

TREES FOR CHICAGO'S NORTH SHORE:

A Centennial Gift Honoring
The Garden Club of America
1913-2013

from

Garden Guild of Winnetka
Winnetka, Illinois

The graceful mature trees that enhance the historic streets and parks of Chicago's North Shore suburbs have been a valued legacy for these verdant communities. Yet in the past several years, a combination of harsh weather, pests, and drought have undermined the health of some of our oldest trees. As a way to help homeowners select appropriate trees to replace those that our communities have lost, **Garden Guild of Winnetka** collaborated with **Chicago Botanic Garden** and the **Morton Arboretum** to compile a tree booklet with recommendations for our villages on the shores of Lake Michigan. The colorful reference guide features tree, leaf and seed images, and informative entries as to scale, habitat and site conditions. The guide is available **online** at www.gardenguild.org and will soon be linked with our community libraries and village websites so that all homeowners — especially those new to the community—will have a local guide for choosing and planting trees successfully. The online version of the booklet has links to both the **Botanic Garden** and the **Arboretum** for nearly every recommended tree, so that larger photos and more information is immediately available for the more curious reader. Just click on the highlighted link in blue and enter the specific tree that you are searching for in the open search category.

Central to this guide booklet is **education** for our communities, and this initiative has taken many forms. We have funded and planted trees in the heart of our community and taught classes at the libraries beginning with the children of our villages. Classes underscored the virtues of biodiversity, plant and seed identification, and the heritage that our trees have in our communities. **Garden Guild of Winnetka** members have continued to work with our local Park Districts in pruning and trimming existing trees, installing memorial trees for beloved past public servants, and restoring heavily-used local parks with appropriate trees and plants.

Finally, we are so very grateful to many of our local experts for their guidance. Both Jim Stier, Forester for the Village of Winnetka, and Robert Smith, Winnetka Superintendent of Parks and Recreation worked with us early in this project to identify important trees for our community and arranged for the planting of our Centennial Gift: an American Beech. A special thank you to Chicago Botanic Garden staff James Boudreaux, Vice-President of Marketing Development, Jim Ault and Andrew Bell for their beautiful photographs, and especially Boyce E. Tankersley III, Director of Living Plant Documentation, for hours of guidance, refining the tree selection, and support during the creation of this resource. Thank you also to Kunso Kim, Head of Collections & Curator at Morton Arboretum for his support and use of the data base for photos.

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Larger Deciduous Trees

Aspen

Quaking Aspen
Populus tremuloides

H 40'-50'

W 20'-30'

Sun



Aspen are upright, fast growing trees but short-lived with spreading branches and rounded crowns. The shiny, dark green heart-shaped leaves turn a brilliant bright yellow after the first frost. The flattened petioles, or leaf stalks cause the leaves to flutter or “quake” in the breeze. Hanging catkins produce pale greenish brown capsules with small seeds tufted with long, silky hairs. The bark is a smooth grayish green that furrows with age. The trees will grow in a variety of soils from shallow and rocky to deep heavy clay, but they prefer well-drained sites. The **Quaking Aspen** tree has a tendency to sucker.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Beech

American Beech
Fagus grandifolia

H 50'-80'

W 40'-60'

Sun/Partial Shade



This is a slow growing tree with a wide spreading crown. The shiny oblong leaves with prominent veins turn a golden bronze in the fall. The **American Beech** produces a small three-winged nut that attracts birds and squirrels. The bark is smooth and uniformly gray. The tree likes well-drained, moist soil, and its shallow roots make it difficult to grow other plants near it. It is not a very salt tolerant tree, and it does not transplant easily. Leaves remain on the tree until new growth emerges in the spring. **American Beech** trees are native to Illinois.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

European Beech
Fagus sylvatica

H 50'-60' W 35'-45' Sun/Part Shade



This is a dense upright tree that tends to branch close to the ground. The **European Beech** needs adequate space in order to become a spectacular landscape specimen. The simple oval lustrous dark green leaves turn a rich russet to golden bronze in the fall. The gray bark develops an elephant hide appearance with age that is uniquely beautiful. This beech likes moist, well-drained soil.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Birch

Yellow Birch
Betula alleghaniensis

H 30'-40' W 20'-30' Sun



The **Yellow Birch** has a pyramidal shape when it is young that develops a rounded irregular crown. Its ovate dark green leaves turn a showy yellow in the fall. The spring blooming catkins produce small brown nutlets. This tree is often grown for its attractive amber to silver colored bark that exfoliates in thin shreds or rolls. It prefers cool, moist soils, acid to neutral soils, and it does not tolerate heat or drought as well as other birches. **Yellow Birch** trees are native to Illinois.

Photo courtesy Louis-M. Landrys, copyright 2007, <http://calphotos.berkeley.edu>

River Birch
Betula nigra

H 30'-40' W 20'-25' Sun/Part Shade



The trunk of this birch may divide into several upright stems. The simple dark green leaves have serrated margins and turn a dull yellow in the fall. The **River Birch** is noted for its distinctive multi-colored bark, which exfoliates in curly paper sheets. Since it is native to the banks of rivers and streams in Illinois, it will easily survive temporary flooding. The tree will grow in clay soils but it prefers moist, acidic conditions. Iron chlorosis can appear when the tree is planted in high pH soils or during periods of drought.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

White Spire Senior Japanese Birch
Betula populifolia 'Whitespire Senior'

H 40' W 25' Sun



This rapidly growing, upright birch is often selected for its borer resistance and heat tolerance. The glossy green foliage turns yellow in the fall. Its white bark develops black markings but does not exfoliate. This birch does not tolerate wet soil. 'Whitespire Senior' is a clonally propagated selection.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Catalpa

Northern Catalpa

Catalpa speciosa

H 40'-60'

W 20'-30'

