Beyond the Tidal Basin: Introducing Other Great Flowering Cherry Trees

Self-Guided Tour of the
U. S. National Arboretum's
Flowering Cherries

March 26 – April 10, 2011
8:00 a.m. - 5:00 p.m. daily

U.S. National Arboretum
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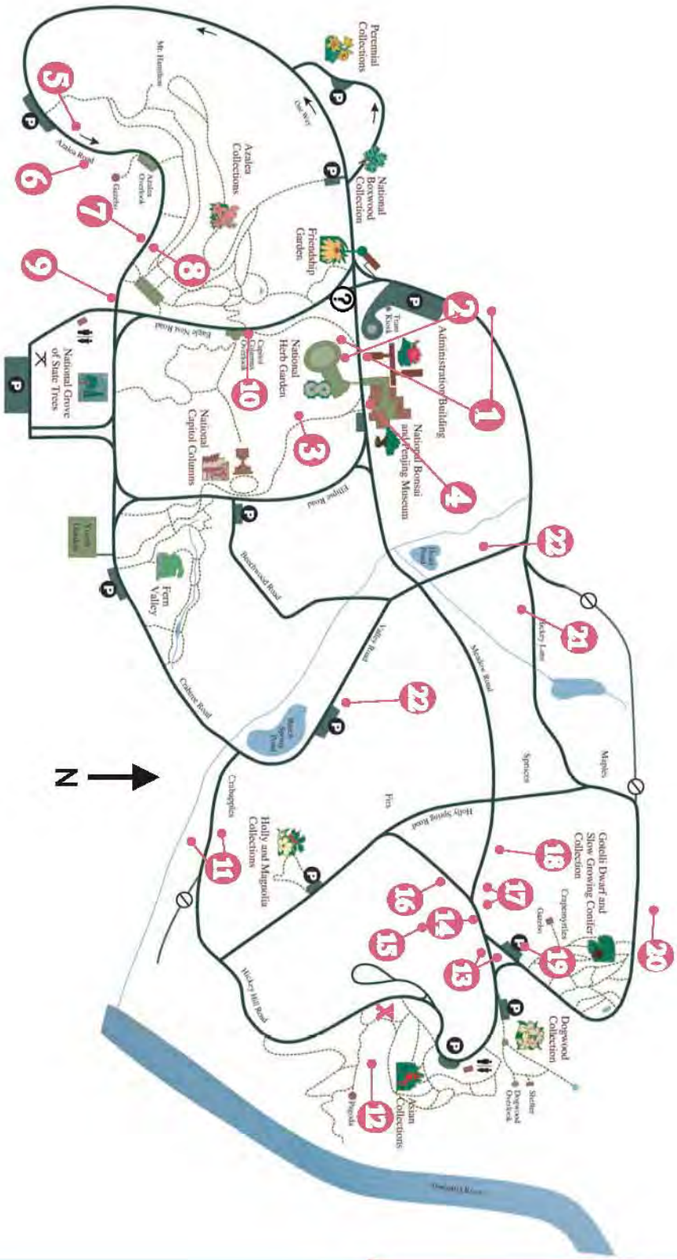
Introduction

For centuries, the Japanese have valued the ornamental qualities of flowering cherries, equating the transient beauty of the blossoms with the brevity of human life. As early as the mid-nineteenth century, Americans, too, were captivated by the delicate beauty of the cherry. Since that time, United States Department of Agriculture scientists have played a role in bringing flowering cherries to the North American landscape through plant collecting in Japan as well as different breeding projects. National Arboretum scientists continue this tradition today.

When most people hear the word "cherry blossom," they think of the familiar Yoshino cherry trees, made famous by the historic planting around the Tidal Basin in Washington, D.C. However, there are many other species of ornamental *Prunus* that offer a diversity of flower color, bloom time, shape, disease and pest resistance, cold hardiness, and tolerance to environmental stresses. The arboretum is using this diversity in its flowering cherry breeding program to create new varieties that can be used in a wide range of landscape settings. You will visit two of these new varieties as well as our research fields on this tour.

Our *Beyond the Tidal Basin* tour introduces you to a wide range of flowering cherries. You will see flowers in peak bloom on only some of the trees, as different types have different bloom times. Cherries have other ornamental features, too, so be sure to look at the whole tree and take note of the ones with the qualities and bloom times that match your taste and landscape needs.



Cherry Blossom Basics

Prunus is the Latin name for flowering cherries and their relatives (over 400 species, which include edible cherries, plums, peaches, apricots, and almonds). Flowering cherries are grown for their flowers, not fruit, and are native to several countries in Asia besides Japan, including China, Korea, and Taiwan.

Plant names enclosed in single quotes (e.g., 'Dream Catcher') indicate that the plant is a **cultivar**, or cultivated variety. A properly named cultivar will have features (e.g., flower color and form) identical to all others with the same cultivar name. To guarantee that you get the type of cherry you want, be sure you ask for it by name.

The **flowering time** of cherries, like most spring-flowering plants, is dependent on a combination of day length and temperature. Different types also have different blooming seasons—some even flower in the fall. For this reason, during this tour, you will discover the cherries in different stages of bloom and leaf.

