also blooms earlier, in March. Only one pear tree grows at the Bloedel Reserve, but because it is so prominently planted, and may excite interest when blooming or when laden with fruit, it deserves its due here. See it on a lawn between the visitor center and lowermost Swan Pond.

**Persian Ironwood** (*Parrotia persica*) This well-named tree is native in Iran and adjacent southwestern Asia, and makes a superbly strong and hard wood. Related to witch hazels and sweetgum trees, it also has lopsided, dangling leaves that light up brilliantly in autumn. The same tree can be green, red, orange, yellow and purplish all at once. The show lasts for weeks. Then the naked trunk and branches reveal a peely bark of rare beauty, especially in great age. Early spring sees the twigs send out bright red, but tiny flowers. The tree was named after Mr. F. W. Parrot, a German naturalist, traveler and medical doctor (1792–1841). Although the tallest Persian Ironwood in Washington is 60 feet, the Bloedel Reserve specimen by the Middle Pond, very close to the entrance drive, is really an enormous shrub—caused probably by it having been grown from a branch cutting instead of being a seedling.

Japanese Red Pine (*Pinus densiflora*) "Aku-matsu" say the Japanese. Red is the bark, green the needles, and various-colored are the cones as they develop, age and decay. It looks nothing like Japanese Black Pine (*P. Thunbergiana*), being an airy, open tree, not somber, with thinner, less prickly needles. The Reserve has it in three versions: 1) regular, which can grow 70 feet tall in cultivation if unpruned; 2) Tanyosho Pine (cv. 'Umbraculifera'), mushroom-shaped, compact habit; 3) the bushy, weeping one (cv. 'Pendula'). All three are in the vicinity of the Japanese Garden guest house. The weeper is so small it might easily get overlooked; it is on one of the *Cotoneaster*-covered mounds outside the Zen stone and rock garden.

Japanese White Pine (*Pinus parviflora* 'Glauca') Every place, it seems, has its white pine. Western White is native here; Eastern White grows across the continent; Mexican White grows southward; Himalayan White spans Asia; Chinese White and Japanese White are two more—and others exist. All share in common pale, lightweight wood, needles borne in clusters of 5, and foliage that is limper in texture and lighter in color than that of the hard, black, red or pitch pines. In brief, white pines are airier, more elegant, less dense, less dark, less heavy. However, the Japanese White Pine in the form commonly cultivated is somewhat heavy, being a short-needled, squat tree. Its needles are 2 inches long, baby blue mixed with greenest of greens—quite sumptuous. The 3-inch cones are produced freely.

Next to the path that leads through the dry meadow from the parking lot is a very wide unpruned specimen. In the Japanese Garden one is formally pruned on the slope below the guest house, in a "sea" of the evergreen groundcover kinnikinnick. It is about 7 feet tall and 9 feet wide, strongly horizontally trained, not allowed to droop at all.

Jeffrey Pine (*Pinus Jeffreyi*) Whoever John Jeffrey (1826–1854) was, few now know, and fewer still care. But thousands of us know well the great pine whose beefy size and good looks have made it important both as a commercial forest tree and (less so) as a landscape ornamental. Feel its sturdy, 10-inch needles, admire their pliable strength. Its cones are of commensurate caliber, usually 6–9 inches in length and proportionately broad. Jeffrey Pine is stout, dark and large, conveying vigor but not heaviness. A close cousin of Ponderosa Pine, it comes from Oregon and California, plus the adjacent corner of Nevada. The Reserve's best is the unusually hefty, wide one next to the gatehouse

**Purpleleaf Plum** (*Prunus cerasifera* 'Pissardii') Sanguineness in plum trees, until Monsieur Pissard's time over 100 years ago, was limited to fruit color. Then, this otherwise unknown French gardener immortalized his name in the annals of horticulture by sending from the Persian Shah's garden to France the first purpleleaf plum tree. Since that dark day, earth has been increasingly planted with these maroon monsters, and no less than 50 cultivated varieties have been named! Besides their more-or-less murky leaf color, which does vary in gloom from one clone to another, significant floral and fruit differences exist. Some of the purpleleaf plums are excellent producers of delicious fruit; many have heavenly flowers as pretty as those of any tree. As a group, these plums offer to thoughtful gardeners keenly pronounced attributes; and they offer to vulgarians an opportunity to spoil landscapes by daubing blobs of muddy vegetation about.

