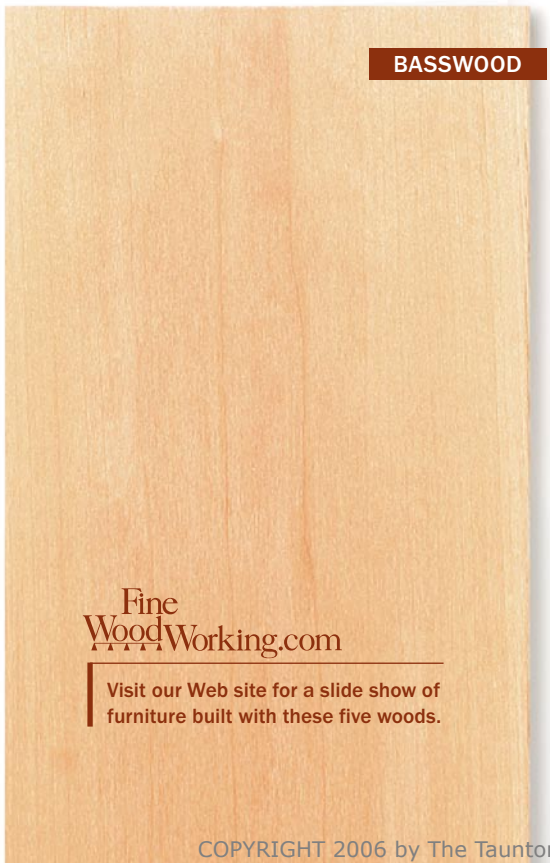
BUTTERNUT

BEECH

APPLE



BASSWOOD

FineWoodWorking.com

Visit our Web site for a slide show of furniture built with these five woods.

Five Overlooked Woods

Discover these woods and make your projects stand out from the crowd

BY GARRETT HACK

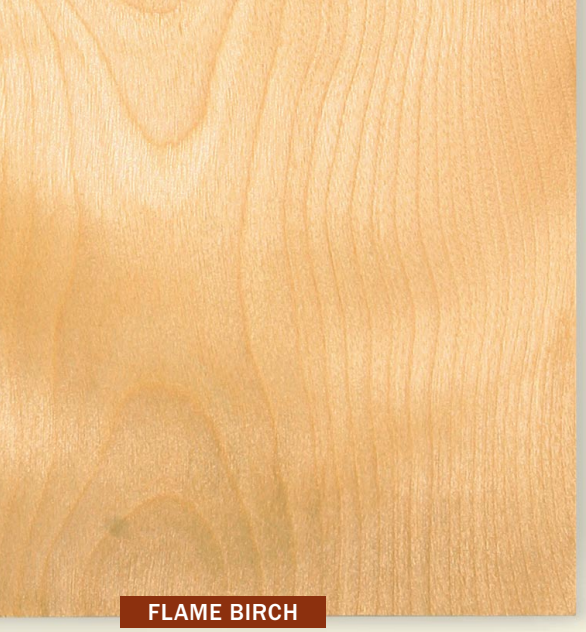
Teaching a class recently, I was introducing basswood as one of the materials we would use when one of the students spoke up: "Isn't that just a carving wood?" That question made me realize that there are many native woods that essentially are ignored by today's furniture makers. In their desire to stick with familiar woods such as cherry, walnut, oak, and maple, they are missing a great many unusual trees.

Early settlers appreciated the unique qualities and usefulness of each tree in the forest—that it bent well, didn't rot, was particularly tough, or sawed clear, wide boards with beautiful color. Look closely at Shaker woodworking and you'll see how readily they used many of their local woods: On a single drawer the sides could be light and strong butternut, the bottom sweet basswood, and the knobs apple, polished to a gleam over time.

My five favorite overlooked woods will add color to your palette, and their unique personalities, figure, and workability can only enhance your experience and enjoyment of woodworking. If you can't find these woods at the local lumberyard, I've included an Internet site that lists suppliers.

Garrett Hack, a contributing editor, makes furniture on his Vermont farm overlooked by a diversity of trees.

