Indiana and the Midwestern states are home to a diverse array of tree species. In total there are approximately 100 native tree species and 150 shrub species. Indiana is a long state, and because of that, species composition changes significantly from north to south.

A number of species such as bald cypress (*Taxodium distichum*), cherry bark, and overcup oak (*Quercus pagoda* and *Q. lyrata*) respectively are native only to the Ohio Valley region and areas further south; whereas, northern Indiana has several species such as tamarack (*Larix laricina*), quaking aspen (*Populus tremuloides*), and jack pine (*Pinus banksiana*) that are more commonly associated with the upper Great Lake states.

In urban environments, native species provide shade and diversity to the environment. In rural settings, trees are an integral part of the landscape providing natural beauty, wildlife habitat and food, recreation, and lumber.

Since the arrival of the first settlers to Indiana, trees have been harvested for the lumber and other wood products that they produce. At the turn of the 20th century, Indiana was the leading lumber producing state in the nation and continued in that role for several years. With the exception of a few protected areas, essentially all of the timber in the state was cut. Much of the area became farm land, but the remaining areas soon reforested themselves with young stands of trees, many of which have been harvested and replaced by yet another generation of trees. This continuous process testifies to the renewability of the wood resource and the ecosystem associated with it.

Today, the wood manufacturing sector ranks first among all agricultural commodities in terms of economic impact. Indiana forests provide jobs to nearly 50,000 individuals and add about $2.75 billion dollars to the state’s economy.

There are not as many lumber categories as there are species of trees. Once trees from the same genus, or taxon, such as ash, white oak, or red oak are processed into lumber, there is no way to separate the woods of individual species. For example, there are ten species of red oak trees in Indiana, but only one lumber group simply referred to as red oak.

For the Pfendler Hall display, we assembled rather large panels of wood to provide a more representative portion of what each lumber group is like. The industry’s very best and clearest material is on the left. On the right of each panel is the lowest-quality material, most of which is used for pallets, blocking, or railroad ties.

In this booklet, each tree species is illustrated with a panel showing the tree, usually in an urban
environment. There is information about the tree itself, including its uses.

Complete information on lumber characteristics is available in a CD titled *Hardwood Lumber of the Central Midwest* available for $25 plus shipping from the Media Distribution Center, Purdue University, www.ces.purdue.edu/new.<.> Complete information on tree characteristics is available in the 325-page book *Native Trees of the Midwest* available for $50 from Purdue University Press.

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**Footnote:** Wood prices change frequently. The prices listed here are for wholesale, semi-load, and highest quality wood (FAS green) for southern Indiana (*Hardwood Review Weekly*, October 2006).

Maximum size is from the National Registry of Big Trees. Many of these trees are open grown. Forest grown trees would be taller.

Wood Density is established at 12% Moisture Content.

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You’ll find information about commercial species such as ash, basswood, beech, black cherry, black walnut, cottonwood, hackberry, hard or sugar maple, hickory, red oak, sassafras, soft maple, sycamore, white oak, and yellow poplar. There is information about other species such as black gum, black locust, buckeye, butternut, coffeetree, elm, honey locust, sweet gum, and willow.

**Order Online at [www.ces.purdue.edu/new](http://www.ces.purdue.edu/new)**
American Chestnut

Scientific name: *Castanea dentata* (Marsh.) Borkh.

**Maximum size:** 6.6 feet DBH by 106 feet high

**Shape:** open-grown form has spreading crown from low, thick trunk

**Leaves:** thick dark green, many curved teeth on margin

**Flowers:** males slender, long white clusters; females nearby – tiny white clusters from prickly ocales

**Fruit/Seeds:** 2-3 dark brown seeds per prickly bur

**Site:** prefers sandy loam soils; moderately shade tolerant, but prefers full sun

**Price per board foot:** not listed in wholesale market report

**Percent saw timber in Indiana:** 0%

**Density:** 30.1 lbs/ft³

**Machinability:** good

**Uses:** previously for lumber; natural durable products such as poles, fence posts, and railroad ties; millwork, tannin, and others

**Wildlife uses:** seeds highly preferred by deer, squirrels, turkeys, and woodpeckers

**Note:** This species continues to hang on by root suckering within its natural range. Most trees were killed by chestnut blight. Wood panel provided by the Indiana Chapter of the American Chestnut Foundation.
**White Ash**