The Bloedel Reserve has three of the original 'Pissardii' (or 'Atropurpurea') variety, set on a lawn against native firs and hemlocks, not far from the distinctive round-headed Asian Pear and the giant Atlas Cedar between the main house and the lowermost Swan Pond. In February or early March, lovely white or palest pink blossoms cover the trees, drawing all eyes.

**Dawn Redwood** (*Metasequoia glyptostroboides*) All three redwoods grow at the Reserve. This happens to be the most prominently situated, remarkable specimen. It stands by the north road at the head of Rhododendron Glen, atypical in its somewhat lopsided manner of growth; most Dawn Redwoods are more symmetric.

From China, Dawn Redwood is *deciduous* unlike the two Californian species. In November it drops its needle-clad twigs, revealing a trunk curiously swollen, convoluted and beset with armpits beneath the branches. Its reddish, soft, flaky bark is like that of its cousins. The burst of tender greenery in May is a pleasing sight, although it inevitably gets lost somewhat in the vegetable explosion of spring flushing and flowering.

The name *Dawn* Redwood has reference to the dawn of time. For this rare Chinese tree had been thought extinct—since its fossils had been known to Western scientists before the living tree was reported in the 1940s! *Metasequoia* trees grew wild in Washington State over 47 million years ago, along with *Sequoia* proper. Now they grow again, as planted by us.

Sierra Redwood (Sequoiadendron giganteum) We have State trees, National trees sometimes, and here is a fitting candidate for World Tree. Most massive of all, the Bigtree is world-famous for size. Millions of visitors have stared in silent wonder at the California Methuselahs. The "General Sherman" Giant Sequoia has been pictured in more books and upon more postcards and calendars than perhaps any other tree ever. Everywhere that the species has a prayer of surviving, it is reverently planted by proud hands. Western Washingtonians are fortunate in being able to grow such noble trees with the utmost ease. Plant it right side up and it grows—*fast.* The tallest in the State is already 150 feet, and trunks  $8\frac{1}{2}$  feet thick are on record—from trees planted this century!

The Reserve has two in the dry meadow beyond the gatehouse, and one on the lawn between the drive and the Middle Pond. None are presently large enough to excite wonder. But their strange prickly evergreen twigs and distinguished spirelike form are as good now as they ever will be. Serviceberry (*Amelanchier arborea*) Refinement of line combined with vibrancy of color are Serviceberry's gifts to human eyes. Serviceberry (or Sarvis) trees are to the forest what the piccolo is to the orchestra. Members of the Rose Family, they are related to hawthorns, crabapples and a host of similar groups. Bright though they be, however, these eastern North American natives were rarely planted in the Pacific Northwest until recently, when nurseries finally began offering them in quantity and variety. All are shrubs or small trees bearing dainty white flowers in late March and April; many produce crops of red to purplish-blue, sweet berries in June or July, attracting birds. Best of all is when the elegant, thin, narrowly elliptic leaves color orange or red in October. Thus, in flower, fruit and autumn brilliance, Serviceberry ranks highly in its fairness. In addition, the trunks are also obliging to our eyes, being neatly slender, with tight gray bark, smooth like that of a holly or a beech.

The Reserve's best Serviceberries are a grove of four multitunked specimens planted in 1984 at the east bluff area near the daisies.

Serbian Spruce (*Picea Omorika*) Most spruces are ill at ease at best and look ratty at worst when planted in western Washington. While they are young and thrifty they do ok, especially if given rich soil, summer watering, and insect-control. But just east of the Cascade Mountains, with no special help they act like they are in heaven. Serbian Spruce, from mountainous Yugoslavia, is a happy exception, and has earned high respect for its role in landscape gardening. A slender, ultimately tall tree, its branches are short, gently sweeping down, and densely covered with twigs beset by rather bluntish, inch-long needles. Dangling brown cones 2½ inches long are also produced. On account of the tree's year-round greenery, pleasing form and essential freedom from maintenance needs, numerous Reserve specimens have been planted, most notably extending from the guest house area to fringing the nearby ponds.

