



Harris County Flood Control District
Tree & Shrub Field Guide

2004 Edition



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Legend

To help with quicker assessment of vegetation identification, needs and locations, the symbols below that are appropriate for each species will be located in the middle section of each page in this book. All information is an estimate and should always be verified.

Sun Needs



Indicates
Grows Best in Full Sun



Indicates
Grows Best in Partial Sun or Partial Shade



Indicates
Grows Best in Shaded Areas

Water Needs



Indicates
Low Water Needs



Indicates
Medium Water Needs



Indicates
High Water Needs

County Location Zone



Indicates
Grows Countywide



Indicates
Grows Mostly in ZONE 1



Indicates
Grows Mostly in ZONE 2

Slope Location



Indicates
Top of Bank



Indicates
Mid Slope to
Top of Bank



Indicates
Toe to
Mid Slope



American Beautyberry

(Callicarpa americana)

Description

An attractive shrub with clusters of colorful berry-like drupes in late summer and fall.

Location

Almost county wide, but most common in pinewoods area of northern Harris County.

Leaves

3-8 inches long and 2-4 inches broad. Soft and unpleasantly aromatic.

Fruit

Lavender-purple or rose; in masses along the stems.

Spatial

Mid slope to top bank.

Remarks

Leaves droop quickly in dry weather.
Many birds and mammals eat the fruits.

Lifespan: 20-30 years.





American Holly

(*Ilex opaca*)

Description

An evergreen tree, usually to about 30-40 ft. in our area, with short, often crooked branches.

Location

Primarily in north Harris County, in sandy soils and near waterways.

Leaves

Stiff, leathery and variable, about 2-4 inches long and half that wide. Some are simple, but others may be strikingly undulate with sharp spines.

Fruit

About 1/3 inch in diameter, green, then brightly red.

Spatial

Top bank

Remarks

A favorite Christmas decoration. About one in ten are female, fruiting trees.

Lifespan: 150-200 years.





American Hornbeam

(*Carpinus caroliniana*)

Description

Tree to 30 ft., often with a leaning trunk. The trunk is frequently fluted and has patches of bluish lichen.

Location

In northern part of Harris County near streams and in low woods. Sun or shade.

Leaves

To 3 inches long and 1-1/2 inches wide. Finely serrate on margins. Elm-like, but tree is in Birch Family.

Fruit

Dangling clusters of bracts resembling hops, 3-4 inches long, containing small nutlets.

Spatial

Top bank.

Remarks

Very tough, muscular wood.

Lifespan: 100-150 years.





Bald Cypress

(*Taxodium distichum*)

Description

Tree to 100 ft. or more, often with woody growths from roots called "knees".

Location

County wide. Along streamsides and in wet places. Sometimes in standing water.

Leaves

Fern-like, light green, turning brown in fall.

Fruit

A round, closed cone about 1 inch in diameter.

Spatial

Often at toes or even in the stream or pond.

Remarks

A handsome tree. One of the few trees that can grow in standing water year around.

Lifespan: More than 1,000 years.



Black Willow

(*Salix nigra*)

Description

Tree with pendulous branches. Grows universally at streamides and in other sunny wet places.

Location

County wide

Leaves

3-6 inches long. Slender and drooping.

Fruit

Slender, cone-like structure with numerous capsules. These release tiny seeds borne by fine white fluff.

Spatial

At and near toes.

Remarks

The most common tree at stream banks.

Lifespan: 60-80 years.





Buckwheat Vine

(*Brunnichia cirrhosa*)

Description

A massive vine with yellowish-green foliage.

Location

Mostly in northern Harris County, where it covers shrubs and small trees near streams.

Leaves

About 1-1/2 to 5 inches long and 1-3 inches wide. Light yellowish green.

Fruit

Clusters of small pendants resembling ear-drops. Light brown, turning darker.

Spatial

Mid slope to top bank.

Remarks

A problem for floodwater conveyance, as the masses of vines collect debris. They can also kill small trees by covering their foliage.

