

Guide to Frihedslyst, Hørsholm Arboretum



UNIVERSITY OF COPENHAGEN

Exploring the collection

The trees and shrubs in the Arboretum are marked with an aluminium label. The front of the label shows the scientific name family of the species and the geographic origin of the seed along with the database entry code of the individual plant. The opposite side of the label gives the common name in Danish (if available), the age of the tree, and the natural distribution of the species.

Detailed information on the plants is stored in a database which can be accessed from www.arboretet.dk, along with a search-able map that allows you to find the exact location of any plant specimen in the collection.

The *Frihedslyst* collection

The Arboretum acquired the former farm *Frihedslyst* in 1986 and planting of the approx. 10 hectare area began immediately. The layout includes meandering paths, broad grassy vistas and scattered lakes and ponds. The southwestern part is dominated by *Gøgebakken* ('Cuckoo Hill'), from which radiate five straight, open paths. This star-shaped pattern emulates the landscape of North Zealand's royal forests, historically used for *parforce* hunting.

In *Frihedslyst* the species are grouped according to geographic origin, as opposed to taxonomy as in the older collection. The western part is for North America and the eastern part is for East Asia, with the southern end representing plants from Europe, West Asia and North Africa.

Many of the trees and shrubs, especially in the Asian section, were grown from seed collected in the wild during expeditions led by

Arboretum staff. The large area of *Frihedslyst* has been used to plant several specimens of some of the wild-collected species. This allows staff and visitors to observe part of the natural genetic variation of wild populations.

The oldest plants in *Frihedslyst* are now over 30 years old, and the collection has developed its own character and aesthetic appeal. There are interesting and attractive species to be observed year-round, with a wonderful array of colours and patterns visible on bark, leaves, flowers, cones, and fruit.

The quiet and peaceful surrounds also make it an excellent place for walking and relaxation. Picnics are allowed on the grounds, as long as you tidy up after your visit.

The Arboretum in Hørsholm

The Arboretum is a living collection of woody plant species that can be grown in Denmark. It currently includes more than 8,500 specimens of trees and shrubs. Since its establishment in 1936, the Arboretum has played an important role in the study and research of exotic species. Researchers work with taxonomy, interactions between species, and the effects of climate change by observing plants in the collection, conducting experiments in the greenhouses, and advanced genetic studies.

The collection is managed by the Department of Geosciences and Natural Resource Management at the University of Copenhagen and the 15. Juni Fonden.



Euonymus sachalinensis



Abies koreana



Picea jezoensis



Cercidiphyllum japonicum

A tour of *Frihedslyst*

Frihedslyst, a newer collection of trees and shrubs established in the 1980s, is located in the southern part of the Arboretum, about 700m along Arboretetsvej southeast of the main gate. There are signs showing the way from the Arboretum entrance.

This map suggests a route with some points of interest (marked with a number) and information about the species you can see in the collection.

1 As you walk by the lake, you will notice a large group of shrubs on your right. The valley here is especially beautiful in spring and early summer and features *Rhododendron* species from around the world.

2 Continuing along the left-hand gravel path, you will enter an area devoted to North American species, including several conifers from western North America. Some species, especially from the wet coastal forests (e.g. Sitka spruce, *Picea sitchensis*), are important in Danish forestry, but many are also valued in parks and gardens for their appearance. The blue-green foliage and bright purple immature cones of the Douglas fir (*Pseudotsuga menziesii* var. *glauca*) stand out in the springtime. The knobcone pine (*Pinus attenuata*) retains mature cones on its lower branches, ready to disperse its seeds after a wildfire (an adaptation to its natural habitat). Also keep an eye out for Nootka cypress (*Callitropsis nootkatensis*, syn. *Cupressus nootkatensis*), a striking tree with beautiful foliage hanging down like curtains from the branches.

3 Further along the path you can find a collection of deciduous, flowering trees from eastern North America. In spring and early summer, look for the showy blossom of the dogwoods, *Cornus amomum* and *C. alternifolia*; in autumn, the colourful foliage of yellow birch (*Betula alleghaniensis*) and sugar maple (*Acer saccharum*) will be on display. Aside from these seasonal attractions, this is a good place to see the stately North American hardwoods black walnut (*Juglans nigra*) and American beech (*Fagus grandifolia*).