Sun/Part Shade



This fast growing tree has spreading, crooked branches and an irregular crown. Its large heart-shaped green leaves turn a dull yellow-brown in the fall. The very showy white flowers have throats spotted with yellow and purple. The flowers mature to long hanging bean-like capsules that can remain on the tree through the winter. The gray to reddish brown bark has irregular, shallow fissures and scaly ridges. The **Catalpa** tree, native to southern Illinois, tolerates a variety of soil conditions.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Corktree

Amur Corktree

Phellodendron amurense

H 30'-45'

W 50'

Sun



The **Corktree** has a short main trunk and several large main branches that give it a wider rather than tall habit. Its crown is flat-topped once it matures. This is an especially picturesque tree. The elongated leaves have 5-11 leaflets and are a lustrous dark green but turn a dull yellow in the fall. The yellowish flowers are insignificant but the females produce black pea-sized fruits that are fragrant. The light gray bark is distinctively ridged and furrowed and it has a soft corky texture.

Corktrees are generally tolerant, putting up with a variety of soil conditions, drought and pollution. **Plant only male cultivars such as 'His Majesty' and 'Macho' because this tree can be invasive.**

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

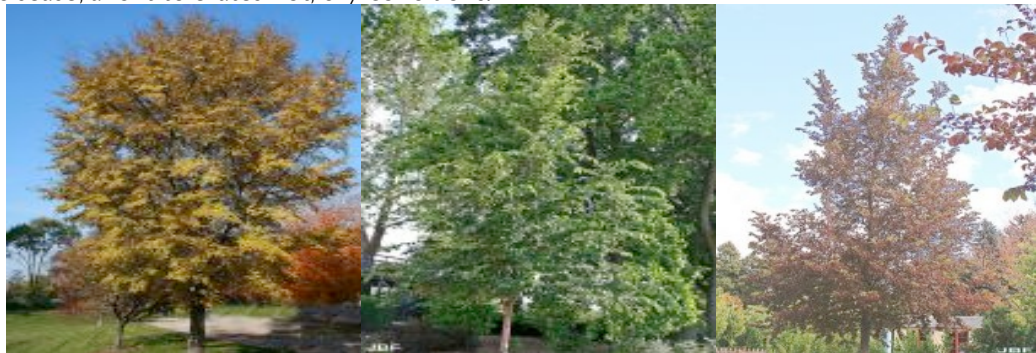
Elm

Regal Elm
Ulmus 'Regal'

H 50' W 30' Sun



The **Regal Elm** is fast growing with a loose columnar to oval shape. The narrow green leaves do not color up appreciably in the fall. It has an attractive mottled greenish gray to brown bark that exfoliates in irregular thin flakes. This tree is highly resistant to Dutch elm disease, and it tolerates hot, dry conditions.



Hybrid elms (Dutch elm resistant) include: 'Accolade' (left,) 'Triumph' (center,) 'Frontier' (right.)
All Photos: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Ginkgo

Ginkgo biloba

H 40' W 20'-30' Sun/Shade



The large **Ginkgo Biloba** trees are living fossils whose long lives are the result of their resistance to diseases and insects, and their very deep root systems that resist storm damage. Their distinctive fan-shaped leaves with veins radiating out to the margins are unique among seed plants. The medium green color turns an attractive yellow in the fall. Leaves tend to drop rapidly when low fall

temperatures occur. The bark is a brownish gray, and older trees have a ridged corky texture. This tree prefers moist, deep, sandy soils but it is very tolerant of poor, compacted soils, drought, salt spray, and air pollution. It is important to plant only male **ginkgos** since the females produce foul smelling fruits that are unattractive and messy as they fall from the tree. 'Autumn Gold' and 'Magyar' are two recommended cultivars.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Gum

Black Gum (Tupelo)

Nyssa sylvatica

H 20'-30' W 15'-20' Sun



The **Black Gum** is a slow growing tree with a flat-topped crown, and sometimes pendulous horizontal branches. Its ovate dark green leaves have serrated margins and turn showy yellow, orange and red to purple in the fall. The flowers are insignificant, but female trees produce a bluish black drupe attractive to birds. The dark grayish brown bark has irregular ridges. These trees like moist, well-drained soils and are particularly fire resistant. The grayish brown bark is deeply furrowed with narrow, round ridges. Black Gum trees native to Illinois like fertile, moist conditions.

Photo courtesy Andrew Bell, The Chicago Botanic Garden, <http://chicagobotanic.org>

Hackberry

Celtis occidentalis

H 40'-60' W 40'-60' Sun



This is a fast growing native tree with slightly drooping branches. The rough textured leaves are medium green on the top with a yellowish underside, especially around the veins. Their yellow fall color is not showy. Neither the spring flowers nor the orange to red fall fruit are ornamentally important, but migrating Cedar Waxwings feed heavily on the fruit. The grayish bark has a corky appearance. The **Hackberry** is very adaptable to most soils and site conditions, including windy or rocky areas, but it does best in rich soils.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Hickory

Shagbark Hickory

Carya ovata

H 40'-60'

W 20'-30'

Sun/Part Shade



The **Shagbark Hickory** is a large, very straight tree that is long lived and native to Illinois. The chartreuse leaves with 5 leaflets are elliptically shaped with serrated margins that turn a golden yellow in the fall. They smell like apples when crushed. The catkins produce small round nutlets with thick shells that split at the base as they age. The bark on young trees is smooth and gray but as the tree matures, it breaks into long, wide sheets that curve away from the trunk, giving it a coarse, shaggy look. This tree likes fertile, well-drained soil.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Hophornbeam

American Hophornbeam

Ostrya virginiana

H 25'-30'

W 15'-25'

