

Flowering Cherry Trees at the U.S. National Arboretum

Self-Guided Tour



#### **Tour Basics**

This tour explores the remarkable beauty of ornamental cherry trees as well as the National Arboretum's long history with them. It visits 31 sites spread out across 450 acres. Each tree is marked with a large number on a stake. The tour's route is approximately three miles. If you are walking, be sure to allow for adequate time. If driving, please park only in designated areas. **Beyond the Tidal Basin** introduces a wide range of flowering cherries, many of which are quite rare. Each type has its own peak bloom time, so you will see different trees in peak bloom depending on when you visit. Find the tour map in the centerfold of this booklet.

#### Doing Hanami

Hanami is the Japanese word for cherry blossom viewing, and the practice dates to the Japanese emperors of the 9th century CE. Sakura (cherry blossoms) appear in Japanese myth, poetry, and other art, and their brief blooming has long symbolized a short life well lived. Hanami evolved over time and gradually became more accessible to ordinary people. It is a communal event, with friends and families gathering for picnics and parties under the trees' shade. Hanami retains a special place in Japanese culture and it has spread to this country too. As you explore the grounds today, make sure to pause and admire the blossoms—do some hanami.

#### What's Blooming Right Now?

That's a tricky question! The answer depends on a combination of day length and temperature and varies slightly from year to year. Different types of cherries also have different blooming seasons. For this reason, you will discover the trees in different stages of bloom and leaf. This guide indicates the general time frame for when each tree is likely blooming, but such predictions are never exact.

#### **Blooming Periods**

Early Flowering: early March to late March Mid-season Flowering: late March to mid-April Late Flowering: mid-April to late April

#### What's in a Name? Understanding Cherry Nomenclature.

The italicized parts of a cherry's name are its scientific name, indicating its species and genus. All flowering cherries belong to the genus *Prunus*, which also contains edible cherries, plums, peaches, apricots, and almonds. If a cherry's scientific name includes an  $\times$ , it is a hybrid species. Many of the trees on this tour do not have specific epithets. These are hybrids that are unnamed or of unknown genetic parentage.

Cultivars are **culti**vated **var**ieties—they have been selected by humans for particular desireable traits. All plants of a given cultivar will share these specific characteristics. If a tree is a cultivar, its cultivar name is enclosed in single quotes.



### *Prunus incisa* 'Kojo-no-mai' Mid-season Flowering

This cultivar of the Fuji cherry has branches that grow in a zigzag pattern, giving it a distinctive texture in the winter landscape. Both white and pink blossoms can appear on a single tree. Like all Fuji cherries, its leaves have deep notches, or incisions, along the edges—hence the species's scientific name, *P. incisa*. This is the smallest tree on the tour, and it can even be grown in a large pot. In autumn, the leaves turn a deep orange-red.

#### Cherry Breeding at the National Arboretum

Since the 1980s, the National Arboretum has had an active flowering cherry research program. Its focus is on developing new varieties of ornamental cherry trees, with a particular emphasis on crossing diverse species. Currently, the program includes over 1500 plants representing forty unique genotypes (such as hybrids and cultivars). Some of the traits that Arboretum scientists work to enhance include: disease and pest resistance, tolerance to environmental stresses, year-round interest, novel shapes and sizes, and ornamental value. The next three stops of this tour visit three cultivars developed by the Arboretum. Stop 25 visits the *Prunus* research fields, where Arboretum scientists grow flowering cherries used in our tree breeding and other research work.

# *Prunus* ×*incam* 'First Lady' Early Flowering

The second cultivar released by the Arboretum, 'First Lady' was selected for its strongly upright growth habit and dark pink, semi-pendulous, single flowers. Even though this specimen is small, at maturity it will reach 25 feet tall and 14 feet wide. Its glossy, dark green leaves show good disease tolerance.



