5 Overlooked Woods

Well-known out West, but available everywhere

BY ANISSA KAPSALES

Growing up in the East with an interest in furniture making, I was aware of the typical furniture woods—oak, walnut, maple, and my favorite, cherry. Then I learned about a few of the "exotics"—mahogany, teak, ebony, rosewood—and I was excited about the new colors and textures. However, these woods come with big question marks for me: How sustainable are the harvest practices? Should I care about that? Also, I like the idea of using wood grown closer to home, or at least on the same continent. I can't say I've never used exotics, but I always have pangs of environmental guilt.

Just when I had resigned myself to the charming but usual local-wood suspects, I spent a year living and making furniture in northern California. There, I discovered five fantastic local woods: alder, bay laurel, madrone, tanoak, and claro walnut. Of these five, alder is the easiest to find in lumberyards across the country because it is the only one grown as a commercial timber product. The other four come primarily from private landowners and smaller lumber mills. But because of the Internet, these woods are now simple to find and order online, and are becoming increasingly available around the country as solids and veneers.

Without turning to expensive exotics, harvested with questionable methods in faraway lands, you can choose from among these five Western woods and add new colors, hardnesses, and textures to your furniture that you won't find anywhere else.

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BEHIND THE NUMBERS

It's important to identify a wood's hardness, workability, and proclivity to warpage and checking. The best way to express these qualities, without using subjective terms such as fair, good, hard, or soft, is (much to my dismay) with numbers. More information about wood shrinkage can be found by visiting www.fpl.fs.fed.us.

specific gravity speaks to how hard, dense, and heavy it is. The specific gravity is a comparison of the weight of the wood with the weight of an equal volume of water. The higher a wood's specific gravity, the more it weighs and the harder and stronger it should be. As examples, black cherry has a specific gravity of 0.47; poplar is 0.40, and red oak has a specific gravity of 0.56. In woodworking this means that poplar is softer and easier to work by hand and with machines than black cherry and oak.

Tangential shrinkage is the amount wood shrinks tangentially (parallel to growth rings and perpendicular to the grain). Black cherry shrinks 7.1% tangentially as it dries, poplar 8.2%, and red oak 8.6%.

Radial shrinkage is the amount wood shrinks radially (perpendicular to growth rings). Black cherry shrinks 3.7% radially as it dries, poplar 4.6%, and red oak 4.0%.

Photos, except where noted: John Tetreault; facing page: Kerry Marshall (top), Jay Odee (bottom)

Tanoak

The oak imposter

Tanoak is not a true oak; in fact, it belongs to the beech family. But it has characteristics similar to oak. For one, the fruit looks like the acorn of the oak tree, but with a woolly or spiny cap rather than the scaly cap of the true acorn. Also, the wood itself somewhat resembles oak. It is exceptionally hard and heavy, though, with finer grain and lighter, more uniform color than the true oaks, ranging from a creamy white to a light tan. The grain can be very straight, with a mix of traditional oak characteristics such as prominent wide rays on quartersawn surfaces.

Tanoak is hard and brittle (more so than the oaks), dulling tools quickly and chipping out easily. The way to manage tanoak is to keep your cutting edges sharp and your patience level high. Taking light passes with a handplane or a router bit and sneaking up on a fit or profile will help eliminate chipout. Tanoak sands well and takes finishes even better.

Tansu in tanoak. *This small chest (18 in. deep by 18 in. wide by 11 in. tall) made by Kerry Marshall reveals interesting character on the front and the more common, subtle side of tanoak on the rest of the box.*

Manage the brittle wood. *Tanoak chips out easily, but multiple light passes with a well-sharpened block plane make chamfering the edge of this tabletop easy.*

HEALING TREE

Tanoak, known as the healing tree, has a long history in Native American culture as well as in the leather industry of northern California. Tanoak is high in tannin, a natural chemical used in the tanning process of leather and a necessary ingredient for fuming and ebonizing wood, making tanoak an ideal candidate for both.

Latin name:
Lithocarpus densiflorus
aka California chestnut oak, tanbark oak

Average price: $2–$4 bd. ft.