Lifespan: 15-20 years.





Buttonbush

(*Cephalanthus occidentalis*)

Description

A shrub or small tree growing in sunny, wet places; often in standing water.

Location

County wide; more prevalent in northern and eastern Harris County.

Leaves

3-7 inches long, about half as wide. Soft, and somewhat drooping.

Fruit

A ball of brown nutlets, about 1 inch across.

Spatial

Toes to mid slope.

Remarks

Round white heads of flowers are attractive in summer.

Lifespan: 20-30 years.





Cherry Laurel

(*Prunus caroliniana*)

Description

A small evergreen tree to about 40 ft. Leaves are aromatic and leathery.

Location

Northern parts of Harris County.

Leaves

Dark green, 2-4 inches long, half as wide. Some have small teeth. Smell like marischino cherries when crushed.

Fruit

A small black drupe.

Spatial

Top bank in sun or partial shade.

Remarks

Somewhat resembles Red Bay, but leaves contain poisonous prussic acid.

Lifespan: 60-80 years.





Chinese Privet

(*Ligustrum sinense*)

Description

A non-native shrub or small tree to 15 ft., often with multiple trunks.

Location

County wide, especially in pinewoods area.

Leaves

1-2 inches long, 1/2 to 1 inch wide. Soft and light green.

Fruit

Bluish drupes in dangling clusters.

Spatial

Mid slope to top bank. Sometimes near toes.

Remarks

Naturalized widely. Multiple trunks and branches catch debris, making this an undesirable plant along streams.

Lifespan: 30-40 years.





Chinese Tallow

(*Sapium sebiferum*)

Description

A very fast-growing imported tree to about 30 ft. Aggressive and invasive, often crowding out native flora.

Location

County-wide.

Leaves

About 1-3 inches long and wide, with acuminate (pointed) tips. Very colorful in fall.

Fruit

A three-lobed capsule breaking open in fall to reveal 3 white, waxy seeds.

Spatial

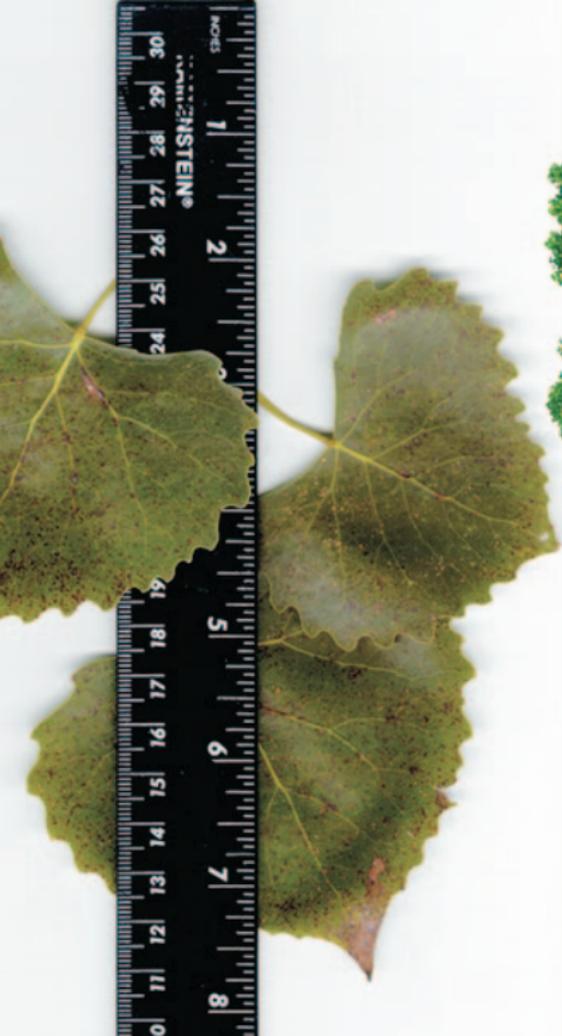
Mid slope to top bank. Can grow for long periods in standing water.