# **Prunus 'Dream Catcher'**Early Flowering

This cultivar was selected in 1984 from the Arboretum's research breeding program. It was the first flowering cherry to be released by the Arboretum for sale by commercial nurseries. 'Dream Catcher' grows to 25 feet tall with a vase-shaped crown spread of 15 feet and features large, clear medium pink single flowers.



### **Prunus 'Helen Taft'** Mid-season Flowering

The Arboretum introduced this hybrid cherry in 2012 to mark the centennial of the Tidal Basin cherries. Along with Viscountess Iwa Chinda, First Lady Helen Taft planted the first trees at Potomac Park. A clone of the Yoshino cherry planted by Viscountess Chinda is one parent of 'Helen Taft'. Like its parent, this tree is large and spreading, reaching 35 feet wide and tall at maturity. Unlike the white Yoshino blooms, 'Helen Taft's flowers emerge and remain pink.





#### *Prunus* ×*subhirtella* 'Beni-hoshi' Mid-season Flowering

Beni hoshi means something like "crimson star" in Japanese. While crimson is a bit of an overstatement. each blossom's five pointy petals, narrower than those of many other flowering cherries, are indeed arranged like a perfect star. The flowers are rather fragrant, musky rather than sweet. This is a fast-growing tree, its spreading, arching branches reaching a height and width of up to 25 feet.



# **Prunus sargentii**Mid-season Flowering

Although named after a renowned American botanist, the Sargent cherry is native to northern Japan. It was introduced to this country in 1890. As this mature specimen demonstrates, the species is large, growing 30 feet tall and just as wide. Some individuals may even reach 45 feet in height. Single, pale pink flowers grow in clusters of two to six blossoms. *P. sargentii* is one of the most cold-tolerant ornamental cherries, hardy to USDA Zone 5a.



### Prunus ×incam 'Okame' Early Flowering

This cultivar is a hybrid between a species from Taiwan and one from Japan, and is one of the earliest-flowering cherries.

Vase-shaped when young, 'Okame' becomes more rounded with age. The blossoms appear before the leaves, covering the branches with abundant, deep pink, single flowers. 'Okame' is one of the parent plants for two National Arboretum introductions, 'Dream Catcher' and 'First Lady'.

#### Prunus ×yedoensis 'Shidare Yoshino' Mid-season Flowering

Shidare is the Japanese word for "weeping." 'Shidare Yoshino' is a weeping form of the more familiar Yoshino cherry and originated some time in the late 1800s. It typically reaches 20 to 25 feet in height, with a spread of up to 30 feet. Its pendulous branches are thickly covered with the Yoshino's characteristic single, white flowers.



#### **Prunus 'Kanzan'** Late Flowering

After the Yoshino, this village cherry is the most common cherry planted at the Tidal Basin. It reaches between 20 and 45 feet when mature, with ascending and spreading branches. 'Kanzan' blooms later than many other cherries. Its deep pink, double flowers resemble small peonies hanging in pendulous clusters. 'Kanzan' might also be known as 'Kwanzan', an obsolete spelling, or 'Sekiyama', its Japanese name.



#### Village Cherries: Sato-zakura

The Japanese fondness for flowering cherries goes back over 1200 years. Mountainside cherry viewing excursions are recorded as early as 720 CE, and ornamental cherries began appearing in Japanese gardens by the end of the 8th century CE.

As gardeners selected and refined them, these cultivated garden trees came to be called village cherries, or *Sato-zakura*, to differentiate them from wild species, *yama-zakura* ("mountain cherries"). A number of cultivars dating as far back as the 17th century are still grown today. Due to their long history, their exact breeding background was uncertain until the recent advent of modern DNA testing.



#### *Prunus* ×*yedoensis* (Yoshino Cherry) Mid-season Flowering

The Yoshino is Washington's iconic cherry, with over 1400 trees lining the Tidal Basin. It grows to 50 feet, broadly upright with young branchlets descending. Single, white flowers, with perhaps a tinge of pink, smell faintly of almonds. These two trees have close ties to the Tidal Basin cherries. The left is a clone of the tree that First Lady Helen Taft planted in 1912, while the right originated as a cutting from the tree planted by Viscountess Iwa Chinda at the same time.