Specific gravity: 0.58

Percent shrinkage, green to kiln-dried:
Tangential 11.7
Radial 4.9
Tangential/radial ratio 2.38

The **percent shrinkage** indicates how stable a wood will be. There are three numbers to consider: tangential and radial shrinkage, taken on their own, and the ratio of the two.

As the **ratio of the tangential to radial shrinkage** gets higher, wood is more prone to warping. Black cherry's T/R shrinkage is 1.92, poplar's is 1.78, and red oak's is 2.15. As you are deciding where to use woods, consider their T/R shrinkage. A wood with a very high T/R might not make the best door panel or solid tabletop.

Strong and sturdy. *Dan Stalzer, a woodworker who teaches chairmaking in Fort Bragg, Calif., uses tanoak almost exclusively because of its color, strength, and durability. This chair has an oil finish.*

Illustrations: Bobbi Angell

Vibrant and colorful. *This tabletop apothecary made by Martin Shelton displays the variety of colors that can be found in a small section of one board. Shelton paired the bay laurel on the drawer fronts with a black-oak carcase and finished the piece with shellac.*

Bay laurel

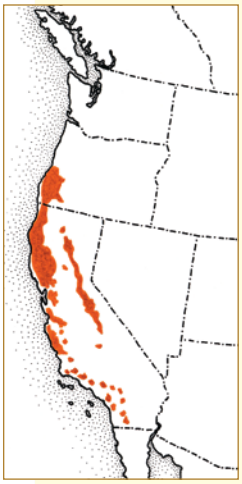
Color and character abound

The best reason for using bay laurel is its colors, which range from blond to black with many shades of gold, brown, gray, and red in between. There isn't a strong distinction between the heartwood and the sapwood. It's not uncommon to see vivid dark streaks and figure running through the wood. Once, while resawing a board for veneers, I was astounded by the character and pigment that were revealed in each layer. With age, the colors mellow and blend somewhat, taking on golden tones while still maintaining variations.

Bay laurel is heavy, durable, and hard with very fine grain. It tends to have swirly, interlocked grain that tears out. The trick to machining and handplaning bay laurel is sharp blades and light passes. Unfortunately, this wood dulls tools quickly. Depending on the specific piece, a sharp scraper could work well, but sanding is your safest bet. Work methodically through the grits to avoid visible scratches on this fine-grained wood. Bay laurel is finicky, but the results are worth the extra care. The grain and colors pop and shimmer when finish is applied, and it takes finishes very well. Because it is so distinctive, bay laurel is a great choice when building a piece with a subtle design that allows the wood to be the star.

Prep the surface for finishing. *Bay laurel's interlocking grain can tear out easily, so you may end up sanding it (left). Super-blond shellac (right) brings out the colors without changing them and can be used under oil finishes to add protection (providing that it is dewaxed).*

Wood and design working together. *Aaron Levine used very plain bay laurel for the legs and stretchers of this table. However, he used a very colorful, highly figured piece for the top. He kept the form simple so the wood would have the most "voice." The finish is varnish.*



HEADACHE TREE

Bay laurel is related to the Mediterranean laurel (*Laurus nobilis*), source of the aromatic bay leaf you find in the spice section at the grocery store. But the leaf of a California bay laurel is much more potent. Bay laurel is sometimes called the "headache tree" because the smell of the leaves can be so strong that it causes headaches. The wood itself is pleasantly fragrant, especially during milling and working.

Latin name: *Umbellularia californica*
aka myrtle, pepperwood, Oregon myrtle

Average price: $4–$7 bd. ft.

Specific gravity: 0.51

Percent shrinkage, green to kiln-dried:
Tangential 8.1
Radial 2.8
Tangential/radial ratio 2.89

Photos, this page: David Welter (top left); Art Grice (bottom right)

Madrone

Pretty in pink

HARDY EVERGREEN

The madrone is a beautiful evergreen with distinctive red, peeling bark, under which is a smooth green skin. Madrone trees are hardy and drought-tolerant because the root systems can be far reaching and abundant, tapping up to 12 ft. in fractured bedrock and holding soil in place. This makes the madrone tree excellent for controlling erosion. The tree flowers in the spring, and berries form late in the summer, providing food for birds.

Latin name: *Arbutus menziesii*
aka Pacific madrone, strawberry tree

Average price: $4–$7 bd. ft.