4 Following the path as it bends to the right, then continuing along the broad grass path, you will leave the North American species behind for now. As you walk, the European section will be on your left and the Asian section on your right. Keep an eye out for the beautiful silky foliage of Macedonian pine (*Pinus peuce*) from southern Europe and the attractive bark of Erman's birch (*Betula ermanii*) from East Asia.

5 Take a left onto the narrow grassy path that leads through a stand of conifers. This is a good place to see Nikko firs (*Abies homolepis*), an attractive species of fir rarely seen in Denmark, and Korean white pine (*Pinus koraiensis*), one of the few pine species used to commercially produce pine nuts (i.e. seeds).

6 Several specimens of Korean fir (*Abies koreana*) stand on both sides of the path here, showing off their colourful cones in spring and summer. Grown from seed collected from the wild in South Korea, these trees show a wide variation in the colour of their cones, an example of natural diversity. You will rejoin the gravel path near an avenue of dawn redwood (*Metasequoia glyptostroboides*) collected in central China. Until the 1940s, this species was known to science only from fossils, but since its discovery it has become a popular ornamental.

7 Turn right and continue along the gravel path. Here there are some attractive flowering species mixed in with the conifers. One of the most eye-catching is the Korean dogwood (*Cornus kousa* var. *chinensis*), which stands out in both summer and autumn for its flowers, foliage and fruit. *Euonymus sachalinensis* has brightly coloured fruit that splits open to reveal bright orange arils. Further along the path, on your right is an eye-catching Japanese red pine (*Pinus densiflora*) with a flat-topped crown and pale red bark. Its distinctive growth habit makes it a favoured species in Japanese and Korean traditional gardens.

8 On the right of the path there is a stand of Meyer's spruce (*Picea meyeri*), a spruce with attractive blue-green foliage and pink (male) and purple (female) cones. The female cones only retain their colour while growing; when mature they hang downwards, one of the most obvious differences between this genus (spruces) and genus *Abies* (firs). A short distance away (along the right-hand grassy path) you can find the interesting Japanese umbrella pine (*Sciadopitys verticillata*). Although not truly a pine, one can easily see how the species got its name from the umbrella-like whorls of foliage occurring along the stems. This species is the only extant member of its family.

9 To the right the gravel path leads towards several eye-catching specimens from China and Japan. Look for the beautiful white flowers of Biond's Magnolia (*Magnolia cf. biondii*) in the spring and the heart-shaped, colourful leaves of the katsura (*Cercidiphyllum japonicum*) in the autumn.

10 Returning to the North American section, a group of giant redwoods (*Sequoiadendron giganteum*) overlooks the lake. This species is famous as the largest tree in the world. Although these specimens do not come close to their Californian cousins in size, they are growing quickly and already make an impressive sight. The path leads back towards the old section of the Arboretum and the circuit is now complete.



Welcome to the Arboretum

The Arboretum is open to the public from 7:30 am to sunset.

Arboretum in Hørsholm • Kirkegårdsvej • 2970 Hørsholm

www.arboretet.dk

www.ign.ku.dk

www.15junifonden.dk

An easy way to visit the Arboretum is by bus. Buses leave directly from Copenhagen, Holte, Nivå and Kokkedal train stations. The closest bus stop to the Arboretum is on Hørsholm Kongevej, at the roundabout at the intersection with Dr. Neergaards Vej. Follow the path from the roundabout towards the east past the lake and you will come to the main entrance. Access by car is possible from Kirkegårdsvej. Please park in the parking area outside the Arboretum.

Frihedslyst is located in the southern part of the Arboretum. Follow the signs from the main entrance.

* It is not allowed to gather leaves, fruits, or cones from the collection.



15. Juni Fonden is a non-profit foundation, which strives to work for the benefit of the Danish society by supporting activities within the objectives of the foundation including a lasting preservation of the values of the Danish landscape and its nature and biodiversity.

The Arboretum is owned by 15. Juni Fonden while being managed by the Department of Geosciences and Natural Resource Management, UCPH



15. Juni Fonden

