Brief Descriptions of Trees and Wood

<u>A B C D E F G H I J K L M N O P Q R S T U V W X Y Z</u> Wood Figures

There are many, many kinds of **apple fruit trees** (as opposed to decorative apples such as the flowering American crab). We know that this wood is from a fruit tree but since we're not sure which kind, we'll just use its generic name, common apple (Malus sylvestris). Apple has been planted all across the U.S. and has naturalized as well. The very light colored sapwood contrasts well with the deep brown heartwood.

American crab apple (probably *Malus baccata*; the most common of dozens of different crab apples) has been planted all across the U.S. and has naturalized in the northeast. According to Constantine's *Know Your Woods*, "it is a fairly difficult wood to work with, has a dulling effect on tools, but is unusually fine for turning..." The contrast between the nearly white sapwood and almost walnut-brown heartwood, much greater than found in the fruting apples, makes for vividly colored pieces.



Arborvitae or eastern red cedar (Thuja occidentalis) grows across the northeastern U.S. and southeastern Canada from Prince Edward Island to North Carolina. This tree rather than the true Cedrus (Cedar of Lebanon, for example) is the source of most "cedar" products made on the East Coast of the United States. Arborvitae is known to gardeners as an ornamental tree or shrub, but undisturbed, it can grow as high as 20 meters (about 65 feet).



Ash (many kinds, e.g. *Fraxinus americana*) grows all across the U.S. and Canada in the form of white, green, black, brown, American, and Canadian ash. If not otherwise labeled, the piece is white or American ash.

White ash is the most common wood used in sports equipment and is sometimes known as "sports ash". It is also used for tool handles and cabinetry. In colonial days, ash was commonly used for bowls, plates, and other eating equipment.



American beech (Fagus grandifolia) grows across the eastern U.S. and Canada and as far west as Missouri and eastern Texas. The name Fagus comes from the Greek word meaning to eat, probably referring to the edible nuts. The bark is smooth and was once used as a writing surface. Our word "book" derives from Anglo-Saxon word for the beech. The wood is dense and particularly suitable for food vessels, imparting neither odor nor taste.



Yellow birch (Betula lutea and related species) grows all across the U.S. and Canada. It is most commonly used in building and in decorative veneers. Color varies from light yellow-brown to

deep reddish-brown. Wavy grain patterns are common. Sanded and polished, it can be almost iridescent.

White or paper birch (B. paperifera) and river or black birch (B. Nigra), softer and lighter in color, are used mostly for dowels, spindles, toys, and tool handles.



Box elder or **Manitoba maple** (*Acer negundo*), also known as **ash-leafed maple** is the only member of the maple family to have compound leaves, each leaf composed of usually five leaflets. A member of the soft maple family, its wood is too weak to be used for large projects. Due to the fungus-caused pink coloring present in some trees, box elder is prized by wood turners.



Bubinga (*Guibourtia demuesei*) comes from the African counties of Cameroon, Gabon, and Zaire where it is known as kevasingo. Bubinga is primarily used for decorative veneers but is also a favorite with wood turners. It is a very dense wood and logs have been known to weigh as much as 10 tons.



Buckeye (*Aesculus octandra*), a member of the horse chestnut family, is well known as the state tree of Ohio. Originally brought to Ohio from Germany, it now grows from western Pennsylvania through eastern Oklahoma and southward into Alabama and Mississippi. The strong unpleasant odor of the flowers has led to the names "stinking buckeye" and "fetid buckeye" (though presumably not in Ohio). The wood has varied grain and color, making for elegant turnings.



Butternut or **white walnut** (*Juglans cinera*) grows across almost all of the U.S. and Canada although it is more common in the East and especially in the Piedmont and mountains of the southern states. The husk of the nut contains a permanent brown dye that has been used by Americans since colonial times and by Native Americans before them. Most of the uniforms worn by the South during the War for Southern Independence were butternut, not gray.



