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## In our Collection

# Zelkova Collection

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Until about eighty years ago, the American elm (*Ulmus americana*) stood tall as the dominant street and shade tree throughout the eastern and midwestern U.S., due largely to its stately form—broad-limbed, vase-shaped, and reaching for the sky like the cities they shaded. The outbreak of Dutch elm disease in the 1930s brought an end to the elm's reign, leading cities and consumers to seek elm-like but disease-resistant alternatives. One of the contenders—used, for example, as a replacement species for elms along Boston's Commonwealth Avenue beginning in the 1950s—was the Japanese zelkova (*Zelkova serrata*), a tree closely related to the elms with a similar appearance. Though shorter in stature, zelkovas offer an elm-like form and the dense cover of beautiful, sawtooth-edged leaves. Though it remains relatively obscure as a genus today, *Zelkova* has much to offer beyond providing ample cover from the sun.

At the Arnold, the zelkova collection grows in the vicinity of the elms on both sides of Bussey Hill Road near the lilac and birch collections and the edge of the North Woods. The genus consists of six species of deciduous trees native to southeastern Europe, and southwest and eastern Asia—four of which (*Z. carpinifolia*, *Z. schneideriana*, *Z. serrata*, and *Z. sinica*) are hardy in Boston and grow in the living



The bark of zelkovas may exfoliate to reveal spots and patches of inner bark that fade over time, perhaps most notably in the Chinese zelkova (*Z. sinica*), pictured here in winter. Photograph of 288-80\*A by William (Ned) Friedman.

collections. All display fall interest—foliage in hues from golden to yellow-orange and red-brown—as well as winter interest, their smooth trunks exfoliating with age to reveal patches of orange-brown inner bark. This trait is particularly strong in Chinese zelkova (*Z. sinica*), which also tends to be the most diminutive of the species at only 20–40 feet in height, often with a low-branching, multi-trunked habit. The Caucasian zelkova (*Z. carpinifolia*) displays more bluntly-serrated leaves, and has been cultivated in eastern Europe for centuries, though today the species is considered vulnerable in its native range. Interestingly, the species least known in America, the Schneider zelkova (*Z. schneideriana*) from China, may have the most untapped commercial potential, with beautiful red fall color and a habit slightly more graceful and vase-shaped than the other species.

The Arboretum stewards 31 zelkovas, representing 16 accessions, a number likely to grow in coming years. That is because two of the species—*Z. carpinifolia* and

*Z. serrata*—number among the desiderata for the Arboretum's decade-long biodiversity initiative, The Campaign for the Living Collections. Explore *Zelkova* when you next visit, and admire their seasonal charms and unassuming nobility—a bit like the elms, but a shade apart.