# *Prunus* ×*yedoensis* 'Awanui' Mid-season Flowering

This unique cultivar hails from New Zealand. Although it is popular outside the United States, this tree is the only large specimen in this country. 'Awanui' demonstrates good disease resistance and has soft pink, single blossoms. *Awanui* means "gully" in Maori and was the name of the street leading to the nursery where the cultivar was developed.



### **Prunus 'Shirotae'** Mid-season–Late Flowering

This village cherry dates to at least the early 1800s. Its thin, white petals inspired the Japanese to name it after *shirotae*, a white cloth made from the paper-mulberry tree. Its large, mildly fragrant, double flowers grow on wide-spreading, horizontal, often slightly drooping branches. 'Shirotae' does not grow very tall, reaching no more than 15 to 20 feet.

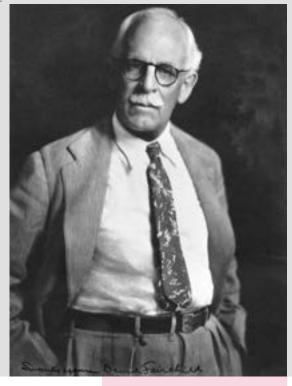
#### USDA's Cherry History: David Fairchild (1869–1954)

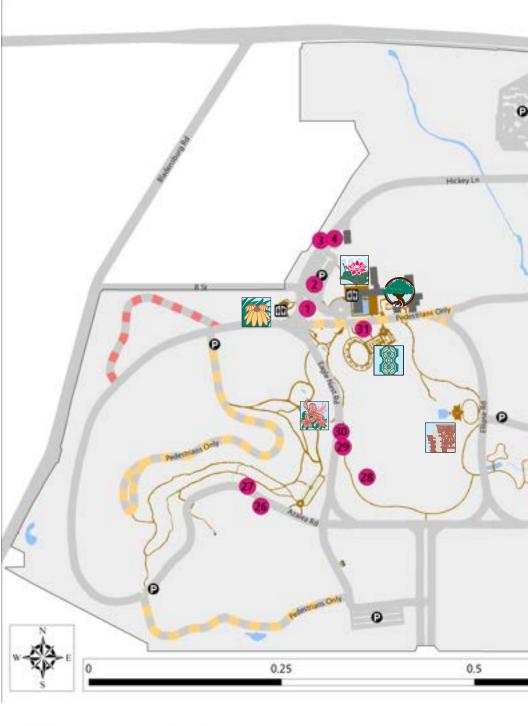
David Fairchild was an American botanist and plant explorer. He spent much of his career with the U.S. Department of Agriculture, where he led the Foreign Seed and Plant Introduction Section. Fairchild is a tremendously important figure in American agricultural history, having introduced over 75,000 crops to this country, including mangoes, soybeans, pistachios, nectarines, and avocados.

Fairchild had an enduring interest in flowering cherries, having become enamored of them on his first visit to Japan in 1902. Four years later, he imported 125 trees to plant at his home in Chevy Chase, Maryland, even hiring a Japanese gardener to tend them. As his trees thrived, Fairchild became a booster for their introduction elsewhere in the region. Together with Eliza Scidmore, a journalist widely respected for her knowledge of Japanese horticulture, Fairchild eventually caught the attention of First Lady Helen Taft in 1909.

