

PURDUE EXTENSION

Hardwood Lumber and Veneer Series







FNR-286-W



Honey Locust

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Beneath the thorns of wild honey locust (*Gleditsia triacanthos* L.) lies a beautiful coarsegrained, pink wood much like red oak. Since sawlog quality trees are not abundant, the species is not often traded in the wholesale market, but sooner or later, every hardwood sawmill will likely produce some honey locust lumber. For the woodworker looking for something a little different and at a reasonable price, honey locust could be the ticket.

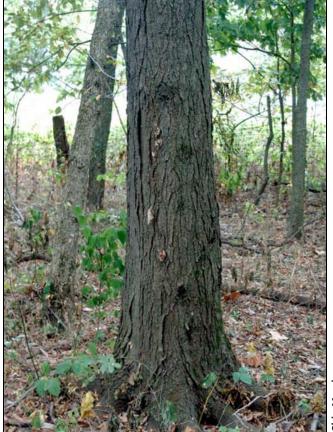
The natural range of the species is from central Pennsylvania east to Nebraska south through east Texas and then back to central Alabama and up the west side of the Appalachian mountains. This original range has been greatly extended by urban tree planting of a thornless, podless variety particularly to the east.

The species prefers rich, moist bottom lands or soils of limestone origin, but it can persist in drought areas. It is normally mixed with other bottom land hardwoods. Being well armed with thorns, the species also tends to invade old or unused pastures and abandon fields.

Forest grown honey locust trees are medium-sized trees 70 to 80 feet tall and 2 to 3 feet in diameter. The largest living tree reported is 6 feet in diameter at 4½ feet above the ground and 100 feet tall.

Wood Color and Texture

The wood is ring porous. The large earlywood pores abruptly change to small diameter thickwalled cells. As a result, the wood has a grain pattern about like red oak. Some of the pores will be filled with dark inclusions, but usually not to the extent that a dark objectionable streak develops.



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Honey locust

Unfinished heartwood is pink. Sapwood is white.

Workability

As a dense wood, it is reported to machine well.

Strength

At 12 percent moisture content, honey locust will weigh about 46.8 pounds per cubic foot which is slightly more than red oak and somewhat less than

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white oak and hickory. Its mechanical properties are comparable to red oak.

Small pin knots or pin knot clusters are common, probably from sprouts or where thorns were attached to the main trunk.

A small ray fleck about like that in cherry will appear on quartered surfaces. Vigorous open-grown trees will be fast growth while older or suppressed trees can have quite a slow growth rate.

Steam Bending

No information is available concerning how well the wood can bend when treated with steam.

Drying

Little information is published on the drying of honey locust. Since the wood does not shrink excessively, degrade is likely to be minimal. The author has not observed any serious problems in drying the species with mild to moderate conditions.

Shrinkage

The total volumetric shrinkage for honey locust is 10.8 percent. Given the high density of honey locust, the shrinkage is very low. Thus, the wood should be relatively stable in use.

Decay Resistance

The wood is rated as resistant or very resistant to wood decay. However, the sapwood particularly from logs that have aged is subject to bore attack.

Commercial Use, Grading and Value

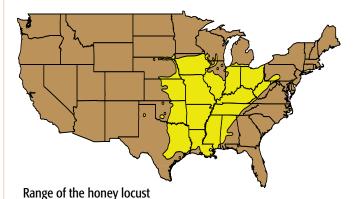
The National Hardwood Lumber Association grading rules refer to locust without mentioning honey locust or black locust. The species is treated the same as oak which is standard with the exception of limited mineral stain.

There is no established wholesale price reporting for honey locust. Given the lumber is similar to oak, it could be sold on a comparable price schedule or as a higher priced "specialty item."

Applications

Few uses are listed for honey locust. As somewhat durable, the species has been used for posts and rails. With a density and mechanical properties similar to red oak, it could likely be substituted for many of the domestic and industrial applications for this species.

It has been used as frame stock in upholstered frames. Much of it probably ends up as pallets or blocking due to a lack of an established market. The most likely higher valued uses are for custom furniture, cabinets, millwork, and flooring because of the attractive figure and color. Honey locust is a beautiful wood that deserves more attention.



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1 ,

Board 1 shows the reddish pink color and coarse grain pattern of honey locust. Grain swirls which are no doubt the result of thorns on the main trunk are also present. On the left edge and toward the bottom, some darkening can be seen due to a dark unknown substance which tends to accumulate in the vessels.

Board 2 is similar to the first but shows a light yellowish colored sapwood at the top.

Board 3 shows a sound and unsound knot.

Boards 4, 5, and 6 are cut directly from the heart of the trees. The small dark spots are ingrown thorns. The brown streaking is decay that occurred in the living tree, and it is common for this species. The streaked areas are still firm.

Some small ray fleck can also be seen.

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