



ANTIQUHE HEART PINE 101

How to Buy Antique Heart Pine: Not all Heart Pine is All Heart

America's interest in historic preservation has resulted in a tremendous increase in popularity of reclaimed woods. Independence Hall, Jefferson's Monticello, the Brooklyn Bridge and homes from the 18th and 19th centuries are just a few examples where antique heart pine has stood the test of time.

Buying the antique floor of your dreams can be time consuming and often, downright confusing. Because there are vast differences in terminology, grades, pricing and quality, this guide will prove helpful in making sure your dream floor comes true.

QUESTIONS TO ASK WHEN SHOPPING

1) *Is the wood from the longleaf pine?*

Longleaf pine is the best source of antique heart pine. Some companies sell Southern yellow pine, loblolly, shortleaf pine, slash or a combination and call it heart pine. Although they *are* pine and they have some heartwood, antique longleaf pine, especially the River Recovered® wood, is stronger, more durable, more stable and has a richer patina and color.

2) *Is it truly antique? Or how old was the tree when harvested?*

The only way to get heartwood is time. According to the USDA Forest Service book Longleaf Pine; it takes 200 years for a longleaf pine to become mostly heartwood and to be considered antique. Scientists say any wood from a tree less than 200 years old is "new heart pine." A 75-year-old tree will average only 30% heart, and even a 130-year-old tree yields wood that is not as hard or rich in color as antique heart pine. U.S. Forest Service specialists report that a 200-year-old tree will average only 65% heartwood.

Note: Goodwin's heart pine is from trees 200 to 500 years old.

Alert: "Old-growth" does NOT mean antique. The term is used loosely today and often refers to new heart pine.

3) *Is it 100% heartwood?*

A tree has both heartwood and sapwood. Heartwood is prized because its tight grain means it is stronger and more stable. In other words, more is better. Less heart, which means more sapwood, results in softer wood that can be scratched and dented. Heart wood hardness and strength comes from its resin, and longleaf has more resin than the other 200+ species of pine.

Plus, the longleaf heartwood is the prettiest wood. The grain is not your usual oak pattern (found in 75% of homes) and is a rich, red color thanks to the resin. One hundred percent heartwood means the color will be consistent. Even 98 percent heart will have yellow sapwood streaks that produce a strong/obvious color variation.

Alert: Grades with 50 percent sapwood may still be called heart pine.



4) *Are there at least 6 growth rings per inch?*

The more growth rings, the stronger the wood. Each pair of light and dark rings is from one growing season. When pairs of rings are very close to each other it means the tree grew slowly and the wood had time to become dense and strong. Longleaf pine trees usually grew only an inch in diameter every 30 years and lived 400 to 500 years. It's no wonder they are so hard and durable. True antique heart pine has at least 6 growth rings per inch. Four or fewer indicate new growth trees.

Note: Goodwin exceeds industry standards by offering premium grades that have eight or more rings per inch.

5) *What size and type are the knots?*

The last time professional standards were published for heart pine was 1924. After the forests were cleared, they were no longer needed. However, the 1924 specifications allow for knots to be no bigger than 1½ inch in diameter and specify that knots must be sound (not loose or open).

Note: Knots are infrequent in better grades of antique heart pine.

Note: Goodwin exceeds 1924 standards.

6) *What about pitch pockets, checking and nail holes?*

Pitch pockets are crystallized resin pockets and should be solid or easily filled. Only pockets 1/8" or less are allowed in antique heart pine. Checking (or tiny surface cracks) is natural in antique heart pine due to the high resin content. Checks are easily sanded out after installation and will not be noticeable. Demolition salvage wood usually includes nail holes. Better grades allow nail holes that are no more than ¼ inches and only infrequent on the boards. Demolition heart pine may also include nail staining around the nail holes or on some areas of the boards.