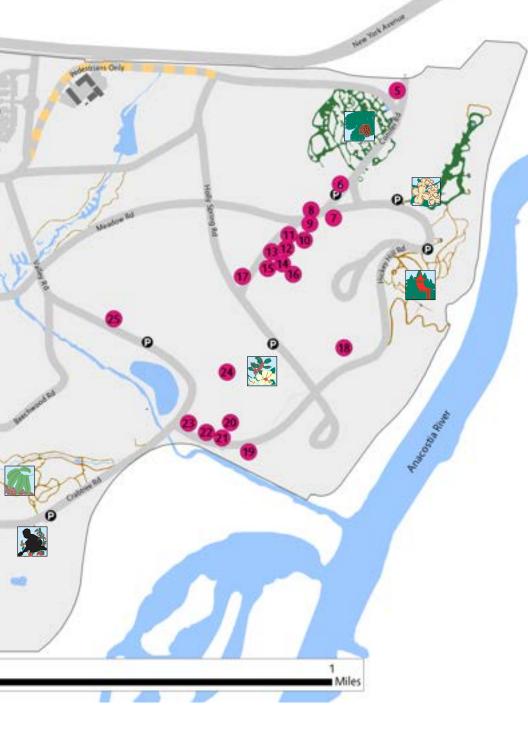
Fairchild's international connections facilitated the necessary relationships with Japanese nurserymen, scientists, and diplomats, and he oversaw the importation of two shipments of cherries from Japan. The first, sent in 1910, had to be destroyed due to a large-scale infestation of insects and other

pests. The second shipment of 3000 trees arrived in 1912 and was of better quality. Today, about a hundred of those original trees still stand along the Tidal Basin. The genetics of many others survive in cuttings grown from original trees. Some of these cloned trees have been planted in Potomac Park, while others grow here at the Arboretum.





# Tour Map





# **Prunus 'Aratama'**Mid-season Flowering

'Aratama' was developed in Hokkaido, in northern Japan. A Japanese nursery donated this tree to the USDA in 1979, and it was planted here at the National Arboretum in 1992. A large, umbrella-shaped tree, 'Aratama' can reach 30 feet in height. Flouncy, double flowers emerge from deep red buds, starting pink before fading to nearly white.



# *Prunus* × *kanzakura* 'O-kanzakura' Early Flowering

Oh-kan-zakura means "big flowered winter cherry," and the name is certainly accurate. This is one of the earliest flowering cherries to bloom each year, with large, pink, single flowers gathered in pendulous clusters. Like all kanzakura cultivars, 'O-kanzakura' is rarely found in the United States. This tree was donated by a Japanese nursery to the USDA in 1979 and has been growing here since 1992.



### **Prunus 'Fudanzakura'** Early–Mid-season Flowering

This village cherry is an extremely rare cultivar and not often seen even in botanical gardens. The Japanese word *fudanzakura* means "cherry without interruption," and the name is well chosen. This cultivar is one of only a very few cherries able to flower in multiple seasons, often in the fall and even during warm winter spells, with a main flush in the spring. The flowers are single and white.

#### **Prunus 'Matsumae-oshio'** Late Flowering

Many Japanese cherries are centuries old. 'Matsumae-oshio', however, was developed in 1963 in Hokkaido by Masatoshi Asari, who also selected 'Aratama', Stop 13 on this tour. *Matsumae* refers to the town where it was bred. *Oshio* means "big wave," a reference to the tree's large, soft pink flowers and their frilly petals. This may very well be the only 'Matsumae-oshio' in the United States.



### Prunus 'Pink Cloud'

#### Early Flowering

In the early 1970s, staff at the Huntington Botanical Gardens were charmed by a chance seedling growing there. It was introduced as 'Pink Cloud', and the tree's round clusters of pink, single flowers certainly do resemble a mass of fluffy clouds. Although many flowering cherries are bred specifically for desired traits, many others are happy accidents like 'Pink Cloud'.



### *Prunus* ×*sieboldii* (Ingram selection) Mid-season Flowering

A compact tree with an upright yet open branching habit, this cultivar is an excellent ornamental cherry. Its semi-double blossoms shade from palest to rich pink and are lightly scented. Flowers appear before the foliage.





# *Prunus* ×*subhirtella* 'Autumnalis' Mid-season Flowering

This is a graceful, rather small tree that reaches between 20 and 25 feet in height. 'Autumnalis Rosea' earns its name by blooming heavily in the spring and again, more sparsely, in late fall. A warm winter spell may also prompt a flush of this cultivar's semi-double, pink-tinged flowers.