**Scientific name:** *Fraxinus americana* Linnaeus and other species

**Maximum size:** 8 feet DBH by 125 feet high

**Shape:** broadly rounded or pyramid-shaped crown

**Leaves:** feather-shaped (pinnate) with seven leaflets

**Flowers:** inconspicuous, petal-less, mostly greenish

**Fruit/Seeds:** hanging clusters of light brown, winged seeds

**Site:** prefers deep, moist, fertile upland soil; shade intolerant

**Price per board foot:** $0.75

**Percent saw timber in Indiana:** 6.5% (all ash species)

**Density:** 38.9 lbs/ft$^3$

**Machinability:** average to good

**Uses:** long tool handles, baseball bats, oars, furniture, planing mill products, woodenware, and toys; previously used for sporting goods and vehicle parts

**Wildlife uses:** seeds taken sparingly by birds and rodents

**Note:** All ash species are seriously threatened by the Emerald Ash Borer. The entire state of Indiana is quarantined.
American Basswood

Scientific name: *Tilia americana* Linnaeus

Maximum size: 7.8 feet DBH by 78 feet high

Shape: narrow and symmetrical crown with many slender branches

Leaves: broadly heart-shaped, with finely serrate margins and pointed tip

Flowers: whitish yellow, suspended from a leafy bract on a long stalk, strongly scented

Fruit/Seeds: hangs from a long stalk in clusters from a leafy bract

Site: prefers rich, moist, well-drained soil, shade tolerant when young

Price per board foot: $0.75

Percent saw timber in Indiana: 1%

Density: 25.9 lbs/ft³

Machinability: below average

Uses: venetian blinds, toys, carvings, key stock in pianos, picture frame mouldings, apiary supplies, concealed furniture parts, basket veneers; some millwork such as sash and doors; core stock in some plywood

Wildlife uses: seeds taken sparingly by squirrels and rodents
American Beech

**Scientific name:** *Fagus grandifolia* Ehrhart

**Maximum size:** 7.4 feet DBH by 115 feet high

**Shape:** tall, broad, with low, wide-spreading crown

**Leaves:** ovate with an elongated tip and prominent veins, papery but tough, dark green and lustrous; the underside is slightly hairy

**Flowers:** male and female on the same tree; males are in clusters of dangling rounded heads; females are small terminal spikes

**Fruit/Seeds:** spiny case of husk opens when ripe into 4 parts and releasing nuts

**Site:** tolerates a wide range of well-drained soils; shade tolerant

**Price per board foot:** $0.52

**Percent saw timber in Indiana:** 2.8%

**Density:** 44.7 lbs/ft³

**Machinability:** good

**Uses:** furniture, especially bent parts in chairs; paper, railroad crossties, charcoal; many turned items such as spindles and novelties; pallets, blocking, nuts as wildlife food; previously used for wooden clothes pins, brush backs, and handles

**Wildlife uses:** seeds highly preferred by many birds and mammals; hollow old trees used as dens
Ohio Buckeye

Scientific name: *Aesculus glabra* Willdenow

Maximum size: 4 feet DBH by 148 feet high

Shape: upward-arching branches; oblong, rounded crown

Leaves: palmately compound with mostly 5 coarsely pointed leaves

Flowers: large, pale-yellow upright clusters with red markings, odd smelling

Fruit/Seeds: spiny leathery capsules that split in autumn and release brown shiny “buck’s eye” seeds

Site: mixed hardwood forest with moist rich (limestone) soils; shade tolerant

Price per board foot: not listed in wholesale market reports

Percent saw timber in Indiana: <1%

Density: low

Machinability: wood is soft and tends to fuzz

Uses: concealed or low-cost furniture parts, paint grade moulding, excellent carving wood; previously used for artificial limbs

Wildlife uses: very little, all parts of tree considered toxic
**Butternut**

**Scientific name:** *Juglans cinerea* Linnaeus

**Maximum size:** 7 feet DBH by 78 feet high

**Shape:** open-grown trees with short trunks and a few ascending limbs that form a broad open crown

**Leaves:** 11 to 17 leaflets, leaf stalk is finely hairy and leaflet margins are serrate, sticky to the touch, and aromatic