Photos, except where noted: Mark Schofield; wood photos: Rodney Diaz; facing page (top): Bill Truslow



FLAME BIRCH

Revealing the figure is worth the effort

A little Shaker, a lot of shimmer. *The flame-birch carcase and top of this piece built by Hack dance in the light when viewed from different angles.*

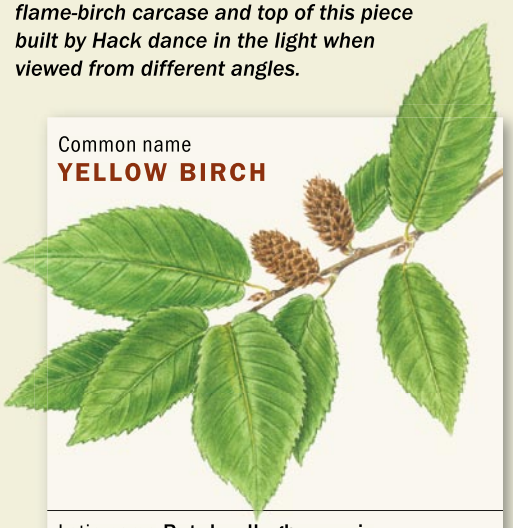
I always wondered why you see curly maple furniture, but rarely curly birch; here is a wood with the most dazzling figure that emanates from deep within the surface, with a warm, light-golden color and a very fine, smooth grain. I found out when I started working boards that flame (or curly) birch, for all its beauty, is also one of the most challenging woods to plane by hand.

Curly figure is as rare in the yellow birch tree as it is in hard maple—perhaps a tree or two in a hundred—and the intensity of curl is just as varied, ranging from a few lazy waves across a board to waves spaced inches apart that give the appearance of a quilt pattern.

I can only guess what makes flame birch so challenging to plane, for it sands, scrapes, and screws well. The curls that make it so irresistibly beautiful are broad areas of reversing grain, and being a little softer than maple, the fibers are more prone to tear from the surface rather than to cut cleanly. I thought that being highly figured, the wood would respond best to a high-angle cut, but tuning my planer for more of a scraping action still produced tearout. I was surprised to find that of my dozens of planes, only a low-angle smoother successfully handled the wood.

Flame birch will wear well, but it's only moderately stable. To be on the safe side I would not use curly birch for door panels, drop leaves, wide tabletops, or any part without good support to keep it flat.

The flame revealed. *Its reversing grain makes flame birch difficult to work. Hack finds that a low-angle plane and a scraper work best.*



Common name
YELLOW BIRCH

Latin name	**Betula alleghanensis**
Other names	**Flame/curly birch**
Price per board foot	**$5-6**
Specific gravity	**0.62**
Percent shrinkage, green to kiln-dried	
Tangential **9.2**	Radial **7.2** T/R ratio **1.3**

For more on wood shrinkage, visit www.fpl.fs.fed.us.

BUTTERNUT

Walnut's country cousin

For many years I've valued butternut for its wide boards, handsome, even grain, and golden tan color with a background of fine darker flecks. Butternut is similar to black walnut and is sometimes even called white walnut. Just as black walnut has a distinct dark heart and light sapwood an inch or more in width (unless it is steamed to even out the color while being kiln-dried), butternut has a heart/sap contrast. This wood is considerably lighter in weight and softer than black walnut, but with the same modestly pronounced grain that hides gluelines so easily.

Butternut is very stable. I once had a set of boards that were 24 in. wide and perfectly clear, that shrunk little and stayed nearly dead flat. It was pure pleasure turning them into single-board chest sides and a few wide tabletops.

Typical defects are black knots and occasional voids, and a hollow black pith that can weave through a board. Butternut is quite weak—only slightly harder than white pine—making it unsuitable for chairs or parts that must withstand much wear. Its softness makes it especially friendly to work with hand tools, but sometimes a board that appears to have even grain has an internal curl that can be challenging to smooth. However, these challenging boards often are the ones with the satiny depth and luster that make butternut so alluring. On the jointer and planer, you can get occasional tearout around swirls and echoes of knots.

Butternut ages slowly, if anything getting lighter and always more beautiful over time.

Understated beauty. *Restrained butternut is a good partner for the vivid holly and ebony adornments on this chest built by Hack.*

Common name
BUTTERNUT

Latin name **Juglans cinerea**
Other names **White walnut**
Price per board foot **$4-5**
Specific gravity **0.38**
Percent shrinkage, green to kiln-dried Tangential **6.4** Radial **3.4** T/R ratio **1.9**

Photo, this page (bottom): John Sheldon; drawings: Bobbi Angell

BASSWOOD

Easy to work, consistent in grain and color

The natural habit of basswood is to grow straight and shed any lower branches, so it's common to saw a 12-ft. log of considerable diameter completely free of knots and defects. The wood is creamy white with little visible grain, although some pieces have dazzling depth and a pearly luster. Quartersawn faces have a fine fleck pattern that is especially appealing. While basswood is soft, it also is surprisingly tough for its weight. I'm at a loss to explain why basswood lumber is so little used, for here is a light and stable wood, easily worked, without any of the pitch or knots found in slightly softer white pine.