7) *How much extra wood should I order?*

Your installer or flooring manufacturer may ask you to order additional wood (waste) for trimming, special installation or other needs. Sometimes they may order extra in the event some of the delivered wood is not usable. Unfortunately, some companies don't remove defects as thoroughly as others because it increases their yield and costs. Waste can add significant cost to your projects.

Note: Goodwin guarantees 100 percent usable wood. You save money in the long run.

Alert: Use caution when asked by anyone beside your installer to order more than three to six percent waste.

8) *Is the wood kiln dried?*

Kiln drying is a process that removes moisture with heat and dehumidification. This provides greater stability in your flooring and reduces problems that can occur after installation. Many companies don't kiln dry because it is too expensive.

Even though wood reclaimed from old buildings has been 'on the job' for hundreds of years, it still must be kiln dried when milled again. Salvaged wood can take on moisture content as buildings are dismantled and insect larvae may be present. Air drying or "age drying" are not acceptable remedies.

Antique heart pine recovered from river bottoms has less moisture content than a newly cut tree, and is more stable because it has been underwater for at least 150 years. However, Goodwin properly kiln dries all our woods to ensure your project receives the highest level of stability.

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9) *What milling standards do you use?*

When buying flooring, paneling or other products made from fine woods, you want to ensure the company practices careful milling techniques. For example, flooring should be milled tongue and groove in a manner that allows each piece to fit neatly and tightly into the next. Widths should not vary unless you specifically request this type of floor design.

Note: Goodwin precision mills to simply a quality installation. Our flooring has a nail groove above the tongue and many technical details entailed in a well-made floor.

10) *Do you guarantee you will deliver what is specified?*

We recommend you use the terminology provided by the Reclaimed Wood Floor Association when you specify the grade you want for your project. Get your grade in writing to guarantee you get what you specified. Larger, more established manufacturers will spend a great deal of time with you from planning to installation to ensure you get the floor of your dreams.

MORE ABOUT ANTIQUE HEART PINE

Where antique heart pine comes from

Before the American Revolution, longleaf pine—the source of heart pine—dominated the landscape in the South. Once the largest continuous forest on the North American continent, the longleaf ecosystem ran along the coastal plain from Virginia’s southern tip to eastern Texas.

Where there once was approximately 90 million acres, less than 10,000 acres of old-growth heart pine remain today. Put another way, what was once 41 percent of the entire landmass of the Deep South now covers less than 2 percent of its original range.

Interestingly, the few remaining protected forests are still the most diverse ecosystems on the continent, often home to more than 60 species per square meter. Open and park-like, these forests are just as they were centuries ago with a diverse group of animals and plant ground cover.

Groups such as The Longleaf Alliance and Association for the Restoration of Longleaf Pine (Goodwin is a founding member) are helping landowners interested in replanting longleaf. Unfortunately, the conditions for longleaf pine’s slow growth over hundreds of years will probably never exist again, so the reclaimed beams and river logs are irreplaceable treasures.

Why heart pine is the ‘wood that built America’

More than 150 years ago, you couldn’t go anywhere in the South without running into the naval stores industry, which tapped the longleaf for its valuable resin. Longleaf resin was used in paints, soaps, weatherproofing products, shoe polish and medicines and made the U.S. the world leader in naval stores until the middle of the twentieth century. Even baseball players used resin on their equipment and ballerinas on their toe shoes to improve their performance.

By 1850 the South had constructed only 2000 miles of railroad, so the best way to transport longleaf logs to downstream sawmills was to use the rivers. The common method for timbering was to cut trees with axes and drag logs with oxen or mule teams to the riverbanks.

As more and more people moved to the South, lumber companies began to take their crews further inland in search of more heart pine. Loggers dug manmade canals to carry the inland logs to the river.

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As industrial America began to flex its muscles later in the 19th century, heart pine was transported in tall ships made of heart pine up the Eastern seaboard and over to Europe. The Herculean wood provided flooring, joists and paneling for homes and factories, as well as timbers for bridges, warehouses, railroad cars and wharves. Also appreciated for its beauty, it was utilized in Victorian hotels and palaces. Anytime you visit an old building, look around. You are likely to recognize heart pine still hard at work and in excellent condition.