Flowering cherries have **ornamental features** beyond their blossoms. Summer and fall foliage or ornamental bark characteristics add year-round interest to some species. Cherry bark can be quite shiny and range in color from gray to a reddish brown. On some species the lenticels, or porous lines through which gases are exchanged, form distinctive patterns on the trunk and branches. Flowering cherries also come in different shapes. Some may be broad and rounded, while others are more upright or even weeping.

Generally **easy to grow**, flowering cherries require full sun, well-drained soil, and adequate moisture. Plant them in spring or fall. Most are hardy to USDA Zone 5. Few *Prunus* species are resistant to disease and insect pests, but generally can tolerate some damage from them, blooming consistently for several decades if otherwise healthy.

The U.S. National Arboretum serves the public need for scientific research, education, and gardens that conserve and showcase plants to enhance the environment.

www.usna.usda.gov

Gift Shop Hours
10:00 a.m. to 3:30 p.m. daily and
10:00 a.m. to 5:00 p.m. on weekends
April 9 - mid-October 2011.

The U.S. National Arboretum is an official participant of the 2011 National Cherry Blossom Festival. For more information about the festival, visit www.nationalcherryblossomfestival.org.

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AGRICULTURAL RESEARCH SERVICE
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Early Flowering = Mid- to late March
Mid-Season Flowering = Late March to mid-April
Late Flowering = Mid- to late April

1. ***Prunus* 'Dream Catcher'**
(U.S. National Arboretum Introduction)
This cultivar resulted from a selection made in 1984 from the arboretum's research breeding program (see stop #21) and is the first flowering cherry to be released by the National Arboretum. 'Dream Catcher' grows to 25' tall with a vase-shaped crown spread of 15' and features large, clear medium pink, single flowers. To view a fact sheet, see www.usna.usda.gov/Newintro/awards.html.
Early flowering

2. ***Prunus subhirtella* 'Shidare-higan'**
A weeping cultivar of the Higan Cherry (*Higan* is the Japanese word for spring equinox; *Shidare* means weeping). Note that the mature tree needs room to spread.
Mid-season flowering

3. ***Prunus ×yedoensis***
This stately specimen is an example of the tree made famous in the United States by Japan's 1912 gift of flowering cherries to the Nation's Capital. It is because of its long-standing popularity in their country that the Japanese selected Yoshino as one of the varieties to send to America. Replacing the now aging and dying Tidal Basin trees with authentic duplicates has been challenging. National Arboretum horticulturists assisted by taking cuttings from the original trees and growing them to a size suitable for transplanting (see stop #4).
Mid-season flowering

4. ***Prunus ×yedoensis***
In 1975, arboretum botanist Roland Jefferson took cuttings of several of the trees from the 1912 Tidal Basin gift in order to preserve documented specimens. This is a plant from one of those specimens, which though 60 plus years younger than the original Yoshino trees, is genetically identical to them.
Mid-season flowering

5. ***Prunus* 'Tai Haku'**
The flowering cherries commonly known as "Garden Cherries" (Sato-zakura Group) are grouped into this *Prunus* species. The grouping assumes a common parent whose varied offspring resulted from centuries of hybridizing and selection in Japan. There are many different cultivars, including this one, 'Tai Haku', which means big white in Japanese—a reference to this tree's large flowers.
Early flowering

6. ***Prunus leveilleana* 'Fudanzakura'**
The Japanese word *Fudanzakura* means "cherry without interruption" and refers to this cultivar's tendency to flower sporadically throughout the winter and early spring months before it puts on a full display. Unfortunately, frost sometimes turns the early flowers brown. Grow this cherry for the joy of finding flowers fully open at surprising times of the year.
Early flowering

7. ***Prunus yedoensis* 'Akebono'**
The cherries in this multi-tree* planting are all 'Akebono', a popular American cultivar of the Yoshino cherry (see stops #3 and 4). Like the Yoshino, the flower buds are pink, but the mature flower turns white with a trace of pink.
*The first is mid-way down the bank, directly behind this sign, and the others are at the forest edge.
Mid-season flowering

8. ***Prunus* 'Shirotae'**
The thin white petals of this Garden Cherry (see #5) cultivar inspired the Japanese to name it after a white cloth—called *Shirotae* in Japanese—made from the paper mulberry tree. 'Shirotae' has been grown in Japanese gardens since the early nineteenth century, remaining a favorite for its large, double, fragrant blossoms. A broadly spreading tree, it requires room to mature.
Late flowering

9. ***Prunus subhirtella* 'Pendula Plena Rosea'**
This attractive deep pink, double-flowered weeping cherry grew on the grounds of the imperial palace in Kyōto, Japan, and came to the West in 1928 via England (through propagations, which is how nurseries produce plants identical to the original to sell). Its red buds are unusual because the bright yellow-green stigma (the portion of the female reproductive organ to which pollen attaches) protrudes from the still tightly closed petals. Nurseries usually propagate flowering cherries by taking a cutting from the parent tree and grafting it onto the roots—and sometimes trunk—of another cherry, called the rootstock. In order to obtain a straight trunk, propagators will graft weeping varieties onto longer trunks, while standard varieties (or non-weeping types) are often grafted near the ground.
Mid-season flowering