Basswood's lightness is also its strength: Before medium-density fiberboard and plywood came on the scene, basswood was used as the core of veneered panels, yardsticks, and puzzles. It is ideal as a secondary wood for drawer bottoms, dust panels, case backs, or for patterns and mockups, and of course carving. It is a dream to plane—it will make you feel like a hero—with only the occasional tearout in the contorted grain around the echo of a knot.

Trees can yield board after board of straight-grained basswood that sand, glue, shape, and screw easily. Defects, if any, will be elongated dark stains spread out across a board, similar to and larger than those in cherry. Carvers prize basswood for its even grain that carves smoothly in almost any direction, but other woodworkers should share the bounty of this overlooked wood.

Common name **BASSWOOD**

Latin name **Tilia Americana**
Other names **Lime, linden**
Price per board foot **$2-3**
Specific gravity **0.37**
Percent shrinkage, green to kiln-dried Tangential **9.3** Radial **6.6** T/R ratio **1.4**

Plane like a hero. *The even grain of basswood that appeals to carvers also makes it an ideal wood for novice handplane users. The clear, wide, lightweight boards make excellent drawer bottoms.*

APPLE

Dense but full of character

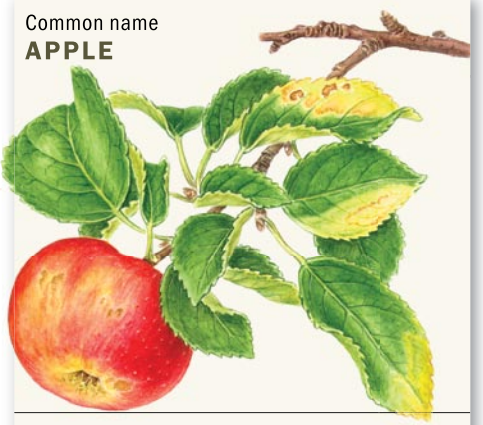
Although apple trees are native to the United States, within a forest they are usually so stunted and misshapen that their only use is for smoking meats (second only to maple in my opinion). Most apple lumber comes from orchards, when rows of trees are cut to make room for some hot new variety. Don't expect very long logs, for fruit production and easy picking are opposite goals to lumber quality. A further drawback is that the largest and oldest trees tend to rot from inside so that only part of the main trunk will yield anything useful.

Apple is dense, heavy, hard, and tough, perhaps because the trees have a hard life and grow slowly, sometimes twisting as they grow. It also tends to have a variety of knots, from tight little swirls almost like little burls, to punky black holes. Apple is similar to cherry, with dense, dark heartwood surrounded by considerable white sapwood, but with wider variation in the color and grain. I have an old drop-leaf table made from four unusually wide apple boards that has aged to a very rich red with tones of dark brown. Apple works much like cherry, but requires more effort due to its hardness. Take light cuts when planing and scrape any minor tearout. It is nearly as hard as hickory, our hardest native wood, and it takes and holds fine details on a par with many tropical woods.

Since most logs yield modest-size pieces, apple is best used for knobs, tool handles, or small projects that show off the beauty of the wood.

Crisp and polished. *The hard wood of apple develops a natural shine when used for frequently handled parts. The density means it can hold sharp details.*

Common name
APPLE



Latin name **Malus**

Price per board foot **$4-5**

Specific gravity **0.71**

Percent shrinkage, green to kiln-dried

Tangential **10.1** Radial **5.6** T/R ratio **1.8**

Photos, facing page: Steve Kaminoff (bottom); Michael Pekovich (center left)