### **Prunus 'Royal Burgundy'** Late Flowering

'Royal Burgundy's slightly spreading vase shape and flowers—abundant, deep pink, and frothy double blossoms—rather resemble its parent, the familiar 'Kanzan' cherry, seen at Stop 9. Its foliage is what makes this cultivar really stand out. Leaves emerge bronze and rapidly turn reddish-purple. In the fall they take on an orange tinge. Slightly smaller than 'Kanzan', 'Royal Burgundy' grows to about 25 feet tall and wide.



#### USDA's Cherry History: Paul Russell (1889–1963)

In 1934, Paul Russell wrote a scientific guide to the newly popular flowering cherries, one of the country's first. Many of his detailed descriptions came from observations of cherries growing at the USDA's plant introduction station in Glenn Dale, Maryland. The tree at Stop 12 was planted in Russell's memory a year after his death. It was grown from a cutting of one of the trees Russell studied at Glenn Dale.

#### Prunus sargentii 'Princeton Snow Cloud'

Mid-season Flowering

The popular Sargent cherry typically has pink flowers. This cultivar, developed in the 1980s, produces abundant large white flowers. As with other Sargent cherries, the leaves of 'Princeton Snow Cloud' can turn a brilliant red in the fall. This is among the most cold tolerant of the white ornamental cherries, hardy to USDA Zone 5a.

# Prunus 'Snofozam' SNOW FOUNTAINS

Mid-season Flowering

Its cascading branches covered with small, pure white flowers inspired the trademark of this weeping cherry. As a weeping type, it grows no upright trunk, but it may be trained upright or grafted onto the roots and trunk of an upright cherry to give it a more tree-like appearance. The leaves turn from dark green to a rich orange-gold in the fall.

### **Prunus 'Snow Goose'** Mid-season Flowering

A small tree at just 20 feet tall and wide, 'Snow Goose' opens its abundant, fragrant, white blossoms before its leaves appear. Later in their bloom, the flowers' centers redden slightly. 'Snow Goose' was developed in the Netherlands.







#### Cherry Architecture: Some Examples

Flowering cherries grow in a variety of shapes. Some are large and spreading, some weep, some stay narrow and straight. Not every tree fits in every space. Selecting a tree with an appropriate growth habit is critical. Every tree is an individual, and each will vary slightly. A tree's shape is dependent on its location, health, and age. Regular pruning, starting when the tree is young, helps maintain its desired size and shape.



Narrow-upright trees have an erect crown with branches growing mostly upward. *Prunus* 'First Lady' is an example.



Layered trees like Prunus ×yedoensis 'Akebono' take on an almost tiered shape with openness between the layers.



**Broadly spreading** trees have crowns that tend to be wider than they are tall. *Prunus* 'Kanzan' is one such tree. 'Kanzan', like most non-weeping cherries, tends to grow more round with age.



**Weeping** cherries' branches droop towards the ground. Mature trees can be quite broad. Many weeping cherries would stay low to the ground if not trained upright when young or grafted to the trunk of an upright cherry. *Prunus itosakura* shows a classic weeping shape.



# **Prunus 'NCPH1' PINK CASCADE**Early—Mid-season Flowering

PINK CASCADE is a petite tree, reaching only 12 feet wide and tall at maturity. It gets its weeping habit and short stature from one of its parents, *Prunus* 'Snofozam' (Stop 22). From its other parent, *Prunus* × *incam* 'First Lady' (Stop 2, an Arboretum introduction), it inherited its rich pink blossoms, which offer a musky fragrance. Be sure to visit all three trees to take full advantage of this little family reunion.

