This tree tour is called "Southwest Benson Garden." It starts on the wide gravel path at the end of the parking lot of the Parking Services Building (go 150 feet from the end of the parking lot toward Lawlor Events Center to the first narrow path on the right), and covers trees between the wide gravel path and North Virginia Street.

Benson Gardens was named for Dorothy Benson, who donated Benson Garden in 1946. Since then, there have been a number of landscaping projects here. This tour features a number of uncommonly-planted tree species not seen on other Tree Tours. Much of it is "in the woods," which is unusual for UNR trees.

OK, let’s get started!
Columnar Hornbeam (Tree Number 1)

Tree No.

1

Columnar Hornbeam

On the right of the wide path, where it meets the narrow path, is a columnar tree with upright branches on the right at number 1 on the map. This is **Columnar Hornbeam** (scientific name *Carpinus betulus* 'Fastigiata'), a cultivar of the long-cultivated Hornbeam native to Europe. The species name indicates that the leaves are shaped like Birch leaves. It has branches at a high
angle to the trunk. Its leaves are a dull yellow in Fall, but, in the Winter, the dense spare branches provide a screen. These are used as street or perimeter trees in many Reno settings.

2

Arizona Cypress

Just ahead on the right is a group of gray-leaved conifers at number 2 on the map. These are Arizona Cypress (scientific name *Cupressus arizonica*). Note that, besides the bigger trees, there are some smaller trees. These are "volunteers" (trees that spontaneously sprouted from the bigger trees' seeds). Also, look at the bark on young limbs; it is an appealing combination of orange, gray and brown.

2

Red Maple Silver Maple Samara

On either side of the Arizona Cypresses near the path are two Maples, on the right Red Maple (scientific name *Acer rubrum*), native to eastern and midwestern U.S., and on the left Silver Maple (scientific name *Acer saccharinum*), native to eastern North America. Both trees are struggling, possibly because they are hemmed in by the Arizona Cypresses; by the time you go on this tour, they may well be gone.

3

Giant Sequoia

At the end of the group of Arizona Cypresses at number 3 is Giant Sequoia (scientific name *Sequoiadendron giganteum*), native to the western slope of the Sierra Nevada. This tree's preferred habitat is an elevation belt where there is a lot of moisture (in the form of snow). It grows quickly and can easily reach 100 feet in height within 60 or 70 years. This tree has red-brown bark with an unusual characteristic. If you would like, go to the tree and press on the trunk. Surprise! This tree's bark is spongy. The thickness of the trunk in mature trees makes it
fire-retardant, and the large amount of tannin in the tree makes it insect-resistant; these are two of the reasons that Giant Sequoias may live a couple thousand years.

About 35 feet farther, in an island between paths at number 4, is a multi-trunked tree with dark green glossy leaves. This is **Black Cottonwood** (scientific name *Populus trichocarpa*), native to the mountains of the western U.S., including the Sierra Nevada. This tree is quick-growing but not long-lasting, and it prefers streamside environments: the only place it is found in the wild in Reno is along the Truckee River, which can carry seeds downstream from the Sierra.

Ahead on the right at number 5 is a small tree with more-or-less horizontal branches and leaves with parallel veins. This is **Giant Dogwood** (scientific name *Cornus controversa*), native to China, Korea and the Himalayas. It has umbrella-shaped clusters of small white flowers, and, unlike most other Dogwood species, has alternating leaves.

On its left and a few feet farther from the wide gravel path is another small tree, with finely-toothed roundish leaves, at number 6. This is **Thornless Cockspur Hawthorn** (scientific name *Crataegus crusgalli var. inermis*), a thornless variety of the species which is native to eastern and midwestern U.S. It also tends to have horizontal branches, and has typical Hawthorn white flowers and red fruits. Fall foliage is gold. This tree was transplanted from elsewhere on campus a few years ago.
To its left and a few feet farther back at number 7, also transplanted a few years ago, is a tree with six-inch roundish leaves. This is **Northern (or Western) Catalpa** (scientific name *Catalpa speciosa*), native to midwestern U.S. This tree can be identified by its dark brown half-inch by 8-inch pods. Its wood is used for furniture and cabinetry because it has a beautiful grain and a low shrinkage/expansion rate.

**Tree of Heaven**

At number 8, just before a path heads to the right, is a compound-leaved tree with 20 to 30 leaflets. This is **Tree of Heaven** (scientific name *Ailanthus altissima*), native to China. This tree has abundant pink seeds and looks good as a landscape tree, but it has a distressing characteristic: it root-suckers easily and can form thickets if not controlled.