Sun/Part Shade



This is a graceful small tree with a habit of upright, spreading branches. The dark green oval leaves have serrated margins and turn a dull orange-brown in the fall. The catkins produce small, inflated tan pods with hard nutlets inside. The gray brown bark forms attractive vertical stripes, which exfoliate at the ends. **Hophornbeams** are native to Illinois and like moist, fertile soils but can tolerate dry rocky sites once they are established.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Hornbeam

American Hornbeam

Carpinus caroliniana

H 20'-30'

W 30'

Sun/Part Shade



The **American Hornbeam** is a slow growing, multi-stemmed plant with a spreading habit and a flat-topped crown that can be trained as a small tree or a large shrub. Its oblong dark green leaves have doubly serrated margins and turn yellow-orange to red in the fall. The spring flowering catkins form numerous nutlets held together in a chain of pendulous clusters. The bark is a smooth gray with fluted vertical ridges. This native tree prefers moist, fertile, acidic soil.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Upright European Hornbeam

Carpinus betulus 'Fastigiata'

H 25'-30' W 20'-25' Sun/Part Shade



This is a narrow upright tree that matures to a tear-drop or oval shape with age. It needs little pruning when grown as a tree but can be hard pruned to form a hedge. Its bright green ovate leaves remain attractive throughout the summer and turn yellow-orange in the fall. Spring flowering chartreuse catkins form small nutlets that droop in clusters. The bark is a smooth gray with noticeable fluting.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Horsechestnut

Aesculus hippocastanum

H 50' W 40'+ Sun



This tree has a domed habit at its crown. It has palmate compound dark green leaves that have a pronounced vein pattern, but poor brown fall color. Showy white spring flowers produce large light brown nuts. The grayish brown bark exfoliates on older trees, revealing the attractive orange bark underneath. The tree will adapt to a variety of soil conditions but will develop leaf scorch during hot, dry spells if it is not adequately watered.

Photo courtesy: USDA.gov., Plants Database, <http://plants.usda.gov>

Red Horsechestnut

Aesculus x carnea 'Briotii'

H 25'-35' W 25'-35' Sun/Part Shade



The **Red Horsechestnut** tree has dark green palmate compound leaves but poor brown fall color. It is notable for the attractive large dark red flowering panicles it produces in the spring, that are followed by large brown nuts with prickly husks. The tree foliage will scorch in hot, dry spells if the tree is not adequately watered, but this tree is somewhat more drought tolerant than other Horsechestnuts.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Ohio Buckeye

Aesculus glabra

H 20'-40'

W 20'-35'

Sun



The **Ohio Buckeye** has an oval to rounded crown. The palmate compound green leaves turn yellow in the fall. Its upright chartreuse flower panicles bloom in the spring and produce large light brown nuts with prickly husks. The gray bark is deeply furrowed. This tree will adapt to a variety of soil conditions but is not drought tolerant. Leaf scorch may develop during dry periods if the tree is not adequately watered. **Ohio Buckeye** are native to the moist rich forests of Illinois, especially on floodplains.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Katsura Tree

Cercidiphyllum japonicum

H 30'-40'

W 20'-30'

Sun



The **Katsura Tree** has a broad pyramidal crown that will often have multiple trunks. The heart-shaped leaves emerge with a purple tinge and mature to a bluish green. The foliage turns a beautiful yellow apricot color in the fall when they also develop a spicy brown sugar fragrance. The insignificant spring flowers produce small pods that release thin winged seeds. Older trees have an attractive brown shaggy and peeling bark. This tree likes fertile, moist, well-drained soil and needs to be watered during dry periods.. Recommended Cultivars: 'Aureum', 'Heronswood Globe' (dwarf), 'Pendula' (weeping), 'Ruby' (dwarf).

Photo courtesy Andrew Bell, The Chicago Botanic Garden, <http://chicagobotanic.org>

Kentucky Coffeetree

Gymnocladus dioica

H 40'-75'

W 30'-40'

Sun



This tree has an oval shape with irregular branching that is especially picturesque in the winter. The compound leaves are made up of many small leaflets that emerge with a pink tinge in the spring, maturing to a bluish green in the summer, and then turn a dull yellow by fall. The flowers grow in panicles that produce chunky, dark reddish brown pods. The rough gray bark is textured with ridges and furrows. The **Kentucky Coffeetree** native to Illinois, prefers fertile, moist soil but will tolerate a variety of conditions, including drought and air pollution.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Linden

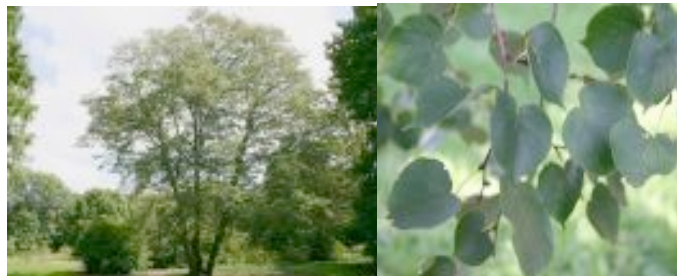
Littleleaf Linden

Tilia cordata

H 45'

W 25'-30'

Sun



The **Littleleaf Linden** is a moderately growing, densely branched tree that forms a rounded shape at maturity. The oval bright green leaves have serrated margins and turn yellow in the fall. The lacy clusters of fragrant creamy flowers produce winged brown nutlets. This tree makes an excellent street tree because it tolerates poor soil and air pollution.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Redmond Linden

Tilia x euchlora 'Redmond'

H45'

W 20'-30'

Sun



This is a fast growing upright tree with dense erect branches. The simple shiny dark green leaves with serrated edges turn yellow in the fall. Its pale yellow fragrant flowers hang in clusters. The **Redmond Linden** tree prefers moist, well-drained soil but will grow in a range of soil types. It will also tolerate wind, salt spray, and urban pollution.

