the benefits of Secondary Wood

How about a simple way to build a better project, with less effort, and at a lower cost? Sounds like a winning combination to me.

When I build a project (especially a case project), I'll often include more than one type of wood. The finished product is usually a combination of a primary "show" wood — cherry, oak, mahogany, or walnut — along with a much less noticeable secondary wood. Building with secondary woods has been common practice for hundreds of years and there are some very good reasons for it. It can improve the quality of the project while reducing the amount of labor and the cost.

WHAT IS SECONDARY WOOD? In choosing the primary wood for a project, appearance is usually the main consideration. But secondary wood can, more or less, go unseen. It's mainly used for the interior parts that may only show when the doors of a cabinet are opened or a drawer is pulled out.

This fact is a key to understanding the use of secondary wood. With a few exceptions, secondary wood is chosen for reasons other than color and figure. The best secondary woods are often the ones that wouldn't make the first team.

A SHORT LIST. Secondary woods are usually the ones we think of as being "plain." A short list might include poplar (tulip poplar), hard and soft maple, various types of pine, birch, sycamore, and red alder. But many types of wood can be used as a secondary wood to fill particular needs. Sometimes plywood or less desirable pieces of the primary wood can serve the role.

The maple sides contrast with the oak front to highlight the dovetail joinery.

THE BENEFITS

There are more advantages to including secondary wood in a project than you might think. One obvious plus is lower cost. Using a common, relatively inexpensive wood like pine or poplar in place of more costly walnut, mahogany or cherry naturally makes good sense. With ever-increasing lumber costs, any way to control material expenses without sacrificing quality is certainly welcome.

LESS EFFORT. Another good reason to use secondary woods is that they are usually easier to work with. A slightly softer, friendlier-working wood like poplar will serve just as well as a harder, more demanding piece of red oak. You can save yourself a lot of time and effort on the parts that don't show and spend it on the parts that do.

LIGHTER WEIGHT. Unfortunately, the attractive woods that woodworkers covet are also some of the heavier woods. This weight can complicate the construction and result in a hard-to-move project. Some wise use of secondary wood will go a long way toward solving the problem. A board foot of poplar or pine weighs about one third less than a board foot of red oak. This can make a big difference.

CONTRAST. Most woods achieve their second-class status due to plain figure, bland color, and an

often uninspiring appearance. But sometimes this can be an advantage. The finely fit dovetails on a drawer side wouldn't look nearly as impressive without the contrast between the darker primary wood and the light secondary wood. The lower photo on the opposite page illustrates this point.

A MASQUERADE. Sometimes you may want secondary wood to masquerade as the primary wood. The highly visible parts of the case — the front, and top — are made using the primary wood, while the sides are made of pine, poplar or birch stained to match the primary wood. This is commonly seen in antique period pieces.

MANY USES

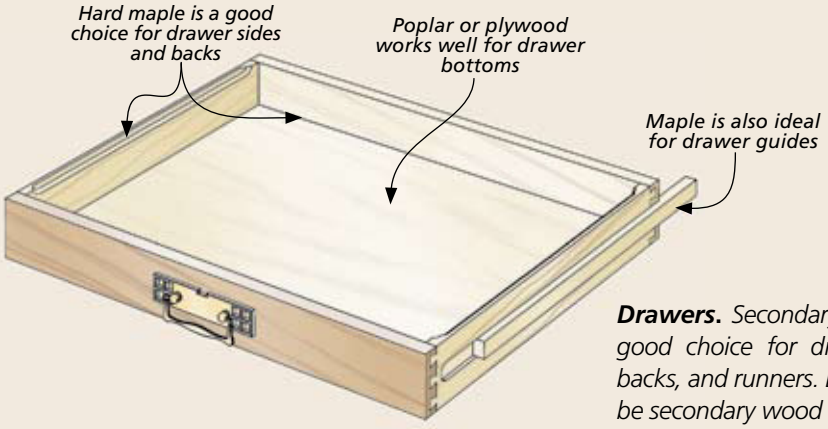
Secondary wood can fill in for the primary wood on a number of the parts in a project. Even though they're generally softer and lighter in weight, most are still tough enough to handle any structural requirements. The drawings at right illustrate some ideas.

DRAWER PARTS. On my projects, the drawer fronts are, of course, primary wood but the rest of the drawer parts are usually secondary wood. Although also used as a primary wood, long-wearing hard maple is a good choice for the sides and back. Plywood is a common option for drawer bottoms. Easy-to-work poplar is my first choice for solid wood bottoms.

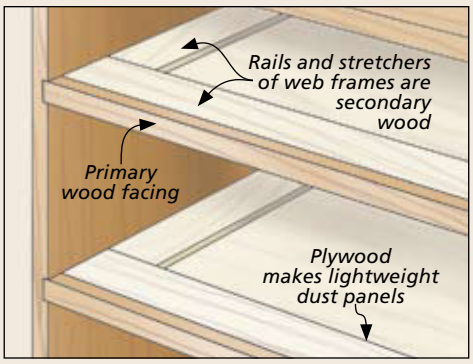
CASE DIVIDERS. The interior parts that divide a case can be made entirely from secondary wood. This includes web frames, dust panels, and also drawer runners and guides. Making these utilitarian parts from secondary wood is cheaper and easier.

CASE BACKS. The back of a case is another natural fit for secondary wood. In many instances, it will never be seen. So you can save yourself time and money by using plywood or making a solid-wood "board" back out of an inexpensive secondary wood.

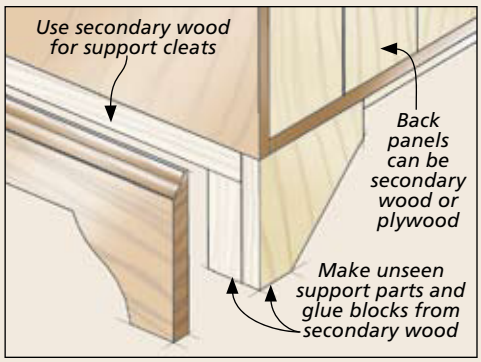
STRUCTURAL PARTS. Many cabinets have a variety of frames, cleats, and glue blocks that serve a vital structural role but don't show. They'll do the job just as well if you use secondary wood.



Drawers. *Secondary wood is a good choice for drawer sides, backs, and runners. Bottoms can be secondary wood or plywood.*



Web Frames. *It's common to use secondary wood for the rails and stretchers of web frames. The dust panels can be plywood.*



Hidden Parts. *Secondary wood works well for many of the unseen parts of a project. This includes glue blocks, cleats, and case backs.*

THE CHOICE

When it comes to selecting a secondary wood, you have lots of choices. It may just be a matter of what wood is most affordable and readily available. Most woodworkers develop a favorite after a time.

But some secondary woods have good specific uses. As I mentioned, I like to use hard maple for drawer sides and backs. It wears well and the color sets off the joinery. Birch and western alder can be used to mimic other woods. With the right stain, you have a good substitute for cherry, walnut, or mahogany.

My favorite all-around choice is poplar. It's can be found in clear, wide boards, is easy to work, and is relatively inexpensive.

So the secret to a better project might be including a cheaper, less attractive wood. I guarantee you'll find that it works. W

Versatile Sheet Stock

Plywood and MDF are both handy as secondary woods. The fact that they come in large panels makes them very useful, efficient materials. Second, you can avoid dealing with the problem of wood movement. Plywood is perfect for drawer bottoms, case backs, and dividers. MDF is a my substrate of choice for making veneered panels.