Turn right onto a narrow path between a "forested" area and a grassy area. This is one of many paths in the southwest part of Benson Garden, and, in order to prevent confusion, please follow path directions to see the rest of the trees on this tour. The map may help you in this regard. When you get to two small trees on the grassy knoll left of the path, stop at number 9.

**Princeton Elm**

These are **Princeton Elm** (scientific name *Ulmus americana* 'Princeton'). This cultivar of the eastern and central North American native American Elm was introduced in 1922, but proved its worth after Dutch Elm Disease killed millions of American Elms: it was resistant to the disease. In fact, it has been planted along Pennsylvania Avenue in Washington, D.C. to replace trees killed by the disease.
Follow this path around and look to the right at a rounded shrub at number 10. This is Boxelder (scientific name *Acer negundo*). This was planted as a tree, which later died to the ground. But such trees are hard to kill: root suckers grew from the stump. The UNR facilities crew have trained it to be a round-headed shrub, proving that you can turn a tree into a shrub.

Nearer the path 10 feet farther at number 11 is a small tree by itself. This is Goldenchain Tree (scientific name *Laburnum x watereri*), a crossbreed between two species of Laburnums native to Europe. It has two-inch, three-lobed leaves reminiscent of Clover, long drooping strings of bright yellow flowers reminiscent of those of Pea, and long stringy seedpods. All parts of this plant are poisonous, so don’t eat it!

20 feet farther on the left at number 12 is Weeping Willow (scientific name *Salix babylonica*). This tree has been cultivated for thousands of years. At one time it was thought to grow in the Hanging Gardens of Babylon (one of the Seven Wonders of the Ancient World), but this idea was discredited after the tree was named. It is a riparian (that is, streamside) tree; it grows rapidly but is short-lived, maybe an average of 50 years. This particular tree is faring poorly and will probably be removed in the near future.

Another 15 feet farther on the left at number 13 is Japanese Apricot (scientific name *Prunus mume*), native to China (of course). It has fragrant pink flowers in late Winter, followed by small
fruits in some years. The taste of these fruits compares poorly to the taste of other Apricots in this area; consequently, it is essentially an accent tree.

14

Apple

Another 15 feet farther on the left at number 14, where two paths intersect, is Apple (scientific name *Malus domestica*). This tree has white flowers and fruits which, I am told, are edible but not very tasty.

15

Mugo Pine

Cross the intersecting path. On your left, at number 15, is a conifer with multiple small limbs and short needles. This is Mugo Pine (scientific name *Pinus mugo*), native to mountains in central and southern Europe. It is usually considered a treeshrub (that is, a plant that can have either a tree or shrub form), but over time it can grow to tree size. The regular form of this treeshrub makes it appealing to landscapers.

16

Birchleaf Mountain Mahogany

About 10 feet farther on the left at number 16 is Birchleaf Mountain Mahogany (scientific name *Cercocarpus betuloides*), a treeshrub native to southwestern U.S. This is the predominant Mountain Mahogany on the western slope of the Sierra Nevada. Its name comes from the fact that it has Birch-like leaves and bark with a color like that of the tropical tree Mahogany. The seeds are very interesting: the end away from the plant is fuzzy and sometimes curled like that of a butterfly's tongue.

If you would like, take a leaf pointing toward the center of the treeshrub (I won't look) and put it into your pocket; it may come in handy near the end of this tour.
Continue to where a path comes in from the left. The gray-green conifers on either side, with a roundish shape and sprays of leaves arranged vertically at number 17, are **Oriental Arborvitae** (scientific name _Thuja orientalis_), a cultivar of the species which is native to China, Korea and far east Russia. I don't know the cultivar, because there are many which look similar.

Continue to a roundish path to where another path comes in from the left. In the area of this path are four compound-leaved Ash species. Now, Ash species look similar, and I am putting my best guess forward on species identification based on differences in both leaf shape and bark form. The fact that there are four species in this small area seems to me intentional, to give us a chance to compare Ash species and form.

The first tree, at the intersection at number 18, is **Green Ash** (scientific name _Fraxinus pennsylvanica_), native to the Eastern United States. This is one of the five most popularly-planted trees in northern Nevada because of its reliable bright yellow Fall color. Note that its leaves are coarsely-toothed, and the leaflet stems are about 1/4 inch long.

Let's head to the right around the path, with a small diversion; the tree closest to the Planetarium at number 19, with dark bark and dark green glossy single leaves is **Aristocrat Pear** (scientific name _Pyrus calleryana 'Aristocrat'_), a cultivar of the China and Taiwan native **Callery Pear**. It is narrower than the species, which has abundant white flowers in Spring and good Fall colors. Here in the "forest" it doesn't have as good color.
Tree
No.

