

Telltale signs to match and find wood that all came from one tree

SAWMILL MARKS



A cut in common. An error at the sawmill marks these two boards of curly maple as likely to have come from the same tree.

In my early days at woodworking, I'd buy the board feet of lumber I needed for a project, build the piece and be on my way. As my knowledge of woodworking increased and my artistic side developed, I became more particular about which boards were placed together. Return trips to the lumberyard were frequently needed after planing the roughsawn lumber and finding that the color and grain didn't match. This caused a considerable waste of time and lumber.

I discovered the joy of making furniture with wood from a single log after I purchased some cherry from an individual who had cut down a tree on his property. This wood was completely uniform in color. It was easy to match boards for the drawer fronts, sides and top. Now I aim to use lumber from the same tree for every project.

Finding entire logs to saw up, however, isn't always a realistic option. Buying a whole tree is a large initial outlay, and air-drying lumber takes considerable time, assuming you have the space required. Fortunately, there are ways to find boards from the same tree at your local lumberyard. All it takes is a bit of patience and knowing what clues to look for.

The four key clues

When identifying boards that may come from the same tree, I look for four things: significant natural marks in the wood, marks made at the sawmill, grain pattern and color.

Re-creating the tree.
Once you have found several matching boards, the end grain can sometimes reveal their original order in the log.

Distinguishing marks—When you stand boards on end next to each other, significant marks, such as knots, splits or dark streaks, usually stand out. Notice the width of the boards. Check whether the end is cut at an uneven angle. When boards have a combination of heartwood and sapwood, look for similar growth patterns.

An obvious large knot may pass through three or more boards, making them easy to match, while a small knot may show up on only one side of a board. Don't assume that the boards don't go together just because one has a knot and the other doesn't. Turn the boards around and upside down until you are sure there is no match, then set them aside.

Grain pattern—You can identify matching boards by looking at how the grain swirls or runs at a particular angle, and if it is excessively tight or loosely figured. Notice whether the grain is flatsawn or quartersawn. Once you have narrowed your selection, checking the end grain for growth rings can sometimes show in what order the boards were cut. One trick for finding curly grain is to

GRAIN PATTERN

Matching grain. The "corrugations" of these boards are similar, clues that they may have come from a common log of curly maple.

DISTINGUISHING MARKS



Blemishes can be a blessing. Use these clues to identify boards that come from a single log.



Check both sides of a board. Because small knots may not pass through a board, check both sides when looking for distinguishing marks.

PAINTED ENDS



Don't overlook the ends. Boards with matching paint over the end grain probably came from the same sawmill. However, it's not a guarantee that the boards came from the same tree.

HOW WOOD **GETS SHUFFLED** AT A SAWMILL

In a large-scale sawmill, logs go through five or six different processes before the lumber is bundled together. After the log has been sliced into planks, the bandsaw edger trims the rough outer edge. Then the planks travel to the trimmer saw, where a worker determines what defects need to be cut away. To eliminate flaws, boards may be split into narrower widths to create a higher grade of lumber, thus bringing a higher price per board foot. From there the lumber is sorted by species, length and width before being stacked in the kiln. Once dried, each board is inspected for grading, then boards are bundled and shipped by rail, truck or container to their destination. The likelihood of lumber from a whole tree remaining together throughout this process is very slim, but you may find a few matching boards.



One log among many. After being debarked, logs from the same species are run through the sawmill, where the operator determines the thickness of the boards.



Planks from one tree go their separate ways. After being cut to length, the boards are stacked based on their length and thickness, then sent off to be kiln-dried. Even in this small sawmill, it is rare for all of the boards from a tree to end up in a single stack.

shine a light diagonally down the edge of a board, which reveals the corrugated effect.

Sawmill marks—Sometimes an errant sawkerf can mark several boards, revealing their common ancestry. The color of the paint used to seal the ends of the boards can also indicate boards that came from one tree, or at least the same sawmill.

Color—The color in any given species can differ dramatically from tree to tree. This color variation can be a big clue in your search for wood from a single tree. If necessary, use a block plane to shave away a layer to reveal the color of clean-cut wood.

The color variations are caused by the chemical makeup of the soil, the weather, pollutants or insects. Trees growing on a hill will have a different color than those living along a creek bank. Cherry from Vermont looks different from cherry from New York or Ohio. Even trees grown a mere 100 yd. apart may not match in color.

Besides color variation caused by different growth patterns or conditions, color differentiations can occur among the variety of trees within a specific type of wood. There are 42 different species of red oak, any of which can be mixed in one lumber bin. The color varies from gray to a yellowish tan to pinkish beige. Wood sold as poplar can come from either the tulip or the cucumber tree, while a bundle of hickory can contain wood from four different pecan trees or four true hickories.

The lumberyard owner can help

The owner of my local lumberyard told me the yard orders from 15 to 20 sawmills, depending on which one can supply the species they need at any particular time. The best time to look for singletree lumber is when the boards are all from one bundle or lot shipment. My supplier knows I look for matched grain. When I let him know I need a specific type of wood, he calls me the next time he receives a shipment. Sometimes I may find only two or three boards that match; other times I can re-create the entire log.

Ask your supplier when the next delivery day is. Depending on how large or small the lumberyard is, and how fast they make the wood accessible, you might want to show up on the day of delivery or several days after. By the way, when you're finished searching, don't forget to neatly restack the lumber you don't buy.

Cliff Scott is the owner of Carriage House Woodworks in Olean, N.Y.

Make the best use of your lumber from one tree

Using lumber from the same tree allows you to make pieces that enjoy a harmonious grain pattern. Book-matching can be used for doors or a series of drawers. On a box-shaped project, such as a cedar chest, cut the boards and orient them so that the grain runs from one side, across the front and to the other side. In a similar manner, if I have a tall project, such as an entertainment center or a cabinet, I cut the lumber so that the vertical grain on both sides of the corner comes from one board. This allows the grain, especially if it has some wave to it, to swirl around the corner.

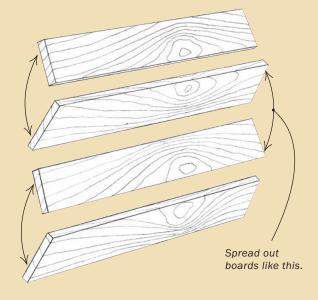
While a piece of furniture with unmatched boards stands out for the wrong reasons, the use of a continuous or matching grain pattern from a single tree is a subtle technique that doesn't readily jump out when you view a piece of furniture. Yet it adds a certain refinement to the overall look of your work.



BOOK-MATCHING

Scott made this chest of drawers with wood from a single log of walnut. All of the drawer fronts are bookmatched.





LONG BOARDS, MANY CUTS

In this piece by Michael Pekovich, sequential boards of cherry form the drawer fronts. The drawer fronts in the gallery box and the top of the chest are from one board.