Photo: University of Missouri, Tropicos Botanical Information System, Missouri Botanical Garden, <http://www.tropicos.org>

Silver Linden

Tilia tomentosa

H 50'-70' W 30'-40' Sun/Part Shade



This is a fast growing tree with an upright form that is often grown for its formal, symmetrical habit. Its dark green leaves have sharp, doubly serrated margins that turn a dull yellow in the fall. The pale yellow fragrant flowers grow in loose drooping clusters and attract bees and other pollinators. Small pale egg-shaped nutlets appear in late summer. The tree has smooth light gray bark. It prefers moist, well-drained soils and will tolerate urban pollution. Frost cracks on the trunk may be a problem.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

London Planetree

Plantanus x acerifolia

H 45'-50'

W 45'-50'

Sun



The **London Planetree** has wide horizontal branching and a rounded habit. It was notably used on the streets of London and other major European cities. It has large 3 to 5 lobed green leaves that turn a dull yellowish brown in the fall. The insignificant spring female flowers produce pairs of fuzzy balls that contain densely packed seeds that persist into the winter. The seeds eventually disperse as small downy tufts. The attractive brown bark exfoliates in irregular furrows to display a creamy white inner bark. These trees are easily grown in average soil and are very tolerant of most urban pollutants. Popular varieties include 'Exclamation' and 'Ovation.'

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Maple

Autumn Blaze

Acer x freemanii 'Jeffersred'

H 40'-55'

W 30'-40'

Sun/Part Shade



This is an upright, fast growing maple with ascending branches and a dense broad crown. The medium green leaves are deeply cut with fine pointed lobes that turn a brilliant orange to red in the fall. It rarely flowers or produces fruit. Its thin bark is easily damaged, and its wood is not as hard as other maple varieties; it is more susceptible to storm damage. The **Autumn Blaze Maple** likes moist, well-drained soil but it will tolerate clay. It is drought resistant once it is well established. 'Autumn Fantasy' is another popular cultivar of *Acer x freemanii*.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Black Maple
Acer nigrum

W 40'-50'

W 30'-40'

Sun



The **Black Maple** grows tall with lobed, yellow green dangling leaves. Its flowers produce clusters of two-winged horseshoe shaped samaras. The bark is dark gray to black, and older trees can be furrowed with long irregular ridges. This native tree likes moist soils. It grows rapidly in its early life but can live up to 200 years. It is both heat and drought resistant but salt sensitive.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Miyabe Maple
Acer miyabei

H 30'-40'

W 30'-40'

Sun/Part Shade



The **Miyabe Maple** maple has an oval to round shape. Its 5-lobed, medium green leaves turn yellow in the fall. The chartreuse flowers appear in pyramidal clusters followed by wing-shaped samaras. The grayish brown bark has long scaly stripes. This tree grows in average well-drained soil. 'State Street' is a good cultivar.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Shantung Maple
Acer truncatum

H 20'-25' W 20' Sun/Partial Shade



This is a smaller maple with a rounded broad crown and regular branching. Its palmate-lobed, glossy green leaves may emerge with a red tinge in the spring and turn yellowish orange with some red in the fall. The chartreuse spring flowers produce winged samaras. The bark is grayish brown, and some twigs may have a purplish cast. This maple adapts to most soil conditions and is tolerant of heat, drought, and shade.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Sugar Maple *Acer saccharum*

H 50' W 30' Sun/Part Shade



The **Sugar Maple's** dense, hard wood and ability to produce maple syrup makes it one of the most important trees in North America, and it is native to Illinois. Its deeply notched, palmate-lobed green leaves produce spectacular fall colors running a spectrum of bright yellow, orange, and brilliant red -- sometimes displaying all these colors at the same time. Parts of the tree may change color weeks ahead of the rest. It produces two-winged samaras, which fall in the autumn. The smooth grayish bark develops thick, irregular recurved plates as it ages. The **Sugar Maple** can be sensitive to drought, salt, air pollution, and compacted soils. Recommended cultivars include 'Green Mountain.'

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Oak

Bur Oak *Quercus macrocarpa*

H 60'-70'

W 80'-90'

Sun



The **Bur Oak** is a slow growing massive oak that produces a broad crown at maturity. Its dark green leaves with rounded lobes have a whitish underside. The foliage turns a yellowish brown in the fall. The small spring blooming catkins produce an ovoid shaped large brown acorn. The gray brown bark has a distinctive flaky texture. This oak likes rich, well-drained soil. It can live up to 300 years and is more tolerant of urban conditions than most other oaks. The **Bur Oak** is native to Illinois.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Chestnut Oak
Quercus prinus

H 60'-70' W 60'-70' Sun



This oak forms a densely rounded tree with an irregular spread. Its narrow green leaves with wavy edges turn a yellow-orange to brown in the fall. The catkins produce a sweet tasting dark brown acorn that is very attractive to wildlife. The tree's thick gray brown bark is distinctive for its massive ridges and furrows. The tree is adaptive to a range of soils, including poor dry conditions, but it will not tolerate poor drainage.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Chinkapin Oak
Quercus muehlenbergii

H 40'-50' W 50'-70' Sun



The **Chinkapin Oak** has a narrow, rounded crown and attractive branching. Its narrow shiny green leaves have wavy edges and a whitish underside. In autumn, the foliage colors a reddish brown. The stemless acorns are egg shaped. The light gray bark is thin, fissured and scaly. This native oak likes well-drained soils and is drought tolerant. It is difficult to transplant.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Northern Red Oak
Quercus rubra

H 60-80'

W 50'-60'

Sun



The **Northern Red Oak** is a fast growing, upright tree with large branches that generally grow close to the ground. Its triangular, bristle-tipped green leaves emerge with a reddish tinge in the spring

and turn a brilliant red in the fall. The acorns are attractive to wildlife despite their very bitter taste. The distinctive dark reddish gray brown bark has rounded ridges that appear to have shiny stripes down the middle and run to the base of the trunk. This native oak is tolerant of many soil types and site conditions, but it prefers moist, well-drained locations.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Scarlet Oak

Quercus coccinea

H 50'-60' W 40'-50' Sun



The **Scarlet Oak** is a fast growing oak native to Illinois with a round and spreading canopy. The ovate shiny green leaves are deeply lobed and turn a brilliant scarlet red in the fall. The spring blooming catkins produce short stalked oval acorns with a large cap. The gray brown bark develops irregular broad ridges and narrow furrows, especially near the base of the trunk. This tree can be less tolerant of adverse conditions than other oaks..