One example is the pilings from the shipping port in Savannah built by General Oglethorpe in the early 1700s. When the dock was torn down a few years ago, Goodwin reclaimed them to provide an antique heart pine darker than most. Once it was milled again, the wood is the color of the heart pine floor in George Washington's Mount Vernon...without waiting 250 years for the color to age.

Why River Recovered® wood is better

In our experience, the densest and best logs were the ones that slipped loose from the makeshift rafts and sank to the river bottom. The cool waters preserve the logs in a pristine condition so that the resulting lumber is not only a more stable and durable wood, but also a wood that is more alive and richer in color, just as it would have been 200 years ago. Today, just like yesterday, heart pine is cherished for its natural beauty, hardness and durability and will last for generations to come.

River Recovered® logs also provide historical information not available anywhere else. The United States participates in an international effort to monitor the health of the world's forests. Goodwin provides river log ends to a longleaf forester and dendrologist who study weather patterns from tree rings to determine the first history in the South...information that also helps provide a baseline for monitoring U.S. forests today.

Why the Reclaimed Wood Floor Association?

Reclaimed wood manufacturers have seen an increase in orders, and many individuals and manufacturers are getting into the reclaimed wood business. The problem is that no standards exist to protect consumers. Standards for heart pine were last published in 1924.

Led by Goodwin Heart Pine Company, a team of quality focused manufacturers have founded the Reclaimed Wood Floor Association. The association's work to date has centered on establishing standards for antique heart pine, with other woods standards planned.

Why wood is better for the environment than other building materials

- Wood product manufacturing is cleaner. Steel products give off 24 times more harmful chemicals. Concrete leaches a great deal of carbon dioxide.
- Wood requires less energy to manufacture. Brick takes four times more energy, concrete six times and steel 40 times.
- It takes 15 inches of concrete to equal the insulation value of just one inch of wood.
- Antique reclaimed wood IS recycling. This wood can come from industrial revolution era warehouses and docks, old homes, cider casks or even river bottoms (where logs are perfectly preserved). Rather than destroying the wood that built America, reclaimed wood manufacturers put this wood back to work to enjoy for many more generations to come.

Why wood is the healthy choice

- Wood is the perfect choice for anyone with allergies. Carpet fibers trap allergens such as dust and fumes, and mold can grow in tile grout.

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- Wood requires fewer chemicals to clean than other floor coverings.
- Many doctors recommend wood floors for your spine and joints because it gives a little and is easier on your legs and feet.

Why reclaimed wood appears to be more expensive

Antique heart pine does not come from standing trees. All of the few remaining original growth trees—trees old enough to produce mostly heart wood—are protected, as they should be. Thus, the process to locate, carefully reclaim and mill this limited treasure requires more labor and time. Prices vary widely depending on the grade and may range from less than \$5 to more than \$20 per square foot.

Step 1: Discovery – Whether old buildings are dismantled or logs are raised from river bottoms, a great deal of effort is expended to save this wood. Wood reclaimed from old buildings and docks must first be located and judged to determine its quality.

To find logs in rivers requires a diver to swim along murky river bottoms and raise each log by hand so there is no disturbance to the riverbed environment. The divers are required to hold special permits, take specific river habitat protection training and pass surprise inspections. Goodwin has been fortunate enough to work with the same divers for more than 20 years.

Step 2: Sawing – Each log is fed through a saw to become lumber of varying dimensions. Because the logs are several hundred years old, it is critical to spend time reviewing each and every one to carefully render the highest quality timber possible and to keep waste to a minimum.

Step 3: Air Drying – The lumber is then air dried for weeks or months depending on the thickness. Careful air drying allows the wood to release excess moisture in a natural manner. This step is critical to ensure the wood is not dried too quickly, which can result in large cracks and checks.