Remarks

A real "problem" tree. Should be retained only when no other tree is nearby.

Lifespan: 60-80 years.





Cottonwood

(*Populus deltoides*)

Description

Tree to 100 ft. with a large trunk.

Location

Near water. County wide.

Leaves

3-7 inches long and broad. Somewhat heart-shaped. Leaves swing back-and-forth in a breeze.

Fruit

Small capsules that open in late spring and produce great amounts of cottony fuzz carrying tiny seeds.

Spatial

From near toes to top bank.

Remarks

Very fast growing, water-loving tree.

Lifespan: 80-100 years.





Elderberry

(*Sambucus canadensis*)

Description

A tall, weedy shrub with weak branches growing in rich, moist soil.

Location

County wide.

Leaves

Compound, from 4-12 inches long, with 5-7 (sometimes to 11) leaflets.

Fruit

This plant is characterized by large heads of tiny white flowers in May, followed by many purple-black, berry-like drupes in summer.

Spatial

Mid slope to top bank.

Remarks

Flowers and fruits are used in wines, confections and jellies.

Lifespan: 80-100 years.





Elms

(Ulmus species)

Description

Three species – American, Cedar, and Winged Elms – are common near Harris County streams. American Elm grows very large; Cedar elm has scaly bark, and Winged elm has corky “wings” along its twigs.

Location

County wide, along streams and in nearby woods.

Leaves

As illustrated. All have finely serrated leaves.

Fruit

Elms have small winged seeds called samaras.

Spatial

Mid slope to top bank.

Remarks

All three elms are found near our waterways.

Lifespan: 150-200 years.





Green Ash

(*Fraxinus pennsylvanica*)

Description
Spreading, round-topped tree to 60 ft. or more, with dark green, compound leaves.

Location
County wide, especially near streams and in wet places.

Leaves
Compound, 8-12 inches long, usually having 7 leaflets, each 2-6 inches long.

Fruit
Prominent clusters of winged seeds, light brown at maturity, then turning darker

Spatial
Mid slope to top bank. Often near toes.

Remarks
Water loving, fast growing tree.

Lifespan: 80-100 years.





Live Oak

(*Quercus virginiana*)

Description

Somewhat evergreen tree to 60 ft. with wide-spreading crown and low branches.

Location

Native in south Harris County. Much planted in other areas.

Leaves

Dark green and leathery, 2-5 inches long. Variable in shape.

Fruit

Slender acorn to 1/2 inch long.

Spatial

Top bank

Remarks

Foliage is renewed in spring.

Lifespan: 300-400 years.





Loblolly Pine

(*Pinus taeda*)

Description

Tree to well over 100 ft. The common pine in our area. Often with very straight trunks.

Location

Northern and eastern Harris County.

Leaves

5-10 inch long needles, usually in bundles of 3, sometimes 2.

Fruit

Cones 3-5 inches long with small winged seeds beneath the scales.

Spatial

Top bank; sometimes mid slopes. Common in flat woods.

Remarks

This is the dominant tree in northern Harris County, lifting its tops above all others.

Lifespan: 100-150 years.





Pecan

(*Carya illinoensis*)

Description

Large tree with dense compound foliage.
Can reach 100 + ft. with a spreading crown.

Location

Near streams and in flat woods; most prominent in southern and western parts of Harris County. Widely planted elsewhere.

Leaves

Compound, with 9-17 lance-shaped leaflets.

Fruit

1-1/2 inches to 2-1/2 inches in native pecans.
Much larger in hybrids.

Spatial

Top bank.

Remarks

Texas' State Tree. Late to leaf out and early to drop foliage in fall.

Lifespan: 150-200 years.



Red Bay

(*Persea borbonia*)

Description

Evergreen or persistent-leaved tree with an average height of 15-20 ft.

Location

In northern and eastern Harris County.
Mostly in deep, sandy soils.