10. ***Prunus ×incam* 'First Lady'**
(U.S. National Arboretum Introduction)
The second release from the Arboretum's field trials (see stop #21), this cultivar was selected for its strongly upright growth habit and dark pink, semi-pendulous single flowers. Even though this specimen is small, in 20 years it will grow to 25' tall and 14' wide. Its glossy dark green leaves have shown good disease tolerance.
Early flowering

11. **Flowering Tree Collection**
Flowering cherries represent one the most popular groups of flowering trees for the home landscape. Planted in the area on both sides of the road at this stop is the arboretum's Flowering Tree Collection, which includes several types of flowering cherries. Look on the north side of the road for a weeping form, *Prunus* 'Snofozam' (see stop #12), and a dark-leaved cultivar, *Prunus serrulata* 'Royal Burgundy'. On the south side of the road is a group of *Prunus subhirtella* 'Autumnalis Rosea', a pink-flowered cultivar that blooms twice, in spring and fall. Walk among this collection to find other interesting flowering cherry cultivars (names are on silver tags hanging from the branches). Since this is a new collection, most of the cherries are small because they are young.

12. ***Prunus* 'Snofozam'**
View three 20-year-old specimens of this lovely small weeping cherry also called Snow Fountains®. Stand at the "X" on the map to look down the valley. The trees are on the left side of the stream bed. (For newly planted specimens, see stop #11.)
Mid-season flowering

13. ***Prunus ×incam* 'Okame'**
One of the earliest cherries to flower, an 'Okame' in full deep pink flower heralds the beginning of spring. The small- to medium-sized tree works well in small gardens, adding interest in fall with its colorful orange-red leaves.
Early flowering

14. ***Prunus* 'Sekiyama'**
Another type of old Garden Cherry (see #5), this cultivar joins Yoshino as one of the most commonly available in nurseries. It blooms later than other cherries and features double flowers that resemble tiny peonies. This tree is almost 50 years old.
Late flowering

15. ***Prunus ×yedoensis***
The sign is located between two more examples of trees grown from cuttings taken in 1975 from the original Tidal Basin cherries (see stop #4).
Mid-season flowering

16. ***Prunus* 'Aratama'**
This cultivar was donated to the USDA in 1979 by a Japanese nursery. The plant remained at a quarantine station until 1992, when it was planted at the arboretum. Imported members of the genus *Prunus* must be grown in special facilities and assessed by the USDA for a number of years before being declared safe from diseases that threaten our cultivated and wild fruiting and flowering cherries, peaches, nectarines, apricots and plums (all members of the genus *Prunus*). Only then may they be displayed in public gardens and offered for sale.
Mid-season flowering

17. ***Prunus ×yedoensis* 'Shidare Yoshino'**
A weeping form of the popular Yoshino cherry (see stop #3). Compare this weeping Yoshino to the upright forms across the road (stop #15).
Mid-season flowering

18. ***Prunus cyclamina***
This is the only flowering cherry on the tour native to China. While rare in North America, its vigorous growth habit and mature height of 25-30 feet make it a good candidate for urban gardens. Its delicate pink blossoms appear before bronze-red new foliage, and its berries are attractive to birds.
Mid-season flowering

19. ***Prunus sargentii***
The Sargent cherry was named for Charles Sprague Sargent, an American plant collector who discovered this species in the mountains of northern Japan in 1892. As this mature specimen demonstrates, the species is large, growing to 40' to 50' tall and wide. Its highly ornamental reddish bark, deep pink flowers, and bronze- to red-colored autumn leaves have made it a popular choice for generations.
Late flowering

20. ***Prunus sargentii* 'Rancho'**
'Rancho' is a selection of the popular Sargent cherry (see #19) that has a more compact shape, thus making it a more suitable street tree.
Late flowering

21. ***Prunus* Research Field** (see also stop #22)
While most people are familiar with more common flowering cherries like Yoshino, few realize the diversity present in the flowering cherry group. This research field illustrates some of that diversity. Note the variation in bloom date—some trees are in full bloom, while others are still in bud; the variation in bloom color, from white to dark pink; the variation in form, from tall upright to short rounded; and the variation in bark characteristics—from smooth and shiny to rough and peeling. Scientists at the Arboretum select from this diversity by combining traits from these species through a breeding program that aims to create new varieties of flowering cherries that will fit into different landscape settings.

22. ***Prunus* Research Field** (see also stop #21)
For ease of planting and evaluation, Arboretum scientists plant research trees in rows like a crop. They continuously evaluate the flowering cherries in this field for traits such as disease and pest resistance; tolerance to environmental stresses; plant habit, bloom time, and duration; and bark and flower characteristics. The field contains a mix of trees: some are used for breeding, others are hybrids that are in various stages of selection for eventual cultivar release (see stops #1 and #10).

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