BEECH

Good for more than tools and workbenches

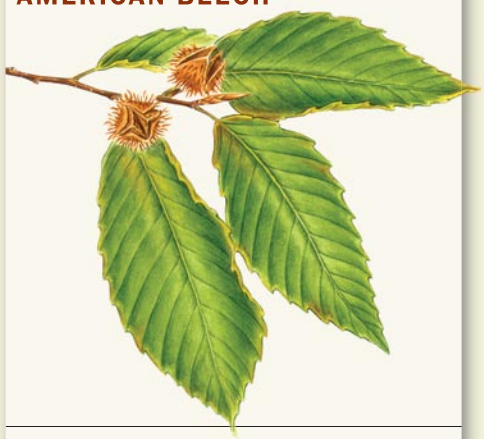
Beech was once the favored wood for planes and other tools because it is tough, fairly easy to work, even grained, and very handsome. It resembles the soft flesh tones of pear, only lighter and more tan colored, with a background of very fine, dark flecks. These flecks are so distinctive that if you saw only a square inch of beech you would know it in a second. The quartersawn faces of both oak and beech have the same prominent ray flecks, but while those on oak are heavy, those on beech are finer with a slight shimmer.

Beech is not known for being overly stable, and its high tangential shrinkage would make me leery of gluing wide boards into a trestle tabletop with little support to keep it flat. As with any wood, choose your pieces carefully for their intended use and you will have fewer problems. My workbench is beech; it has stayed flat for almost 30 years, and it has not only been durable but has mellowed to a warm honey color. Many of my old molding planes with quartersawn beech bodies are also dead true.

Smooth running. *Beech's tight grain makes it ideal for parts subject to wear from friction.*

Beech steam-bends very well and frequently is used for chair parts. Because it imparts no taste or smell, it is ideal for food containers. It planes and machines well, much like maple, and it sands to a perfect smoothness. For many years beech was used for school furniture or the like, much as we use birch today. I think this gave it a reputation for being plain and utilitarian, but it deserves consideration for your next project.

Common name
AMERICAN BEECH

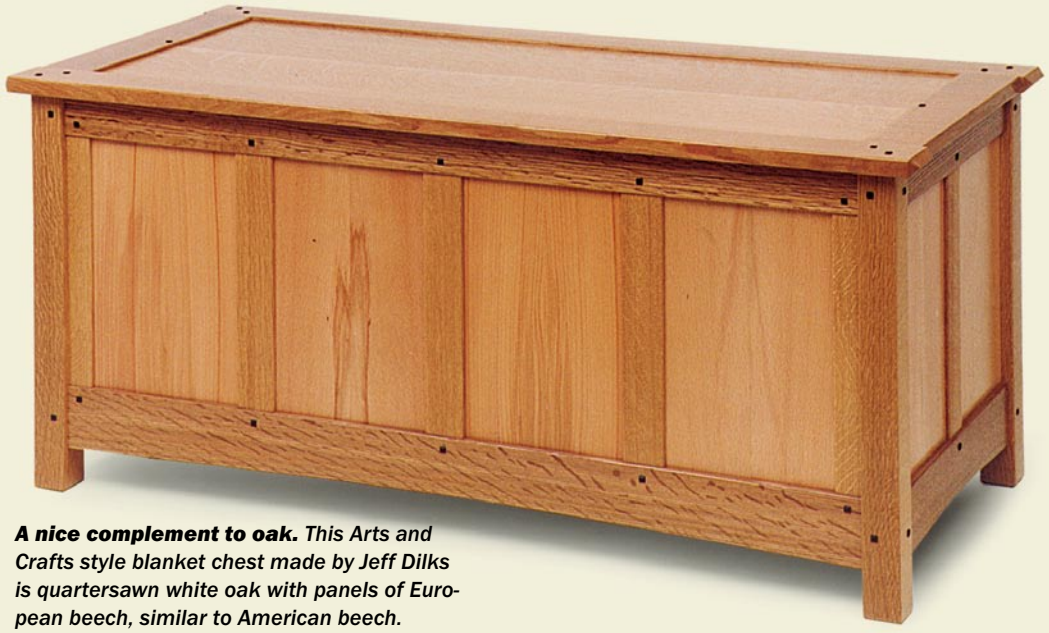


Latin name **Fagus grandifolia**

Price per board foot **$2-3**

Specific gravity **0.64**

Percent shrinkage, green to kiln-dried
Tangential **11.9** Radial **5.5** T/R ratio **2.2**



A nice complement to oak. *This Arts and Crafts style blanket chest made by Jeff Dilks is quartersawn white oak with panels of European beech, similar to American beech.*

Sources of Supply

Local lumberyards will stock some of these woods. Alternatively, go to **www.woodfinder.com** and type in the species you are looking for and your zip code. The site will list the 10 nearest lumberyards that stock that wood. If none are nearby, many lumberyards offer mail order, often with no minimum volume.