**Flowers:** male has drooping aments; females are in terminal spikes; both are on the same tree

**Fruit/Seeds:** oblong nut enclosed in glandular husk; inside nut, sweet and edible; has sharp, deeply corrugated ridges

**Site:** moist, rich, well-drained soils along streams and wooded ravines, shade intolerant

**Price per board foot:** not listed in wholesale market reports

**Percent saw timber in Indiana:** <1%

**Density:** 26.6 lbs/ft³

**Machinability:** not reported

**Uses:** furniture, cabinets, paneling, fancy face veneers, bowls; previously used as a substitute for walnut and called white walnut

**Wildlife uses:** fruit taken by squirrels

**Note:** lumber and veneer production of the species has declined seriously due to butternut canker
Black Cherry

**Scientific name:** *Prunus serotina* Ehrhart

**Maximum size:** 5.5 feet DBH by 134 feet high

**Shape:** oval canopy

**Leaves:** elliptical, lustrous, dark green

**Flowers:** white in drooping racemes

**Fruit/Seeds:** dark red fruit

**Site:** deep, rich soils with uniform moisture; shade intolerant with shallow root system

**Price per board foot:** $2.40

**Percent saw timber in Indiana:** 1.5%

**Density:** 34.9 lbs/ft³

**Machinability:** excellent

**Uses:** high-end face veneer, furniture, moulding, architectural millwork, wood paneling, toys, printer’s blocks, scientific instrument cases, pattern stock, and blocks for mounting electrotypes

**Wildlife uses:** fruit is taken by many birds and mammals; twigs are important winter browse for deer
Kentucky Coffeetree

**Scientific name:** Gymnocladus dioicus (L.) K. Koch

**Maximum size:** 5.4 feet DBH by 92 feet high

**Shape:** irregular rounded open crown, often forks close to the ground

**Leaves:** bipinnately compound, dark green above, pale yellow-green beneath

**Flowers:** large upright clusters of whitish green, single-sexed flowers, male and female are on separate trees

**Fruit/Seeds:** purplish brown pods enclosing yellowish green pulp and 4 to 7 hard seeds

**Site:** rich, moist woods; intolerant of shade

**Price per board foot:** not listed in wholesale market report

**Percentage saw timber in Indiana:** not available

**Density:** 41.9 lbs/ft³

**Machinability:** relatively hard, porous wood, probably comparable to oak

**Uses:** specialty wood for home woodworkers and custom shops; railroad ties, fence posts and rails, pallets

**Wildlife uses:** limited use of pods and seeds
**Eastern Cottonwood**

**Scientific name:** *Populus deltoides* Bent.ex Marsh.

**Maximum size:** 12 feet DBH by 85 feet high

**Shape:** tall clear often massive trunks with irregular oblong open crowns

**Leaves:** triangular in outline, tip is elongate and margins are coarsely round-toothed

**Flowers:** short-stalked, long, thick dangling catkins, male (reddish) and female (yellowish) on separate trees

**Fruit/Seeds:** dangling clusters of small capsules, split open to release numerous seeds attached to fluffy white hairs

**Site:** prefers moist, river bottoms and flood plains; shade intolerant

**Price per board foot:** $0.60 in southern United States

**Percent saw timber in Indiana:** 4.4%

**Density:** 28 lbs/ft³

**Machinability:** poor

**Uses:** boxes, crates, low strength pallets, casks, concealed furniture parts, core stock, general construction where allowed by code

**Wildlife uses:** occasional use; nesting by Baltimore orioles; woodpeckers use old snags; Indiana bat maternity colonies under loose bark of dead tree
American Elm

Scientific name: *Ulmus americana* Linnaeus and other species

Maximum size: 7.35 feet DBH by 122 feet high

Shape: open spreading crown, drooping limbs that form a vase shape, trunk often buttressed at base

Leaves: egg-shaped, lopsided base and pointed tip with doubly serrate margins

Flowers: clusters of small green blossoms with red stamens

Fruit/Seeds: greenish, disk-like, paper-thin, half-inch samaras with hairs on the margins