Photo: University of Missouri, Tropicos Botanical Information System, Missouri Botanical Garden, <http://www.tropicos.org>

Shingle Oak

Quercus imbricaria

H 50'-60' W 50'-60' Sun



This native oak matures to a rounded shape with upright and spreading branches, but the lower branches can droop. The dark green leaves are not lobed and turn a yellow-brown in the fall. The spring blooming catkins produce small acorns. The gray brown bark develops shallow ridges and furrows with age. This oak prefers moist, well-drained, acidic soils but will tolerate a variety of sites. It is easier to transplant than most other oaks.

Photo courtesy Andrew Bell, The Chicago Botanic Garden, <http://chicagobotanic.org>

Shumard Oak
Quercus shumardii

H 60'-80' W 50'+ Sun



The fast growing **Shumard Oak** forms an impressive tree with an open, rounded canopy. Its oval dark green leaves are deeply lobed and turn a brilliant orange to red in the fall. Its small acorns have a shallow cap and are attractive to wildlife. The bark is a dark brown color. The tree prefers moist, well-drained soil but will tolerate drought and urban pollution. It will grow on clay soils.

Photo: University of Missouri, Tropicos Botanical Information System, Missouri Botanical Garden, <http://www.tropicos.org>

Swamp White Oak
Quercus bicolor

H 50'-60' W 50'-60' Sun/Part Shade



The **Swamp White Oak** grows an open, upright oval crown. Its obovate dark green leaves are deeply lobed and have white hairs on the undersides. Leaves turn a copper red in the fall. The spring blooming pendulous yellow catkins produce rounded pairs of acorns. The dark brown bark is highly furrowed and ridged. This native tree prefers wet, acidic soils but will tolerate periods of drought. It can be sensitive to site disturbances. Along with the **Bur Oak**, the **Swamp White Oak** is one of the oak species most tolerant of heavily compacted urban soils.

Photo: THE MORTON ARBORETUM, <http://www.mortonarb.org>

Sassafras
Sassafras albidum

H 25'-30' W 15'-25' Sun/Part Shade



The **Sassafras** has a horizontal branching pattern and a narrow crown. The shiny green leaves turn bright orange and red in the fall. The early spring yellow flowers produce elliptical shaped bluish-black berries in a red cup growing on a long red stem. The thick grayish brown bark is deeply

furrowed. This tree spreads by underground runners, so it can form a thicket of satellite seedlings. All parts of the native **Sassafras** are very fragrant. It prefers acidic, moist, well-drained soil but is adaptable to a variety of site conditions.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Turkish Filbert

Corylus colurna

H 25'-30' W 20'-25' Sun



This tree has a pyramidal-shaped crown. The obovate green leaves have doubly serrated margins and turn yellow to purple in the fall. The spring catkins produce an edible nut. The pale brown bark flakes off to expose an orange colored bark underneath. The tree is tolerant of many harsh conditions, including tough urban sites.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Thornless Honeylocust

Gleditsia triacanthos f. inermis

H 50'-60'

W 50'

Sun



This is a fast growing, upright, spreading tree with a loose, open form that produces only light shade. The bright green leaves are made up of many small leaflets, resulting in a lacy effect. They turn a showy, clear yellow in the fall. The numerous small yellow spring flowers are fragrant and produce twisted, flattened brown pods. The grayish brown bark develops attractively elongated plate-like patches separated by furrows. The tree adapts to a range of conditions but grows best in moist, fertile soils. It tolerates air pollution and salt spray. Due to small leaflet structure, clean-up in the fall or after storms can be tedious. Small leaflets often “disappear” in the turf or flowerbeds.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Japanese Zelkova

Zelkova serrata

H 40'-50' W 30'-40' Sun



The **Japanese Zelkova** has a low branching habit and a rounded broad crown. The elliptically shaped dark green leaves have toothed margins and turn a mix of yellow, russet and bronze in the fall. Neither the flowers nor the fruit are significant. The attractive smooth steel gray bark has prominent lenticels and exfoliates in patches to expose an orange inner bark. The tree prefers fertile, well-drained soil but will tolerate drought and urban pollution once it is established. Japanese Zelkova should be planted close to Lake Michigan for reliable hardiness.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Ornamental Trees

Crabapple

Malus

H 15'-30'+

W Variable

Sun



M. sargentii

'Donald Wyman'

There are over 400 varieties of this popular spring flowering tree. The tree habit can vary from low and shrubby to narrow and upright; some are rounded or a pendulous shape depending on the type. The glossy leaves range from light green to maroon in color and can turn from purplish bronze to orange or gold in the fall. The flowers can be white, pink, or light to dark red. Generally the pink and red flowering cultivars have purple to bronze leaves and dark fruits. "Crabs" produce apples that are less than 2" in diameter. The attractive scaly bark is a shiny grayish brown. These are very tough trees that will grow in a variety of conditions but must have a well-drained site. They flower best in full sun. Some "crabs" are very susceptible to apple scab, a fungus infection that causes ugly spotting on the leaves and fruit and premature leaf drop. This can be minimized by selecting hardy disease-resistant cultivars and by late winter pruning to increase light penetration and improve air circulation. Disease-resistant cultivars: 'Adams', 'Adirondack', 'Camzan', 'Centennial', 'Donald Wyman', 'Lisette', 'Luwick', 'Prairiefire', 'Professor Sprenger', 'Tina', and Sargent Crabapples.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Dogwood