Leaves

Compound, with 9-17 lance-shaped leaflets. 3-4 inches long, 1 to 1-1/2 inches broad. Very fragrant. Often covered with galls.

Fruit

Small green, then blue-black drupes.

Spatial

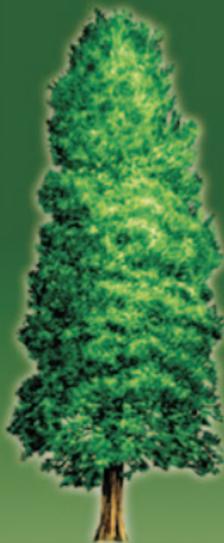
Top bank.

Remarks

Leaves are used for spicing food. Sometimes these small trees form thickets.

Lifespan: 80-100 years.





Red Cedar

(*Juniperus virginiana*)

Description

Well-known native tree to 40 ft. or more, with thick, evergreen foliage.

Location

County wide, and also much planted.

Leaves

Scale-like, finely divided foliage.

Fruit

Tightly appressed cones, about 1/2 inch in diameter; usually called "berries."

Spatial

Mid slope to top bank.

Remarks

Very slow growing tree. Sometimes in colonies, as along Cedar Bayou.

Lifespan: 150-200 years.



Red Mulberry

(Morus rubra)

Description

Usually a small tree to 30 ft in our area, with a broad top and large leaves.

Location

In rich woods, especially near streams, and most common in northern Harris County.

Leaves

3-9 inches across, with a rough surface. Usually heart-shaped, but often with deep lobes.

Fruit

Female trees bear blackberry-like edible fruit in May.

Spatial

Top bank, in sun or partial shade.

Remarks

The fruits are eagerly eaten by birds and mammals, but a majority of trees are male.

Lifespan: 80-100 years.





River Birch

(Betula nigra)

Description

An attractive tree with somewhat pendulous branches, growing at streamside. Can reach 90 ft., but usually much smaller. Bark peels in reddish strips.

Location

In northern and western Harris County. Sun or partial shade.

Leaves

1-3 inches long, 2 inches wide. Fine serration along edges.

Fruit

Small cone-like structure enclosing tiny seeds, following catkins that persist fall and winter.

Spatial

From toes to mid slope.

Remarks

Good erosion control tree with extensive, fine roots.

Lifespan: 80-100 years.



Southern Red Oak

(*Quercus falcata*)

Description

Tree to 80 ft. with a rounded head.

Location

Generally in the pinewoods sections of Harris County.

Leaves

Often broad and 3-lobed on lower branches, and deeply multiple-lobed on upper limbs. Weak spines at lobe tips. Blades up to 7 inches long.

Fruit

Acorn to 1/2 inch long.

Spatial

Top Bank.

Remarks

Often straight-trunked with light blue lichen rings on the bark.

Lifespan: 150-200 years.





Sugar Hackberry

(*Celtis laevigata*)

Description

Tree with spreading top, usually about 40-50 ft. in our region, but can be considerably taller. Dense foliage.

Location

County wide. Sun or semi-shade.

Leaves

Usually lance-shaped, 2-4 inches long, 1-2 inches wide. Often yellowish and covered with galls in late summer.

Fruit

A small drupe, about 1/4 inch in diameter. First green, then orange, then black.

Spatial

Mid slope to top bank.

Remarks

One of the most common trees in our area.

Lifespan: 80-100 years.





Sweetgum

(*Liquidambar styraciflua*)

Description

Tall, fast-growing tree to 100 ft. or more.
Starry leaves make dense shade.

Location

County wide.

Leaves

5-lobed , about 5-7 inches long and wide.

Fruit

A spiny ball with many small round seeds.

Spatial

Mid slope to top bank. Sometimes near toes.

Remarks

Leaves very colorful in autumn. Some trees have corky wings on twigs.

Lifespan: 150-200 years.