Site: floodplains, low fertile hills; intermediate shade tolerance

Price per board foot: not listed in wholesale market reports

Percent saw timber in Indiana: 1.3% (all elm species)

Density: 38.6 lbs/ft³

Machinability: relatively poor due to interlocked grain

Uses: staves, boxes, crates, pallets, veneer, fruit and vegetable containers, children’s wagons and sleds, bent parts for rockers, arms, upholstery frames, cabinets, flooring, paneling, interior trim, barrel staves and hoops, vehicle trim, agricultural implements, bent wood on old time steamer trunks

Wildlife uses: budding in late winter by squirrels; cover/nesting of birds in small, open grown trees

Note: Dutch elm disease has killed most of the large trees throughout its range.
**Blackgum**

**Scientific name:** *Nyssa sylvatica* Linnaeus  
**Maximum size:** 6.1 feet DBH by 110 feet high  
**Shape:** small recurved branches in a narrow oblong crown  
**Leaves:** oblong, dark green, smooth and shiny above, paler beneath, entire margins  
**Flowers:** single sex on separate tree; both male and female are grouped in greenish, long-stalked inconspicuous clusters  
**Fruit/Seeds:** small and dark, blue to nearly black when ripe  
**Site:** moist alluvial soils but also grows on uplands; shade tolerance  
**Price per board foot:** not listed in wholesale market reports  
**Percent saw timber in Indiana:** 0.5%  
**Density:** 35.9 lbs/ft³  
**Machinability:** average; has interlocked grain  
**Uses:** boxes, crates, pallets, concealed furniture parts, container veneer, railroad ties  
**Wildlife uses:** fruit taken by many birds and mammals
**Sweetgum**

**Scientific name:** *Liquidambar styraciflua* Linnaeus

**Maximum size:** 7.5 feet DBH by 136 feet high

**Shape:** pyramidal when young; straight trunk, branches often with irregular wings

**Leaves:** glossy; resembles a star, aromatic when crushed; margins are finely toothed

**Flowers:** males reddish green and sit upright; females hang down in drooping long-stalked round heads

**Fruit/Seeds:** star-shaped head of beaked capsules that hang from a long stalk, turns brown in fall

**Site:** grows best on rich, moist alluvial sites; intolerant of shade

**Price per board foot:** $0.38 in southern United States

**Percent saw timber in Indiana:** 1%

**Density:** 35.9 lbs/ft³

**Machinability:** average, has interlocked grain

**Uses:** available lumber called sap gum is used for furniture, interior woodwork, frame stock, pallets, crates, railroad ties, pulpwood and plywood; previously the species was used extensively for low-end furniture and television, radio, and phonograph cabinets; often stained dark like walnut

**Wildlife uses:** seeds taken by finches, siskins, wood ducks
Hackberry

**Scientific name:** *Celtis occidentalis* Linnaeus  
**Maximum size:** 6.6 feet DBH by 84 feet high  
**Shape:** irregularly sized branches extending horizontally from the trunk, spreading crown  
**Leaves:** ovate-lanceolate, with single-toothed margins and pointed tips slightly curved to one side  
**Flowers:** inconspicuous, greenish  
**Fruit/Seeds:** round deep red to purple berries  
**Site:** prefers rich moist, well-drained bottomlands, but will grow on a wide range of soil types; shade tolerance is intermediate  
**Price per board foot:** $0.47 in southern United States  
**Percent saw timber in Indiana:** <1%  
**Density:** 37 lbs/ft³  
**Machinability:** average  
**Uses:** furniture, upholstery frames, millwork, container veneer, pallets, wildlife food and habitat  
**Wildlife uses:** fruit used commonly by many birds and mammals
**Sugar Maple**

**Scientific name:** *Acer saccharum* Marsh.

**Maximum size:** 7.25 feet DBH by 65 feet high

**Shape:** open-grown trees with very dense and broad crowns

**Leaves:** 5 lobed and smooth, no serration on margins, pale underside, long leaf stalk

**Flowers:** dangling clusters of yellow flowers

**Fruit/Seeds:** greenish, paired fruit, each winged seed sits close to the other

**Site:** prefers a moist, deep, well-drained soil; extremely shade tolerant

**Price per board foot:** $1.54 for mixed heartwood and sapwood; $1.80 for selected sapwood

**Percent saw timber in Indiana:** 8.2%

**Density:** 44 lbs/ft³

**Machinability:** average to above average

**Uses:** high-end cabinets, furniture, architectural millwork, paneling, flooring, bowling alleys, athletic equipment, piano frames, violins, wooden ware and novelties, turned items, butcher blocks, dowels, and even toothpicks