Tulip Tree (*Liriodendron Tulipifera*) Two trees are commonly called Tulip Tree. For the shrubby one with gorgeous early spring flowers, see Saucer Magnolia. At the other extreme, this one is a towering colossus with weird leaves, and flowers of scant notice in June. From eastern North America, the Tulip Tree, Whitewood, Tulip- or Yellow-Poplar—whichever you prefer—is a major species. Whether forming a forest, or shading a lawn, its stately size and fluttering leaves make it a force of unusual importance and appeal. Related to magnolias, it is unlike them chiefly in its making clusters of dry, winged seedpods, instead of colorful cones opening to reveal plump, moist seeds. Also, practically speaking, it is a sturdy, enormous tree that grows 200 feet tall, not a lightweight pushover like most magnolias. The leaf shape is refreshingly different. In November it turns bright yellow-golden. The Reserve's most obvious example stands at the gatehouse. Smaller ones are nearby, plus one south of the maintenance barns.

Golden Weeping-Willow (*Salix* ×*chrysocoma*) Like a woman's long blonde hair, is this willow with its tresses of gold. Brightest in late winter and early spring—when we most need a colorful lift from the gray bleakness of winter—by summer's height its narrow green leaves mask the distinctive twigs. Hanging as it does over the Middle Pond, its reflection doubles its beauty in our eyes.

Although numerous weeping willows are known, this goldtwig hybrid is one of the strongest, most popular and easily recognized kinds. The original weeping willow was brought to Europe from China, and is rarely encountered in western North America.

All willows grow rapidly, but even if they attain mighty size, their lifespan is comparatively brief. Rot-prone, brittle wood is their lot, and they cannot long withstand fungal invasions or the force of wind, weight of snow, and similar natural actions. While they last in healthy exuberance, we enjoy their dynamic growth.

English Yew (*Taxus baccata*) Hedging the Reserve's Reflection Pool, and helping to enforce the reign of silence, is English Yew. The tree is perhaps better called European Yew, since it is by no means an English exclusive. It is the world's most famous, and largest yew. All the other yews put together do not collectively have as much recorded folklore and tradition surrounding them.

Evergreen, it makes short dark needles; the males make clouds of dusty yellow pollen; the females form bright red berries. It is poisonous. The tree grows slow, but lives forever in practical human perspective. The wood is hard, heavy, precious and durable.

English Yew makes an admirable hedge material in shady sites, or can be allowed to attain tree size. Irish Yew, Golden Yew, Yellowberry Yew and many other garden varieties exist, and although some of them are at the Reserve, none command the attention of the long clipped hedge, which is of a vegetatively-propagated male clone.

**Pacific Yew** (*Taxus brevifolia*) In 1989 this tree started making headlines nationally. Taxol, found in its bark, combats some forms of cancer. So medical practitioners desire as much of the valuable bark as possible. The few Reserve specimens, however, shall stay put. They will please thousands of eyes for decades, instead of being cut short to possibly prolong one person's life.

No Washington native tree grows slower than the yew; few are as uncommon. Although it lives for centuries, it doesn't attain the large dimensions you might expect: none in the State are known even 70 feet tall, and the stoutest trunk is less than 5 feet through.

The needles of this homely conifer are dark bluish-green,  $\frac{1}{2}-1\frac{1}{2}$  inches long, abruptly sharp-tipped, and persist for several years. They tend to be seen at the ends of sparse, skinny, drooping twigs. In August and September translucent red-orange berries, wider than long, bear a single seed each, dull, olive colored, that sticks out of the berry bottom snug like a cork in a bottle. The tree's peely *bark* is an interesting mix of colors and texture: always thin and shreddy, it can be red, cinnamon, brown or purplish, not to mention gray or green when lichens or mosses cover it.

The best examples at the Reserve are on the Orchid Walk, and have had their clutter of unsightly dead twigs painstakingly pruned out. Gaunt they are, but what you see is *living* —and probably will be long after you and I are gone.