

# Hardwood Lumber and Veneer Series



## Sassafras

FNR-289-W

Daniel L. Cassens, Professor and Extension Wood Products Specialist  
Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907

**EXPERT**  
REVIEWED

Sassafras (*Sassafras albidum* (nut.) Nees.) ranges throughout the eastern United States. The tree is intolerant to shade and is frequently found colonizing abandon fields, road sides, dry slopes, and old fence rows. On these sites the species develops as a small usually poorly formed tree. It is also found as an occasional tree on rich woodland soils. On these sites, sassafras develops into small to medium sized trees that are harvested.

The largest reported tree is about 7 feet in diameter at 4½ feet above the ground.

### Wood Color and Texture

The sapwood is light yellow and narrow; the heartwood is orange to dark brown, occasionally with orange swirls about ¼ to ½ inch in diameter. The wood is ring porous, making the growth rings very distinct. The earlywood pores are easily seen with the naked eye. The wood, when freshly cut, has the distinctive odor of sassafras. The wood tends to darken with exposure to light.

### Workability

The wood has excellent machining characteristics and is a favorite for home woodworking projects.

### Strength

At 12 percent moisture content, the wood weighs 32.2 pounds per cubic foot making it an intermediate to light weight wood. The mechanical properties are relatively low.

### Steam Bending

No information is available on how well the wood bends using steam. Given the low mechanical



Chip Morrison

Sassafras tree and Dan Cassens

properties and “brashness” of the species experienced by the author, it would probably not be a good wood for bending.

### Drying

The wood can be dried with a moderate kiln schedule.

### Shrinkage

The total volumetric shrinkage from green to oven-dry conditions is 10.3 percent or the lowest of any of the hardwoods considered here. Once dried to the appropriate moisture content, the wood will move very little.

### Decay Resistance

Sassafras lumber is reported to be resistant to wood decay, but standing trees often contain pockets of rot.

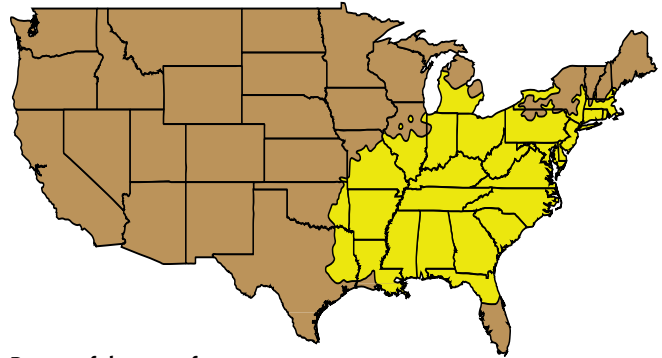
### Commercial Use, Grading, and Value

Sassafras is an attractive, light weight, easily worked, durable wood. Where it is available locally, it is often used for small woodworking projects. It is used in the millwork industry and for paneling. In the past, it was preferred for split rails and even posts. If larger quantities were available, it undoubtedly would be in demand for large scale commercial applications.

The wood is graded standard by the NHLA rules.

At one time, the wood was priced the same as red oak in the southern market region by the *Hardwood Market Report*. It is no longer listed, but some semi-load purchases are possible.

As a member of the Lauraceae family, the wood has a distinctive odor due to the presence of oil cells in the wood rays.



Range of the sassafras



Small pile of sassafras logs showing cinnamon red color

Log end showing a light brown heartwood, very narrow sapwood, and cinnamon red bark



Chip Morrison



Chip Morrison

Sassafras has a coarse grain pattern much like oak or ash. The trees are usually relatively small resulting in narrow lumber as seen here. The light brown color of the freshly cut heartwood tends to darken with age.

Boards 1 and 2 are characteristic of the best the species has to offer. Note the small cinnamon red burls that are unique to the species.

Boards 3, 4, 5, and 6 show characteristic open and tight knots and characteristic grain patterns.

Board 4 is lighter in color but very characteristic of the species.

Boards 7 and 8 represent low grade material. Board 7 shows the characteristic discoloration and soft wood that results from decay in standing trees. This decay is fairly common. Board 8 is cut from the heart of the log and shows a small section of pith, numerous defects, and a quartered grain pattern.

## PURDUE AGRICULTURE

NEW 9/07

It is the policy of the Purdue University Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and facilities without regard to race, religion, color, sex, age, national origin or ancestry, marital status, parental status, sexual orientation, disability or status as a veteran. Purdue University is an Affirmative Action institution. This material may be available in alternative formats.