Atlantic white cedar (Chamecyparis thyoides) grows along the Atlantic seaboard from northern Florida to Canada. It can grow to 80 feet tall with a diameter of three feet. Although the wood is soft, it works well and grows elegant burls. White cedar is much less aromatic that its red cousin. Western white cedar (Juniperus californica, actually a juniper) has similar wood. Western red cedar is the aromatic wood most commonly used in yesteryear's outdoor furniture.



American or black cherry (*Prunus serotina*), the wild cousin of the domestic fruit cherry, though valued for its blossoms and fruit, is not of commercial value for its wood. All types of

cherry grow elegant grain patterns and burls are quite common. Black cherry grows throughout the U.S. and Canada. Most of ours comes from New Brunswick Canada.

Fruit or **European cherry** (*Prunus avium*), the domesticated cousin of the wild black cherry, has gone through so many cross-breedings and hybridizations, that its family history is not well known. What is known, however, is that the wood has beautiful tones and grain patterns and is prized for all forms of woodworking, furniture making, and cabinetry. Cherry of one sort or another grows on every continent.



Crab Apple: see American crab apple



Dogwood (*Cornus florida*, **flowering dogwood**, the common ornamental and *Cornus kousa*, **oriental dogwood**) grows in the eastern U.S.A. relative, **cornelian cherry**, grows in Europe. Flowering dogwood is "perhaps the most beautiful sight in the botanical world" (Constantine's *Know your Woods*) but a blight is taking its toll. Fortunately, the wild variety seen in the spring woods seems to be a bit hardier. In some parts of the southern United States, dogwood bark in whisky is used as a home remedy.



Gonçalo Alves (Astronium fraxinifolium) is a Brazilian wood also known as zebrawood and tiger wood. It is a member of the cashew family and related to sumac. In Brazil it is called urunday-para, mura, and bois de zebre. Unlike many dense rain forest tropical woods, it is not in any danger, as commonly in Brazil as oak, maple or birch here in the U.S. (Gonçalo Alves is the name of the botanist who first noted it.)



Hackberry (*Celtic occidentalis*) is a native American species in the elm family, also known as sugarberry, hoop ash, and bastard elm. The wood is sometimes marketed as elm. The name comes from the fruit of the tree, a drupe of small purple berries which are sweet and attract songbirds. The berries turn purple before ripening fully and in this state are very sour--hence the "hack" part of the name. The related European hackberry is often used in ornamental plantings.



Many kinds of **honeysuckle** grow in the United States. Ours is probably the **Southern Bush Honeysuckle** (*Dyervillia sessifolia*) which is widely spread across the south eastern U.S. as a background planting or on sunny hillsides to prevent erosion. Much of our honeysuckle comes from a defunct specimen planting on the grounds of the Audubon Society in Chevy Chase Maryland



Hickory (Many kinds, e.g. *Carya glabra*) is most common in Southeastern Canada and Eastern U.S. Its sapwood is light in color and is called **white hickory**. The heartwood can be very dark

reddish-brown and is sold as **red hickory**. Although difficult to work, hickory polishes well and it is used for sorting goods such as baseball bats, skis, and tennis rackets. It is a very common wood for hammer and axe handles.



Holly (Many kinds, esp. *Ilex aquifolium*, **English holly** and *Ilex opaca*, **American holly**) is found all across the U.S. and Europe. Related species grow in Africa and South America. The heartwood is cream-white, often with a greenish-gray cast while the sapwood is either white or a light tan. The grain is very fine and holly can be smoothed to a velvet touch. The wood takes dye well and black-dyed holly is sometimes sold as ebony.



Imbuia (*Phoebe porosa*) comes from Brazil where the wood is quite popular for flooring, furniture, trim, and fixtures. Local demand absorbs most of the Imbuia harvested and not much is exported. The wood used to be known in the U.S. and U.K. as **Brazilian walnut**, but the name is misleading and is no longer used.



Black locust (*Robinia pseudoacacia*) is a North American tree that has been planted on every continent in the world. Although the wood tends to warp badly when dried, it is still very popular for furniture, cabinetry, boats, and fencing. It is known to some carpenters as "the nail bender" as it is virtually impossible to nail without pre-drilling holes.