Step 4: Kiln Drying – The lumber is placed inside a specially designed dry kiln for seven to 14 days. The proper moisture content is vital so that the flooring will acclimate correctly to your project setting.

Step 5: Milling – This is the meticulous process of turning rough lumber into flooring, paneling and other fine wood products. Milling procedures include multistage defect removal, creating tongue & groove, providing intricate moldings or very smooth surfaces as needed for your project.

Step 6: Sorting and Grading – Sorting and grading is the point where the professionals stand apart from the amateurs. True sorting and grading begins immediately after sawing the logs and occurs again multiple times throughout all other processes to ensure only the finest product makes it into your project. Goodwin uses a multi-step procedure to eliminate costly waste and ensure the products you receive are 100% usable.

What grain patterns of antique wood are available?

Three distinct grain patterns are sawn by Goodwin Heart Pine:

Select grain is the most popular grain pattern seen in wood floors. Select grain is achieved by sawing flat through the log and results in a blend of both arching or flame grain pattern and vertical grain in planks up to 10 inches wide.

Note: When comparison shopping, you may want to review the percentage of vertical grain included in the plainsawn product. Goodwin provides a high percentage of vertical grain—or about 50 to 85 percent in most plainsawn projects.

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Vertical grain is a pinstriped pattern achieved along the full length of the board by using what is called the quartersawing process. To obtain this formal grain pattern, a more intricate sawing method is used which does incur some waste. Vertical grain is a bit more costly than plainsawn wood.

Note: Goodwin provides 100 percent vertical grain, with growth rings no more than 45 degrees perpendicular from the face.

Curly grain is an extremely rare, natural burlled grain. This unique and luminous grain pattern is found in about one out of every 300-400 logs. It is perfect for a stunning conversation piece, inlays on flooring and cabinetry, or other areas of interest in your project.

What about special requests?

Goodwin provides a complete line of stair parts and architectural millwork, as well as wood for doors, cabinetry, fireplace surrounds and custom furniture.

Known for providing the finest grading in the industry, Goodwin Heart Pine is proud to honor custom requests. These can include projects that require specific lengths, colors or grain density as well as those that may need unique historical imperfections. For instance some logs have “cat faces” or scrapes where turpentine was collected on two sides, yet continued to grow. Other clients like marks such as lightning strikes that have healed over.

One woodworker designed a massive River Recovered® headboard, in which he was happy to leave the original ax marks and gun shot holes. Yet another designer used the natural river worn edges of a curly grain log to create a George Nakashima-style desk.

What about installation?

We are more than happy to provide thorough information about installation of Goodwin Heart Pine products. We are not professional installers and therefore suggest you review all projects with your professional installer; or we can refer you to the appropriate professional organization.

About Goodwin Heart Pine Company

Goodwin Heart Pine Company was founded in 1976 by George Goodwin, a master carpenter and home builder. Intending to build his own home, George acquired some longleaf logs a fisherman friend raised from the Suwannee River and the rest is history. The rich red patina and amazing grains of this “underwater” heart pine, as well as the rareness and historical significance, became his passion.

Today Goodwin Heart Pine Company is one of the most well respected manufacturers of antique heart pine, cypress and cherry. They are the only company consistently delivering rare River Recovered® antique heart pine and cypress of the highest quality.

They have won numerous awards including the prestigious 2002 Designer’s Choice Wood Floor by the American Society of Interior Designers, and Floor of the Year in 2008, 2000, 1999 and 1997 and Best Reclaimed Wood Floor of the Year in 2008, 2009 and 2010 from the National Wood Flooring Association.

Based in Micanopy, Florida, the company provides a full line of superior flooring, millwork and stair parts, along with comprehensive industry knowledge and customer service. They have played instrumental roles in the founding of the Reclaimed Wood Floor Association and Association for the Restoration of Longleaf Pine and hope to ensure that antique woods are appreciated and preserved for many generations to come.

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