**Wildlife uses:** seeds utilized by some birds and mammals; leaves and twigs highly preferred by deer and rabbits
Soft Maple

Scientific name: Silver Maple - *Acer saccharinum* Linnaeus
Red Maple – *Acer rubrum* Linnaeus

Maximum size: 7.8 feet DBH by 115 feet high

Shape: upward-arching branches with uniform, oval crown

Leaves: deeply 5-lobed

Flowers: reddish colored in small clusters

Fruit/Seeds: paired, reddish wings in clusters holding seeds at the base

Site: bottomland and flood plain species, but also grows well in uplands; moderately intolerant to shade

Price per board foot: $1.42 for mixed heartwood and sapwood

Percent saw timber in Indiana: 4.3%

Density: 32.9 lbs/ft³

Machinability: average to somewhat below average

Uses: used as a substitute for hard maple where strength and hardness is not of concern; it is also used for pallets, crates, and basket veneer

Wildlife uses: cavities provide cover and nest sites for owls, raccoons, and wildlife
Shagbark Hickory

Scientific name: *Carya ovata* (Mill.) K. Koch and other species

Maximum size: 6 feet DBH by 153 feet high

Shape: deep oblong, ascending upper branches and descending lower branches

Leaves: pinnately compound, with 5 (sometime 7) smooth wide, ovate leaflets

Flowers: male, yellow-green catkin clusters; female, in small terminal spikes

Fruit/Seeds: brown husk splits to 4 parts when ripe, nut is 4-angled and compressed; seed is sweet

Site: uplands to wet alluvial bottoms to sandy sites depending on species; moderately shade tolerant

Price per board foot: $0.78

Percent saw timber in Indiana: 9.3%

Density: 51.0 lbs/ft³

Machinability: average to better

Uses: kitchen cabinets, furniture, flooring, striking tool handles, ladder rungs, drum sticks, sports equipment, pallets; used for smoking meats; previously used for skis, golf club shafts, agricultural implement, car bodies, and wheel spokes

Wildlife uses: nuts heavily utilized by squirrels; the shaggy bark plates provide cover for bats and frogs
Black Locust

**Scientific name:** *Robinia pseudoacacia* Linnaeus

**Maximum size:** 8 feet DBH by 94 feet high

**Shape:** plume-like crown, fern-like foliage

**Leaves:** pinnately compound leaves, 7 to 19 ovate leaflets per leaf

**Flowers:** clusters of perfect white fragrant flowers

**Fruit/Seeds:** dark brown, flattened, beanlike pods with orange seeds

**Site:** deep, well-drained fertile soil, but very adaptable to many sites; intolerant of shade

**Price per board foot:** not listed in wholesale market reports

**Percent saw timber in Indiana:** <1%

**Density:** 48.2 lbs/ft³

**Machinability:** not reported but probably good due to high density

**Uses:** decay resistant and stable species so it has been used for insulator pines, tree rails, fence posts, mine timber, and railroad ties; it is also used for pallets, blocking, and even xylophone keys

**Wildlife uses:** only occasional use of seeds by birds and small rodents
**Honey Locust**

**Scientific name:** *Gleditsia triacanthos* Linnaeus  
**Maximum size:** 6 feet DBH by 100 feet high  
**Shape:** open-grown tree, short frequently divided trunks, with slender spreading branches that create a pendulous feathery form  
**Leaves:** singly and doubly compound, with 9 to 14 tiny leaflets  
**Flowers:** singly-sexed on the same tree, pale green, densely packed flowers hang in drooping clusters, fragrant  
**Fruit/Seeds:** dark brown, flat, twisted pod with flat seeds inside  
**Site:** rich, moist bottomlands and soils of limestone origin; can persist on droughty sites; shade intolerant  
**Price per board foot:** not listed in wholesale market reports  
**Percent saw timber in Indiana:** <1%  
**Density:** 46.8 lbs/ft$^3$  
**Machinability:** not ranked but probably similar to oak  
**Uses:** home wood-working projects, fence posts and rails, upholstery frame stock, pallets, and blocking  
**Wildlife uses:** some use of pods by deer; seeds eaten by squirrels and smaller rodents
White Oak