Madrone (*Arbutus menziesii*) is also known as madrono, arbutus, or strawberry tree and grows primarily in the Pacific northwest. It is in the heath family (despite its up to 100 foot height) and bears large clusters of creamy-white flowers in the spring. Its bark is bicolored showing both a terra cotta brown outer layer and a green inner layer. According to Peattie's *The Natural History of Western Trees*, the fruits appear somewhat like strawberries and are "just barely edible."



African mahogany (Many kinds, e.g. *Khaya ivorensis*) is also known as Nigerian mahogany, Ghana mahogany, etc. depending on origin. It has popular names in Africa such as krala and mangona. For a period of time in the 18th Century, mahogany of African origin was the preferred wood for cabinetry in the United States and can be found in many pieces from the Colonial era..

American mahogany (Swietenia macrophylla) is also known as Honduras mahogany, Florida mahogany, etc. depending on origin. According to Lincoln's World Woods, "Cuban mahogany, prized for 250 years as the most cherished cabinet wood in the world has now become of more historical importance than commercial significance due to wastage." Many countries are following the Cuban example, including the U.S.

Mahogany of any origin is deep brown to reddish brown in color. It is easy to turn, sands well, and takes a finish very well.



Common manzanita (Arctostaphylos manzanita) one of forty closely related species, mostly shrubs, but some trees of up to 25 feet tall. It grows primarily in California. According to Peattie's The Natural History of Western Treesh, "The branches are always crooked, flattened this way or that, with twisted grain, so that when these little trees grow densely they lock their brawny red arms and arthritic, haggish fingers into an impenetrable thicket or low forest of the type that in California is sometimes called an elfin wood."

Most manzanita burls grow on the root of the plant, underground. Often dirt and stones are embeded, making for "interesting" effects when struck by the turning tools.



Red maple (*Acer rubrum*) is also known as soft maple, swamp maple, and water maple. White maple (Acer saccharum) is also known as rock maple, sugar maple, and hard maple. Big leaf maple (Acer macrophyllum), also known as Pacific or Oregon maple, grows in the Pacific Northwest and is one of the softest of the maples. Maple burl has elegant and interesting swirled grain patterns, often combined with various forms of quilting and bird's eyes.

White maple (Acer saccharum) is also known as rock maple, sugar maple, and hard maple. It is normally off-white in color but often may have a dark brown heart. Maple often has many elegant figures in the grain, the most common of which lead to varieties called birdseye maple, curly maple, tiger maple, quilted maple, or fiddleback maple. Of the more than twenty species of maples in the U.S. and Canada, white maple is the most common.

Bird's Eye Maple is the name often used for white maple or sugar maple with bird's eye figuring. Botanists tell us that the eyes are due to hundreds of undeveloped twig buds, but we don't seem to know what causes the buds to remain undeveloped. Children used to be told that bird's eyes were caused by woodpeckers. As noted, white maple is normally off-white in color but may have a dark brown heart. Brown bird's eye maple is fairly uncommon.

Maple burl has elegant and interesting swirled grain patterns, often combined with various forms of figuring and bird's eyes.



Mesquite (description pending, sorry)



Mimosa or **hardy silk tree** (*Albizia julibrissin*) is of Asian origin but has been transplanted worldwide. Not of commercial interest, although there are African relatives of timber quality, it is primarily used in ornamental plantings. The Taylor Guide to Trees notes that Albizia "transplants with weedlike ease." They add that it is "sometimes incorrectly called mimosa" but give no more information about ther origin of the name. Although difficult to turn, the wood has excellent color and grain texture.



Black mulberry (*Morus nigra*) grows across the U.S. and southern Canada. According to Gorer's *Trees and Shrubs* "The common mulberry tree has been cultivated for so long that its native country is not known." The wood is a rich yellow that will darken over time to a rich golden brown.

The **white mulberry** (*Morus alba*), also common in the U.S., is native to China and was imported to feed silkworms. White mulberry has much less elegant wood (and less tasty berries).