20

Fruitless White Mulberry

Left of the Aristocrat Pear at number 20 is a small tree with four-inch roundish leaves. This is **Fruitless White Mulberry** (scientific name *Morus alba* 'Fruitless'). It has been cultivated for thousands of years because it is a tough, fast-growing shade tree with no messy Mulberry fruits. One of its uses is as a home for silkworms, and the American colonists planted it for that purpose.

21

Black Locust

Continue around the roundish path; just inside it is a compound-leaved tree with round one-inch leaflets at number 21. This is **Black Locust** (scientific name *Robinia pseudoacacia*), native to southeastern U.S. but spread all over the country by settlers. This tree has white panicles of flowers in Spring and four-inch brown pods in Fall. It provides good shade but poor Fall color. A characteristic of this tree with thorny branches is that it tends to sucker and form thickets.

22, 23 and 24

Black Ash          Oregon Ash          Narrowleaf Ash          Green Ash

The other tree inside the roundish path at number 22 is the second Ash species, **Black Ash** (scientific name *Fraxinus nigra*), native to northeastern U.S. Note that its leaflets are thinner than those of the Green Ash. Uses for this tree include basket-making and electric guitars (because of its good resonance). Compare the leaves with those of the Green Ash at number 18: the leaflets are thinner and the bark looks different than that of Green Ash.

Look toward the large grassy area on your right at number 23. Just before it is the third Ash species, **Narrowleaf Ash** (scientific name *Fraxinus angustifolia*), native to the Mediterranean area. Its leaves are even narrower than those of Black Ash, and the leaflet stems are very short. Narrowleaf Ash is valued as an urban landscape tree because of its resistance to air pollution. The leaflets are two inches long and even thinner than Black Ash.
Continue around the roundish path to the next path. The tree on the left at number 24 is the fourth Ash species, **Oregon Ash** (scientific name *Fraxinus latifolia*), native to lower elevations of the Northwest coastal mountains and the Sierra Nevada. This timber tree has leaves which are rounder than the other Ashes in this area.

![Oregon Ash](image)

**Rocky Mountain Juniper**

Head down the path next to the Oregon Ash. On the right side after about 50 feet is a sparse-looking conifer at number 25, **Rocky Mountain Juniper** (scientific name *Juniperus scopulorum*), native to Western North America, including a few places in eastern and southern Nevada. There are numerous cultivars of this species developed for the landscape industry, but this is probably the species. As you might guess, the small leaves indicate drought tolerance; and, in their native habitat, Junipers prefer rocky, dry, windblown sites where there is little competition. The little blue berries are used for flavoring foods and gin.

![Rocky Mountain Juniper](image)

**Amur Maple**

Continue to where the path intersects another path. To your right, at number 26, is **Amur Maple** (scientific name *Acer ginnala*), a native of China and Japan. It has three-inch three-lobed leaves. It is a very tough tree once established, and stays less than 25 feet tall. Perhaps its best feature is its abundant red samaras (winged seedpods) which flood the tree in Summer. It has red, orange and yellow Fall color in the best years.

![Amur Maple](image)

Continue on this path to the sidewalk along North Virginia Street. Turn right. After about 50 feet on your right, and about 20 feet from the sidewalk, is a treeshrub at number 27 with many stems coming from the ground. Reach into your pocket and take out the Birchleaf Mountain Mahogany leaf.
This treeshrub is Curl-leaf Mountain Mahogany (scientific name *Cercocarpus ledifolius*), native to western North America, including the eastern slope of the Sierra Nevada. It grows at about 4000 to 6000 feet. Note that the leaves are thick and look like those of a succulent. This plant is an expert at retaining as much water as possible. If it is the time of year when there are seedpods, you will notice that the seedpods look like those of Birchleaf Mountain Mahogany at number 16.

Goldenrain Tree

Continue on the sidewalk. On each side of the light pole, at number 28, is Goldenrain Tree (scientific name *Koelreuteria paniculata*), native to China, Japan and Korea. It is a three-season tree: in early Summer, after the other trees have bloomed, it has cylinders of small yellow flowers; it has lantern-shaped fruit which start out green, turn to yellow in Fall, turn brown in Winter and stay on the tree until the leaves come out the next Spring.

Winter King Hawthorn and berries

The last tree on the tour is directly behind the light pole at number 29. It has small and dark roundish leaves with pointed ends and sometimes points along the leaf margin. This is Winter King Hawthorn (scientific name *Crataegus viridris* 'Winter King'), a cultivar of the southeastern U.S. species. It has white flowers in Spring and red berries in Fall which sometimes persist into Winter. 'Winter King' is more disease-resistant than the species and has more attractive Fall color (purple and scarlet).

This concludes the "Southwest Benson Garden" Tree Tour.