Scientific name: *Quercus alba* Linnaeus and other species

Maximum size: 10.1 feet DBH by 96 feet high

Shape: straight trunk, wide-spreading crown

Leaves: glossy, bright green with rounded lobes

Flowers: in clusters of drooping, tail-like catkins and spikes of small blooms

Fruit/Seeds: small, shiny, oblong acorns

Habitat: deep, moist, well-drained soils; not tolerant

Price per board foot: $1.25

Percentage of Indiana’s trees: 15.7%

Density: 47.2 lbs/ft³

Machinability: excellent

Uses: furniture, residential, industrial and agricultural flooring, caskets, millwork, tight cooperage, crossties, bridge timbers, shipbuilding, mine timbers, poles, posts, piling, pallets, sill plates, trailer beds, fuel; previously for wagon wheels and bottom logs on cabins

Wildlife uses: seeds taken by many large birds and mammals
Red Oak

Scientific name: *Quercus rubra*. Linnaeus and other species

Maximum size: 11 feet DBH by 80 feet high

Shape: wide branches spread into rounded crowns

Leaves: matte green with toothed lobes

Flowers: clusters of drooping, tail-like catkins and small, greenish blooms or spikes

Fruit/Seeds: reddish brown, egg-shaped acorns

Habitat: deep, fertile, well-drained soils; intermediate in tolerance

Price per board foot: $1.10

Percentage of Indiana’s trees: 18.4%

Density: 44.4 lbs/ft³

Machinability: excellent

Uses: furniture, flooring, cabinets, caskets, crossties, bridge timbers, millwork, mine timbers, poles, posts, piling, pallets, and fuel

Wildlife uses: fruits taken by deer
Osage-Orange

Scientific name: *Maclura pomifera* (Raf.) C.K. Schneid

Maximum size: 8.5 feet DBH by 60 feet high

Shape: short trunk with irregular, rounded crown

Leaves: shiny, green ovate leaves with entire margins; milky sap

Flowers: globose heads; male and female on separate trees

Fruit/Seeds: large peculiar green, solid, ball-shaped aggregated of drupes

Site: in bottomlands within its natural range; very adaptable

Price per board foot: not listed in wholesale market report

Percent saw timber in Indiana: not commercial

Density: 56.3 lbs/ft^3

Machinability: difficult

Uses: bows, fence posts, wooden wagon wheels, shear pins, dye for WWI army uniforms

Wildlife uses: very little, squirrels and possum feed on seeds to some extent

Note: originally restricted to southern Arkansas, southern Oklahoma, and northeastern Texas; widely planted throughout the Midwest for fences before the development of barbwire
Sassafras

Scientific name: *Sassafras albidum* (nutt.) Nees.

Maximum size: 7 feet DBH by 78 feet high

Shape: unsymmetrical crown and twisted, upwards-reaching branches

Leaves: 3 distinct shapes: unlobed, 2- and 3-lobed,

Flowers: inconspicuous greenish yellow flowers in upright spikes

Fruit/Seeds: ovoid dark blue berry-like, held upright in bright red cups on red stems

Site: pioneer species on disturbed sites, but grow best in deep, fertile woodland soil; shade intolerant

Price per board foot: not listed in wholesale market report

Percent saw timber in Indiana: not available

Density: 32.2 lbs/ft³

Machinability: not ranked but probably intermediate

Uses: posts, rails, small woodworking projects, paneling, pallets, and oil for perfumes and scents

Wildlife uses: fruit readily taken by birds and mammals; leaves taken by deer in summer
American Sycamore

Scientific name: *Platanus occidentalis* Linnaeus

Maximum size: 11.5 feet DBH by 85 feet high

Shape: wide-spaying crown, long lateral branches

Leaves: 3-5 lobed, large leathery

Flowers: male (green) and female (bright burgundy) are separate on the same tree, hang in drooping, ball-like heads