Cornelian Cherry Dogwood

Cornus mas

H 20'-25'

W 15'-20'

Sun/Part Shade



This is a small tree with an oval shape that can be grown as a large shrub. Its low branches make it a good choice for a deciduous hedge. The oval dark green glossy leaves turn a poor purple in the fall, but the pale yellow flowers bloom in the early spring and last for several weeks. They produce very showy oblong cherry red fruits in mid summer, which can be used to make syrups and preserves. The dark grayish brown bark flakes and exfoliates.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Kousa Dogwood

Cornus kousa

H 15'

W 15'

Sun/Partial Shade



The **Kousa Dogwood** is a smaller, vase shaped tree with branches that become more horizontal and tiered with age. Its small greenish yellow flowers bloom in early June and become surrounded by large long-lasting showy bracts that age from white to pink. The small, dark medium green oval leaves turn red to purple-red in the fall. The pendant-like fruits that begin to ripen late in August resemble raspberries. Older bark develops an exfoliating character, revealing a mix of gray-tan and mahogany brown color. Relatively problem free, this hardy dogwood prefers moist, well-drained soils but adapts to a variety of conditions. The tree makes a spectacular landscape specimen.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Hawthorn

Thornless Cockspur Hawthorn

Crataegus crus-galli inermis

H 20'-25' W 20'-35' Sun



This is a low branching tree with wide spreading horizontal branches that give it a rounded appearance. Its glossy dark green leaves are spoon-shaped and turn reddish brown in the fall. The small spring blooming, white flowers produce deep red drupes that ripen in mid-fall. The gray bark is particularly attractive in the winter. This hawthorn will adapt to a variety of soils but must have a well-drained site. This tree lacks the distinctive but very prickly two-inch thorns found on other hawthorns.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Winterking Hawthorn

Crataegus viridis 'Winter King'

H 20'-25' W 20'-35' Sun



The **Winterking Hawthorn** is a dense tree with an attractive round habit. It has vase-shaped branching that make it an outstanding landscape choice. The pointed, slightly lobed leaves have sharply serrated margins. The leaves' lustrous dark green color turns purple to red in the fall. Clusters of white flowers with yellow anthers bloom in the spring and produce bright red persistent fruits. The attractive gray bark exfoliates. These long-lived trees adapt to a variety of soils but need a well-drained site. Numerous sharp thorns make this tree a poor choice in heavily trafficked areas. It is best placed out in the landscape.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Magnolia

Saucer Magnolia

Magnolia x soulangiana

H 20'-30' W 15'-20' Sun/Light



The **Saucer Magnolia** is a small tree or large multi-stemmed shrub with low, wide spreading branches. The oval dark green leaves have a coarse texture and end in a distinctive point. They turn a yellowish brown in the fall. These plants produce beautiful cup-shaped, whitish pink to purple flowers in mid-spring, but the blooms are highly susceptible to late frosts. The smooth gray bark is attractive in the winter landscape. This magnolia wants fertile soil and should not be planted too deeply. It will tolerate some shade but flowers best in full sun.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Maple

Hedge Maple

Acer campestre

H 25'-35'

W 20'-35'

Sun/Light Shade



The **Hedge Maple** is a slow growing, dense tree with an oval to rounded shape that is generally more attractive if its low growing branches are limbed up. Its distinctive 5 lobed dark green leaves turn chartreuse to yellow in autumn. The insignificant spring flowers produce winged seeds. The grayish black bark is lightly ridged and furrowed. This is an extremely adaptable maple that likes rich, well-drained soils but will tolerate drought, soil compaction, and air pollution. It is an excellent substitution for Norway Maples.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Paperbark Maple

Acer griseum

H 20'-30'

W 15'-25'

Sun



This is a slow growing maple with an oval to rounded shape. Its three lobed bluish green leaves are coarsely toothed and turn a bronze to russet red in the fall. The insignificant flowers produce winged seeds. The showy, rich cinnamon brown bark exfoliates to expose the reddish brown bark beneath, making this maple exceptional in the winter landscape when set against snow. It likes moist, well-drained sites but will adapt to a variety of soils, including clay.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Tatarian Maple

Acer tataricum

H 15'-20'

W 15'-20'

Sun



The **Tatarian Maple** can be grown as a small wide spreading tree or a multi-stemmed shrub. The dark green leaves are not lobed and turn yellow to reddish brown in the fall. The white spring flowers grow upright on long panicles and produce reddish winged seeds in late summer. The gray and brown bark becomes lightly furrowed with age. This maple likes moist, well-drained soils but is tolerant of a variety of conditions. It can be grown as a container plant.

Photo: USDA-NRCS Database/Herman, D.E., et al. 1996, *North Dakota Tree Handbook*.

Lilac

Japanese Tree Lilac

Syringa reticulata

H 20'-30'

W 15'-25'

Sun



The **Japanese Tree Lilac** has stiff spreading branches and a rounded crown. The simple ovate leaves are dark green and turn a dull yellow in the fall. The very showy fragrant white flowers bloom in the early summer and produce glossy brown seedpods. The dark reddish brown bark is marked

with white lenticels. This is an adaptable tree that will tolerate salt spray. It prefers moist, well-drained soils and will flower best in full sun. It can reseed in the garden.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Pekin Lilac

Syringa pekinensis

H 15'-20' W 15'-25' Sun



This is a small lilac tree that is usually multi-stemmed, upright, arching and open. The simple oval leaves are dark green and turn a dull yellow in the fall. The fragrant, creamy white spring flowers grow on large panicles that make an attractive show in the early summer. The bark is marked with prominent lenticels, and is a shiny reddish brown. **Pekin Lilac** trees like moist, well-drained soils and flower best in full sun. They can reseed in the garden.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Serviceberry

Amelanchier sp.

