

# Quercus phellos

## Willow oak



*Quercus phellos* (Willow oak) is native to the eastern and central United States, where it mainly grows along river banks, in soil that regularly undergoes brief floods in the winter. In its growth season, it sometimes goes through brief wet periods there. *Quercus phellos* often occurs in the areas between wet and dry land and grows along with other species including *Acer rubrum*, *Fraxinus pennsylvanica* and *Gleditsia triacanthos*. The willow oak can reach heights of up to 30 metres. In cultivation, its height is usually limited to 15 to 20 metres, with a maximum width of 12 metres. In its early years, *Quercus phellos* has quite a fast-growing pyramid-shaped crown, that becomes wide and egg-shaped when the tree is older.

*Quercus phellos* combines the elegant appearance of the willow with the impressive character of the oak tree. The tree has the oak's crown and slender, high stem, but not the lobate leaves that are so characteristic of the oak. Instead, the willow oak - like the willow - has tiny, striking lanceolate leaves. The glossy, undulating leaves bud bronze, then turn green, and then turn a beautiful golden yellow in autumn. In warmer areas, the species is evergreen, and in colder areas it sheds its leaves. In May, the willow oak blooms golden yellow hanging catkins. After it blooms, brown and yellow-green acorns appear on the tree, which are eaten by birds and small mammals.

*Quercus phellos* can handle all kinds of urban conditions, making it a great tree for the future. The species can withstand wind, will tolerate moderate coastal winds and will also tolerate heat, drought and brief flooding quite well. That makes the tree perfect for planting in wadi and coastal areas. But the willow oak also does well in (large) gardens and in cemeteries. *Quercus phellos* has no ailments or diseases, but does have to be planted in acidic soil. The tree will not grow well in lime-rich soil.

### SEASONAL COLOURS



### TYPES OF PLANTING

**Tree types:** standard trees, feathered trees, multi-stemmed trees, climate trees, shade trees, characteristic trees, solitary shrubs | **Topiary on stem:** roof-trained, multi-stem umbrella, espalier, pleached

### USE

**Location:** street, avenue, square, park, central reservation, roof garden, large garden, cemetery, traffic areas, industrial zones, countryside, bioswale, coastal area | **Pavement:** none, open, sealed | **Planting concepts:** Climate planting, Landscape planting, Solid planting, Prairie planting

### CHARACTERISTICS

**Crown shape:** egg-shaped | **Crown structure:** dense | **Height:** 15 - 20 m | **Width:** 9 - 12 m | **Winter hardiness zone:** 5A - 9B

### ASPECTS

**Wind:** tolerant to wind, slightly tolerant to coastal wind | **Soil:** loess, sabulous clay, heavy clay, light clay, sand, loamy soil | **Nutrient level:** rich in nutrients | **Soil moisture level:** dry, moist, wet | **Light requirements:** sun, partial shade | **pH range:** acidic, neutral, alkaline | **Host plant/forage plant:** birds, small mammals | **Extreme environments:** tolerant to salt spray, tolerant to dryness, tolerates air pollution, tolerates heat, tolerant to short-term flooding

### PLANTKENMERKEN

**Flowers:** catkins, pendulous | **Flower colour:** golden yellow | **Flowering period:** May - May | **Leaf colour:** buds bronze, dark green | **Leaves:** semi-evergreen, lanceolate, narrow, polished, undulate | **Autumn colour:** golden yellow | **Fruits:** small, acorn | **Fruit colour:** yellow-green, brown | **Bark colour:** grey-brown | **Bark:** slightly furrowed | **Twig colour:** brown-green | **Twigs:** with lenticels | **Root system:** extensive, slightly branched