Sycamore

(*Platanus occidentalis*)

Description

Big tree to 100 ft. and more. Large leaves, peeling bark and white trunk are distinctive.

Location

County wide, but uncommon in southern Harris County. Sun or semi-shade.

Leaves

Large, toothed leaves from 4 inches to 12 inches long and broad.

Fruit

Rounded balls about 1 inch across, green, then brown, with many tiny seeds.

Spatial

Mid slope, top bank, and often near toes.

Remarks

Grows to largest size of any deciduous tree in U. S. Older trees show more white trunk.

Lifespan: 200-300 years.





Water Hickory

(Carya aquatica)

Description

Rapid-growing tree resembling pecan, but much more common in northern and eastern Harris County. Has inedible nut.

Location

Within the pinewoods region, in wet and even boggy areas. ("Hickory Bogs")

Leaves

9-15 inch-long compound leaves, containing 7-15 leaflets.

Fruit

Shallow-winged and flattened, about 1-1/2 inches wide. Very bitter.

Spatial

Top bank in wet areas; sometimes mid slope.

Remarks

More tendency to lean than pecan, and more tolerant of shade.

Lifespan: 100-150 years.





Water Oak

(*Quercus nigra*)

Description

Tree 60-80 ft. tall or more, often with massive branches.

Location

Throughout Harris County, particularly northern half. Along streams and in moist woods.

Leaves

2-4 inches long, 1-2 inches wide. Usually paddle shaped, but sometimes lobed.

Fruit

Acorn 1/4 to 1/2 inches long, light brown when ripe.

Spatial

Mid slope to top bank. Shade or sun.

Remarks

Very common, fast-growing oak.

Lifespan: 150-200 years.



Wax Myrtle

(*Myrica cerifera*)

Description

Dense evergreen shrub or small tree with aromatic foliage.

Location

Most common in pinewoods areas of Harris County, near water.

Leaves

2-4 inches long, about 1/2 inch wide. Dark green on upper surface; lighter beneath.

Fruit

Waxy, bluish-colored drupes about 1/8 inch in diameter on female plants.

Spatial

Mid slope to top bank. Sometimes at water's edge around ponds.

Remarks

The leaves are used to spice food. Waxy fruits were once used in candlemaking.

Lifespan: 80-100 years.





Willow Oak

(*Quercus phellos*)

Description

Tall tree to 100 ft. Leaves slender and willow-like.

Location

Throughout Harris County, particularly northern and eastern parts, in low woods.

Leaves

2-5 inches long, 1/2 to 1 inch wide.

Fruit

Acorn about 1/2 inch long, often striped.

Spatial

Mid slope to top bank. Shade or sun.

Remarks

Fast-growing oak. Sometimes hybridizes with Water Oak or Live Oak.

Lifespan: 150-200 years.





Woolly Hop-Hornbeam

(*Ostrya virginiana*)

Description

Small tree to 40 ft., usually less. The bark is shreddy, leading to the name, "wooly."

Location

Mostly northern Harris County, in wet pine woods. Sun or shade.

Leaves

2-4 inches long, about 2 inches wide. Finely serrate on margin.

Fruit

Hop-like clusters containing small nutlets.

Spatial

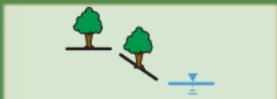
Top bank.

Remarks

Similar to American Hornbeam, except for Shreddy bark. Very tough wood.

Lifespan: 100-150 years.





Yaupon

(Ilex vomitoria)

Description

Evergreen shrub or small tree, often with multiple trunks. Females have red “berries.”

Location

The most common understory tree throughout Harris County. Sun or shade.

Leaves

Evergreen, leathery, and wavy-serrate on margin.

Fruit

A round drupe, first green, then shiny red.

Spatial

Mid slope and top bank. Ubiquitous.

Remarks

Leaves produced a sacred drink for Indians. Much-used in landscapes for evergreen foliage and red fruits.

Lifespan: 80-100 years.



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