

Hardwood or softwood ? What's the difference?

The bad news is that there is no quick and easy foolproof definition. There are lots of traps to fall into and loads of exceptions to rules. But there are a few pointers which will help to distinguish between the two:

Hardwoods tend to be deciduous (except for tropical hardwoods) and broadleaved. softwoods tend to be coniferous (except for larches) and needle leaved.

Hardwoods are often slow growing (except that birches, poplars and willows are all fast growing) and softwoods are fast growing (except for yew which is incredibly slow!)

Hardwoods often have heavy and a hard, tough surface (but both balsa wood and the cork oak are hardwoods) and softwoods are by definition soft and light (but yew is very heavy and has very dense wood)

HARDWOODS

Alder: springy wood with a greenish/white colour which lasts well under water. Used for clog soles, pattens, toys and hat blocks.

Apple: hard & dense wood sometimes used for tool handles and for turning small fancy objects. Can easily be stained so sometimes used as a substitute for more expensive exotic woods like ebony.

Ash : tough and "elastic" and shock absorbing wood. Good general purpose and as easily available in UK it was often traditionally used for everyday objects. Used mainly for tool handles, ladders, farming tools, spear handles, hockey sticks etc...

Beech: hard, close-grained and long lasting wood. One of the most widely used UK woods. Best suited for objects used indoors as it tends to rot if exposed to the weather. Found in tool handles, furniture, toys, woodworking planes and many other domestic items

Birch: widespread throughout the UK and another good general purpose wood for objects like chairs, brush backs, spools and bobbins. As it is cheap and plentiful in UK, it tends to be used for objects at the cheaper end of the market.

Box: Not common in the UK – only really found in the South East. Very tough, close grained wood with a golden honey colour. Exceptional for carving and as it was less common, more expensive and the trees in the UK do not grow so big – available only in smaller quantities – used for expensive goods.

Elm: very tough, very difficult to split, and water resistant - great for wheelwrighting, water pipes, cheese moulds and coffins, boat building and general construction. Very few elms left in UK now, but used to be widespread.

Holly: Fine grain and texture but only available in small widths. Mainly used in fancy turnery as its whiteness contrasts well with darker woods.

Lignum Vitae: a tropical hardwood not grown in UK but often found in museum objects. Very heavy (even small pieces sink in water), very hard and feels colder than many other woods. Used for finely turned and expensive bowls, bowling bowls, axle beams and other engineering work.

Lime: lightweight, close grained and easy to cut cleanly, but not very strong. Yellowish –white colour and great for carving. Also found in artificial limbs and piano cases.

Oak: very strong, very long lasting and very heavy. Many uses including buildings and fittings – houses, boats, churches etc... furniture, barrels and casks, wheelwrighting and carving.

Pear: heavy and close grained with a pinkish colour. It cuts cleanly and easily so it is excellent for carving. Also used for small domestic items like forks, bowls, cups and spoons and, as it takes a stain very easily it is often dyed and used in inlay and marquetry work.

Sycamore: fine grained wood with a silky, creamy white appearance. Good for wood turning and carving. Used extensively in dairy and kitchen equipment because it can be scrubbed without “scratching” the surface, it can tolerate getting wet and dry repeatedly and it has a pleasant smell and does not impart any taste to food. Also widely used for small carvings like love spoons and for bobbins and rollers for mangles. The wood was also sometimes stained grey and used in cabinet making. When it was used like this, it was called hare-wood.

Walnut: A stable, hard, tough and strong wood with good shock absorbing qualities. It has a very smooth surface and its rich brown markings and burrs make it one of the favourite choices of cabinet makers . It is used for gun stocks, xylophones and also cut into sheets as a veneer.

Willow: light weight and springy with a pale greyish/ yellow colour. The wood dents but does not split easily. It lasts well under water but not so well in the open air. It is used for cricket bats, artificial limbs, sluice gates and, when grown as osiers, for baskets.

SOFTWOODS

Unless you have large collections from northern Europe, Asia and America, there does not tend to be so much need to be able to identify softwoods. They tend to be commercial timbers which are widely used for construction work . They are all basically strong and durable and easy to work. In museum contexts, the following might be helpful:

Cedar: pencils, panelling, garden woodwork. An aromatic wood used for resin and perfumery.

Larch: outdoor work like railway sleepers and field gates

Pine: there are several different types and it can be very difficult to separate them from each other: scots pine for carpentry and joinery - floors, beams, rafters, window frames etc... yellow pine for indoor joinery and also matches

Spruce: heavy work like masts, bridges also interior woodwork and because it is strong and light and does not warp - venetian blinds, violin bodies and piano sounding boards. At the other end of the scale it is used for packing cases as, like sycamore, it does not impart any flavour or smell.

Yew: this is the softwood which is most likely to be found in museum collections. Its strength, elasticity, fine colour and grain make it a good choice for carpenters, turners, carvers and cabinet makers. Used for furniture, archery bows, cogs, and for veneers.

Useful books for wood identification

Treen and Other Wooden Bygones Edward H Pinto (Bell & Hyman 1985 reprint)

Standard work on small wooden objects connected to personal, domestic and working life throughout Europe. Collection housed at Birmingham Museum and Art Gallery. Book now out of print.

The Craftsman in Wood Edward H Pinto (Bell & Sons 1962)

Useful sections on properties of different types of wood

Domestic Utensils of Wood Owen Evan-Thomas (Stobart-Davies reprint)

Plenty of illustrations of unusual objects, many of which are now in museums including Birmingham Museum and Art Gallery . Original book out of print, but reprint currently available

Treen for the Table Jonathan Levi (Antique Collectors Club 1998)

Good images of wooden objects associated with eating & drinking. Comprehensive guide and up to date research.

The Wooden Bowl Robin Wood (Stobart Davies 2005)

Good for getting a thorough understanding of pole lathe turning techniques. Comprehensive and useful for identification

What Wood is that? Herbert L. Edlin
Manual of wood identification Stobart-Davies reprint

The standard book of wood identification with a range of timber samples included. Worth pursuing through the botanical detail. Original out of print, but reprint currently available

Timbers for woodwork JCS Brough (Evans 1964)

Old fashioned but useful guide to commercial timbers and their uses. Helpful, if out dated map giving locations of hardwood and softwood species. Worth tracking down if you have an extensive wood collection, or if you get hooked on the subject.

TIMBERS OF THE WORLD