H 15'-20' W 15'-20' Sun/Part Shade



The **Serviceberry** is a small tree with a rounded crown that can be grown as a large multi-stemmed shrub. Its obovate dark green leaves with serrated margins turn from yellow to apricot to dusty red in the fall. The delicate white spring flowers that lay on pendulous racemes, can be short lived. Birds love the purplish black fruit that ripens in the early summer. The highly ornamental smooth gray bark is streaked with longitudinal fissures. This native tree likes moist, well-drained soils but will adapt to a variety of conditions. Since the tree is so widely used, there are many satisfactory cultivars on the market.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Viburnum

Blackhaw Viburnum

Viburnum prunifolium

H 12'-15' W 8'-12' Sun/Shade



The **Blackhaw Viburnum** can be grown as a small tree or large multi-stemmed shrub that has stiff, horizontal branches. The simple, oval dark green leaves have finely serrated margins and turn shiny red-purple in the fall. The white spring flowers with yellow stamens grow on spur-like branches and produce egg-shaped bluish-black fruits with a waxy coating. The distinctively ridged bark is grayish brown. This native is an adaptable plant that tolerates a variety of soil types and dry conditions.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

Witchhazel

Common Witch Hazel

Hamamelis virginiana

H 15'-20' W 15'-20' Sun/Shade



Witch Hazel grows as a small tree or sizable shrub with large, crooked, spreading branches forming an irregular rounded crown. The obovate green leaves are coarsely veined and turn an attractive yellow in the fall. The fragrant yellow flowers appear in the mid to late fall and produce small brown seed capsules. The bark is a smooth grayish brown. This native plant prefers moist conditions and should not be grown in dry sites.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>

***Hamamelis x intermedia* 'Arnold Promise'**

H 10'-15' W 12'-15' Sun/Shade



This is an outstanding low maintenance shrub that has fragrant bright yellow flowers with wavy petals that can bloom from mid to late winter into early spring. It has medium-sized green oval shaped leaves with yellow fall color.

Photo courtesy Jim Ault, The Chicago Botanic Garden, <http://chicagobotanic.org>.

Yellowwood

Cladrastis kentukea (lutea)

H 30'-45' W 40'-45' Sun



The **Yellowwood** is a vase-shaped tree with low branches that form a graceful spreading crown. It has bright green pinnate compound leaves that turn yellow in the fall. The fragrant, white panicles of flowers that appear in the early summer develop into brown seedpods by fall. Flowering can be inconsistent from year to year. The bark is a smooth light gray. This tree likes well-drained soils but tolerates clay, high pH and drought conditions. The deep roots allow shade plants to grow close to it. However, due to its poor structural growth it is a relatively short-lived tree.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Conifers

Cypress

Bald Cypress

Taxodium distichum

H 50'-70'

W 20'-30'

Sun



This is a picturesque **deciduous** tree that forms a slender pyramid with a straight trunk buttressed at the base. Its short horizontal branches curve upward. The 1/3" – 3/4" long needles emerge chartreuse in the spring, become a soft green in the summer, and turn a rich brown in the fall. The 1" brown cones grow on short stalks. The beautiful, fibrous, reddish brown bark is striking in the winter, especially when snow lays on the tops of the branches. "Cypress Knees" can develop when this tree is near water. This native is a very adaptable conifer that tolerates both wet and dry conditions but it prefers moist, well-drained sites. It is frequently found growing in swamps. **Bald Cypresses** are extremely resistant to wind damage, surviving even hurricanes.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Hemlock

Canadian Hemlock

Tsuga canadensis

H 30'-40'

W 25'-30'

Sun/Shade



This is a conifer with a pleasing pyramidal shape and pendulous branches. The lustrous dark green needles grow 1/4" to 2/3" long. The slender brown cones grow 1/2" to 1" long and hang attractively from the branches on short stalks. The brown bark has wide, flat ridges that become fissured with age. This hemlock does best in moist, acidic well-drained soils. It does not tolerate strong, drying winds, so it likes a sheltered site, and it will not survive poorly drained, heavy soils or pollution. Although this tree is more shade tolerant than most conifers, it will become quite sparse and leggy if it does not get enough light.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Fir

White Fir

Abies concolor

H 60'

W 30'-50'

Sun/ Light Shade



The **White Fir** has a conical shape when it is young, but it develops a dome-like crown by maturity. The silver blue-green blunt-tipped needles grow 2" to 3" long, extend at right angles from the twig, and frequently curve upward. They release a citrus smell when crushed. The tree has oblong cones that grow 3" to 6" long in an upright manner; and range in color from chartreuse to purplish brown. The smooth gray bark on young trees develops deep irregular furrows. This fir must have well-drained soil. It is difficult to transplant.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Pine

Limber Pine

Pinus flexilis

H 30'

W 15'-25'

Sun/Part Shade



This is a slow growing, dense, pyramidal pine that matures to a low, broad flat-topped tree. The dark green needles are rigid and densely crowded on the ends of the branches, growing 2½" to 3½" long. There are 5 leaves per leaf bundle clustered towards the tips of branches. The light brown pendulous cones grow on short stalks and are 3" to 6" long. They are very resinous. The grayish brown bark is deeply fissured. This is an adaptable pine that does best in moist, well-drained soils but will tolerate rocky sites; it can be difficult to transplant.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Scots Pine

Pinus sylvestris

H 30'-35'

W 30'-40'