## Prunus Research Field

#### Early to Late Flowering

The trees in this field illustrate the diversity of flowering cherries—their varied blooming seasons, flowers, shapes, sizes, leaves, and bark. Many of these trees were grown from seed collected from Japan during plant collecting trips in the 1980s, and others are hybrids bred by Arboretum scientists. Some trees are used for breeding, some for germplasm preservation, and others, such as this unnamed hybrid seedling, are under evaluation for possible cultivar release.

# *Prunus* ×*yedoensis* 'Akebono' Mid-season Flowering

The cherries in this multi-tree planting are all 'Akebono', a popular cultivar of the Yoshino cherry. As with the Yoshino, the flower buds are pink. But the mature flower turns white with a trace of pink, unlike the pure white Yoshino. *Akebono* means "dawn" in Japanese, a nod to the blossoms' soft coloration. Despite its Japanese name, 'Akebono' was selected in California. (Indeed, in Japan, this cultivar is sometimes called 'Amerika'!)

### **Prunus 'Taihaku'** Mid-season Flowering

Taihaku means "great white" in Japanese, a reference to this tree's large, pure white flowers. 'Taihaku' is a village cherry—an old Japanese cultivar of uncertain origins. A spreading plant, 'Taihaku' may grow to 25 to 35 feet tall and just as wide.







#### USDA's Cherry History: Roland Jefferson (1923–2020)



Roland Jefferson grew up in Washington, D.C., discovering the Tidal Basin cherries as a young boy. After a stint in the Army Air Forces during World War II, he enrolled at Howard University and majored in botany. As a young Black man, Jefferson had difficulty finding work in his field. Six years after graduating in 1950, he secured a job making plant labels at the National Arboretum. His talents were quickly evident, and Jefferson was promoted to botanist in 1957. He was both the National Arboretum's first African American botanist and its first official manager of plant records.

In 1977, Jefferson co-authored The Japanese Flowering Cherry Trees of

Washington, D.C.; A Living Symbol of Friendship, a short book about the Tidal Basin cherries. He also recognized the importance of preserving the Tidal Basin trees as historical records themselves. He took cuttings from many of the original trees and propagated over one hundred clones, two of which are featured at Stop #10.



Scan this QR code to download a free copy of Jefferson's book from the National Agricultural Library.



### *Prunus* (seedling selection) Mid-season Flowering

This tree is a happy accident. Roland Jefferson had planned to use it as rootstock. (Grafted plants are made of a rootstock, the base and roots of one plant, and a scion, the flowering or fruiting part of another. See Stop 23 for a grafted flowering cherry.) The tree's profusion of large flowers and light almond scent persuaded him to keep it as-is instead. It is the only tree at the Arboretum known to have been selected by Jefferson personally.

# **Prunus takesimensis**Mid-season Flowering

This tree was grown from seed collected on Ulleung Island in South Korea, the only place in the world where the species grows naturally. *P. takesimensis* is believed to tolerate wet soils better than most cherries. An upright, spreading tree, it can reach up to 40 feet. The white or sometimes pink flowers grow in large clusters with short stalks.



### **Prunus 'Ukon'** Late Flowering

'Ukon' is an old village cherry, broad and vase shaped and capable of growing up to 50 feet wide with age. When not in bloom, it looks fairly unremarkable. But *ukon* is the Japanese term for turmeric. Every spring, pinkish buds appear on 'Ukon's branches. These buds open into yellowy-green flowers, which eventually fade with age to nearly white. 'Ukon' is striking on any landscape and a pleasing change of pace among flowering cherries.



This weeping cherry produces delicate white flowers along the slender, arched branches for which it is named. *Itosakura* means "thread cherry" in Japanese. The tree's cascading branches sway attractively in the breeze and may reach all the way to the ground.





The U.S. National Arboretum enhances the economic, environmental, and aesthetic value of ornamental and landscape plants through long-term, multi-disciplinary research; conservation of genetic resources; and interpretive gardens and exhibits.



**Arboretum Hours** 8:00 AM to 5:00 PM

National Bonsai & Penjing Museum Hours 10:00 AM to 4:00 PM

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