Fruit/Seeds: globose head on a long stalk with many hairy seeds

Site: prefers rich soils along river banks and bottomlands, but does well in most soils; shade intolerant

Price per board foot: $0.41 in the southern United States

Percent saw timber in Indiana: 5.9%

Density: 34.2 lbs/ft³

Machinability: average to below average

Uses: drawer sides, concealed furniture parts, inexpensive furniture, millwork, paneling, crates, boxes, pallets, basket veneer; previously for butcher blocks

Wildlife uses: seeds important late winter food of finches and siskins; used for nest sites by waxwings, orioles, and king birds
Black Walnut

Scientific name: *Juglans nigra* Linnaeus

Maximum size: 7.9 feet DBH by 130 feet high

Shape: rounded, open crown

Leaves: highly aromatic, feather-shaped (pinnate) with multiple leaflets

Flowers: males in clusters on drooping, tail-like catkins; females in yellow-green spikes tinged with red

Fruit/Seeds: leathery, spherical, fleshy, woody nutshell; fruit with sweet, oily nuts

Site: deep, rich, moist soils and fertile hillsides; shade intolerant

Price per board foot: $2.15

Percentage of Indiana's trees: 2.2%

Density: 38.4 lbs/ft³

Machinability: excellent

Uses: face veneer, cabinets, furniture, flooring, gun stocks, millwork, caskets, novelties, woodenware; previously for scientific instruments, cases, and military gun stocks

Wildlife uses: nuts highly preferred by squirrels
**Black Willow**

**Scientific name:** *Salix nigra* Marsh.

**Maximum size:** 9 feet DBH by 140 feet high

**Shape:** often poorly formed along stream beds, but tall straight trees in southern flood plains

**Leaves:** narrow with an elongate curved tip

**Flowers:** slender, upright, male and female on the separate trees

**Fruit/Seeds:** cluster of capsules, each with numerous tiny seeds attached to cottony hairs

**Site:** moist, wet soils along streams and flood plains; shade intolerant

**Price per board foot:** $0.45 in southern United States

**Percent saw timber in Indiana:** <1%

**Density:** 27.2 lbs/ft³

**Machinability:** below average

**Uses:** boxes, crates, caskets, and pallets

**Wildlife uses:** nest sites for birds in young saplings
**Yellow Poplar**

**Scientific name:** *Liriodendron tulipifera* Linnaeus

**Maximum size:** 11 feet DBH by 175 feet high

**Shape:** long, straight trunk with pyramid-shaped crown

**Leaves:** tulip-shaped

**Flowers:** large, yellow, and orange

**Fruit/Seeds:** winged seeds in upright “cone”

**Site:** moist, well drained, loose textured soils of moderate depth

**Price per board foot:** $0.75

**Saw Timber of Indiana’s trees:** 13.6%

**Density:** 29.4 lbs/ft³

**Machinability:** average

**Uses:** millwork, moulding and interior doors, inexpensive furniture or hidden parts, crates, pallets, plywood, building construction where codes permit; previously for upper logs on cabins, core stock in veneered panels and numerous functional uses

**Wildlife uses:** seeds utilized by wintering purple finches, and small rodents
**Persimmon**

*Scientific name:* *Diospyros virginiana* Linnaeus

*Maximum size:* 4 feet DBH by 132 feet high

*Shape:* open-grown trees with short trunk, rounded crown with numerous crooked branches

*Leaves:* ovate, dark green, thick, and lightly hairy, with entire margins

*Flowers:* greenish yellow, hanging down like tiny bells; trees separately sexed

*Fruit/Seeds:* orange brown when ripe, fleshy, about 10 flat seeds per fruit

*Site:* tolerates wide range of soils and moisture regimes, but prefers moist soils

*Price per board foot:* not reported in wholesale market reports

*Percent saw timber in Indiana:* not available

*Density:* 50.2 lbs/ft³

*Machinability:* not rated but probably good due to high density and small pores

*Uses:* limited use such as shuttles, spools, bobbins, billiard cues, parquet floors, turnery, and golf club heads

*Wildlife uses:* fruit highly preferred by mammals, turkeys, and woodpeckers
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