Sun



The **Scots Pine** is a picturesque conifer with an open, wide spreading form. The stiffly twisted blue-green needles have short pointed ends and minutely toothed margins. They grow 1" to 4" long and have 2 leaves per leaf bundle (fascicle). The gray-brown cones grow on short stalks and are 1½" to 3" long. The thin orange-brown bark peels off in papery flakes that form irregular furrows. This pine tolerates a variety of soils, including poor dry sites, but it must have well-drained conditions.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

White Pine
Pinus strobus

H 50'-60' W 20'-40' Sun/Part Shade



This fast growing native pine forms a distinctive, graceful plume-like shape at maturity because its crown is composed of several horizontal and ascending branches. Its narrow blue-green needles have long, finely toothed margins and grow 2" to 5" long, with 5 leaves per leaf bundle. Light brown cones grow 6" to 8" long, and are resinous. The tree has dark grayish brown bark that is deeply furrowed and ridged. The **White Pine** does best in fertile, moist, well-drained soils. It is not tolerant of air pollution, salt or wind, and its branches can snap off during severe storms.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Redwood

Dawn Redwood
Metasequoia glyptostroboides

H 60' W 25' Sun



The **Dawn Redwood** is a **deciduous** conifer with a pyramidal growth habit and an irregular fluted base. The bright green needles have a feathery appearance and turn an attractive reddish brown in the fall. The pendulous dark brown cones grow on long stalks and measure 3/4" to 1". The textured ruddy brown bark exfoliates in long narrow strips. These trees like moist, rich, well-drained soils. They can be damaged by early spring frosts. Due to the potential large scale of this tree, adequate space is required.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Spruce

Black Hills Spruce

Picea glauca var. *densata*

H 20'-30'

W 10'-20'

Sun/Light Shade



This dense ornamental spruce is very slow growing. Its pale blue-green needles with rounded tips grow 1/2" to 3/4" long. The tree grows blunt, pale brown cones that measure 1" to 2 1/2" long, and its ash brown colored bark has a thin scaly texture. This is a very tolerant spruce that can be grown in hot windy sites, stream banks, or lake shores.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Colorado Spruce/Blue Spruce

Picea pungens

H 30'-50'

W 10'-20'

Sun



The **Colorado Spruce** has a dense pyramidal habit with stiff horizontal branches that make it a good specimen tree, but it is probably overused in our local landscape plantings. The green to silver-blue needles are rigid, incurved and are very prickly growing between 3/4" to 1 1/4" long. The shiny pale brown cones are 2" to 4" in length. The brown bark exfoliates in thin scales. This conifer is more adaptable and drought tolerant than other spruces, but it prefers moist, well-drained soils. It can become sparse and dingy-looking with age, especially if it does not get enough sun.

Photo: USDA , NRCS. 2012. The PLANTS Database (<http://plants.usda.gov>, 17 May 2012.) National Plant Data Base Team., Greensboro, NC 27401-USA

Norway Spruce
Picea abies

H 40'-50'

W 25'-30'

Sun



This pyramidal shaped evergreen with pendulous branchlets has lustrous dark green needles that grow 1/2" to 1" long, ending in blunt points. The light brown cones grow 4" to 6" long and they persist through the winter. Its gray bark has thin, flaky surface scales. The tree prefers moist, well-drained soil and it is especially sensitive to drought until it is well established. The tree will become thin and ragged if it does not get enough sun, yet generally it is the best spruce for the Chicago area.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Serbian Spruce
Picea omorika

H 30'-40'

W 20'-25'

Part Shade



The **Serbian Spruce** is a slow growing conifer whose slender trunk and drooping branches create an attractive narrow pyramidal shape. The needles have a glossy dark green upper surface with two prominent white lines on the bottom that grow 1/2" to 1" long. The shiny cinnamon brown oblong cones are 1 1/4" to 2" in length. The tree's thin scaly brown bark peels off in strips. This adaptable spruce prefers a rich, moist, well-drained soil, but it is not shade-tolerant and does best when it is protected from strong winds.

Photo: The Morton Arboretum, <http://www.mortonarb.org>

Glossary of Terms

Catkin: a spike-like inflorescence comprised of scaly bracts subtending unisexual flowers, often somewhat flexuous and pendulous, and associated with plants that are wind pollinated.

Clone: a group of plants derived vegetatively from one parent plant, identical to each other and to the parent.

Chlorosis: a yellowing of leaf tissue due to lack of one or more nutrients needed for photosynthesis or metabolizing.

Deciduous: falling off, as leaves on a tree.

Lenticel: a small corky spot on young bark made of loosely packed cells, providing gaseous exchange between the inner tissues and the atmosphere.

Obovate: inversely ovate, broadest above the middle.

Ovate: egg-shaped in outline, broadest below the middle, like an oval.

Palmate: digitate, radiating fan-like from a common point.

Panicle: an indeterminate inflorescence whose primary axis bears branches of pedicel led flowers (at least basally so); a branching raceme.

Raceme: a simple indeterminate inflorescence with pedicel led flowers.

Samara: a dry indehiscent fruit bearing a wing (the wing may be limb-like or envelop the seed and be wafer-like).

All of the above terms are from ***Manual of Woody Landscape Plants***, Michael A. Dirr; Fifth Edition, Stipes Publishing, Champaign, Illinois, 1998.



As an American Beech was planted in the park honoring the Centennial Celebration of the Garden Club of America, Garden Guild of Winnetka members came to lend a hand of support (from the left) Lorill Haynes, Valerie Foradas, Dora Aalbrektse, Barbara Kehoe, and Suzanne Canfield.

Photo taken by Garden Guild of Winnetka member,
Pam McCambridge.

Garden Guild of Winnetka collaborators for this booklet included Dora Aalbrektse, Pam Benz, Barbara Kehoe, Suzanne Canfield, and Valerie Foradas.