Oregon myrtle or (*Umbellularia californica*) grows primarily in Oregon and in Northern California, where it is more commonly known as California laurel or baytree, as it has a spicy and aromatic leaf. Myrtle's wonderful grain and burl patterns have made it a great favorite with cabinetmakers and craftsmen and, for a time, it appeared to be heading toward the endangered species list. Fortunately, it is now conserved and, at the moment, in no danger of extinction.



Mystery wood (*Vexatious americanus*) is found in wood piles and back yards across the U.S. and Canada. The state of deterioration has made it impossible to identify the wood uniquely. The black markings are called "spalt" and are the remnants of a fungus that invaded the wood and was then killed by frost.



Red oak (Several kinds, esp. *Quercus rubra*) is distributed across the U.S. and eastern Canada. It is native to North America but was carried to Europe in the 18th century where it became a common building timber. The grain pattern is coarse and distinctive. Southern red oak, also known as Spanish oak or swamp oak, is similar.

White oak (Several kinds, esp. *Quercus alba*) is distributed across the eastern U.S. and southeastern Canada. The tan wood, less porous and darker than that of red oak, is used for high quality veneers and building timbers. Newly cut, the wood smells almost buttery.

Some of our red oak pieces are dyed with red or black stain in a food-safe oil or wax. Blue pieces are dyed with Behlen's salad bowl dye and finish (safe for food). White pieces are finished with "pickling stain".



Padauk (pronounced: pa-dook', *Pterocarpus soyauxii* or *P. dalbergoides*) was formerly called Vermilion wood. It comes from Central and West Africa and from the Andaman Islands in the Bay of Bengal. It resembles rosewood in many ways and, in addition to its use as a decorative wood, it is also used in making dyes. The color will darken over time to a very deep reddish purple. It is one of the few members of the rosewood (Dalbergia) family that is *not* threatened or endangered.



Canadian Parallam (*Admixtus Canadensis*) is found throughout the U.S. and Canada. Growing in rectangular beams, it is harvested several times a year and quickly brought to market. Despite its ubiquity, no botanist has yet reported finding it in the wild and there is some suspicion that it may not be a natural plant.

Actually, it's a composite of shredded Douglas fir and spruce manufactured in Canada. Parallam building beams are strong and heavy. In many load-bearing applications they can supprt a weight equal to a steel I-beam of equal cross section.



Paulownia, Kiri, or Empress tree (Paulownia tomentosa or Paulownia Imperialis) is a member of the Foxglove family! Native to China, it was introduced to the U.S. during the last century and has naturalized itself in the eastern states from New York to Georgia. Taylor's Guide to Trees calls it one of the most spectacular flowering trees of the temperate zone. The wood is prized in Japan for lacquer work and "tree-nappers" steal kiri from people's yards and public property to send to Japan. As a turning wood it has only moderate interest.



Bradford pear (*Pyrus calleryana* 'Bradford') is a member of the Rose family! Native to China, it was introduced to the U.S. during the last century and has been used in ornamental plantings across the United States. Taylor's Guide to Trees considers it one of the most spectacular of the ornamentals both with its profuse white blossoms in the spring and its scarlet to purple foliage in the fall.



White pine (*Pinus strobus*) and its many relatives are found all across the eastern United States and Canada, as far south as Georgia and as far west as Illinois. The wood is generally considered too soft for easy turning, but burls, crotches, and knots make for interesting features and it's usually worth the effort to work with it.

Jack pine (*Pinus banksiana*) grows across southern Canada and northern U.S. from the Atlantic coast to Minnesota. Its wood is soft and slightly grey in color. It is primarily used for pulpwood although some larger trees are made into veneer for knotty pine paneling. It is hard to tell if any given sample is truly the banksiana, however, as "jack pine" is a generic name informally given to any scrub pine.



American Plywood (*Multiplanus Heckengerii*) is found throughout the U.S. and Canada. Growing in 4 x 8 foot slabs, it is harvested several times a year and quickly brought to market. Despite its ubiquity, no botanist has yet reported finding it in the wild and there is some suspicion that it may not be a natural plant.



Purpleheart or Amaranth (Many kinds, e.g. Peltogyne paniculata) grows in Central America