Specific gravity: 0.58

Percent shrinkage, green to kill-dried:
Tangential 12.4
Radial 5.6
Tangential/radial ratio 2.21

Madrone wood is gorgeous, ranging from a creamy light pink to a reddish brown. It's extremely hard, fine-grained, and uniform in texture, with interesting fleck patterns.

Although they need a lot of light, madrone trees thrive in dense stands because they will grow—leaning, twisting, and bending—toward the sunlight. This drive to survive creates a complication for woodworkers. Because the tree doesn't always grow straight, the wood can be under tension and warp during drying. This can be controlled by pre-steaming, closely spaced stickering, and slow air drying prior to kiln drying, but unless you have a good relationship with your supplier, it is difficult to know if this has been done. Adding to this, madrone has a higher water content when green (68% to 93%) than most other woods, so of the woods described here, it shrinks and warps the most during drying, decreasing stability. Quartersawing minimizes shrinkage, and using veneers and preemptive design consideration helps, too. All that aside, madrone is a pleasure to work with.

Despite its hardness, madrone machines exceedingly well and doesn't dull tools excessively. It's a very dense wood, so slow down the feed rate while machining. Hand-planing or scraping madrone can be a huge ego boost, as you can produce thin, lacy shavings with almost any cutting angle, leaving a beautiful, polished surface. Sanding is tricky because the fine texture of the wood will show scratches, but if you are set on sanding, work through the grits to P320.

Strong joints. *Anders Whealdon chose madrone for the elegant lines of this chair, designed by Ejler Hjorth-Westh. Madrone is very hard with exceptional strength, making it an ideal wood (when dried properly) for chairs.*

Online Extra

For an audio slide show of pieces made with these woods, go to **FineWoodworking.com/extras.**

Plane fun. *While madrone works easily with machines, it's particularly satisfying to work by hand with a scraper or a handplane, creating a highly polished surface that will take finish exceptionally well.*

Outmaneuver wood movement. *The inspiration for this buffet came from the wood. Judith Ames wanted to highlight the even pink color and figure of the madrone. She combated any possible instability by using veneer on the top, sides, and door panels, paired with properly kiln-dried solid wood for the rest. The finish is lacquer.*

Photos, this page: David Welter (top right); Robert McCrory (bottom right)

Claro walnut

Walnut at its best

There are good reasons why eastern black walnut (*Juglans nigra*) is such a popular furniture wood. It's a consistently straight-grained, beautifully colored wood that is hard and durable without being excessively heavy. It's easy to work by hand and machine, and it finishes beautifully.

Now take all those fantastic attributes and add more color, interesting swirls, and figure, and you get claro walnut (*Juglans hindsii*). While you're adding, throw some extra cash into the mix. Claro walnut is pricier than black walnut, but it's worth it. The rich colors of this wood range from medium brown to dark chocolate brown, and it often has purple or reddish striping, gold hues, or whitish marbling. Because of the colors and figure, claro walnut is often used for gun stocks.

It isn't a big surprise that claro walnut is a favorite of many woodworkers, including Sam Maloof and George Nakashima. In fact, Nakashima was known to travel from Pennsylvania to California specifically to look over trees and purchase spectacular slabs of claro walnut.

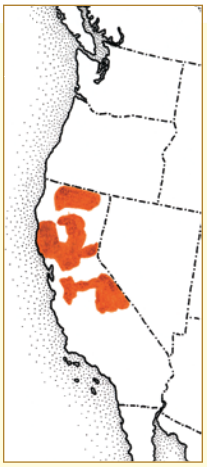
Careful composition. *Ted Blachly designed this unadorned secretary to let the claro figure and color stand out. The grain of the wood requires that parts be chosen and placed carefully. The finish is varnish.*

Scrape the swirls. *Much like Eastern black walnut, claro works easily with machines and hand tools. But anywhere there is a lot of swirl or figure, you may need to use a scraper or rasps, files, and sandpaper to tame tearout.*

Warm it up. *Orange shellac enhances the already rich, warm colors of claro walnut and can be used as a sealer under other finishes.*

Handwork triumph. *Don Gray made this shoe-changing bench from solid claro walnut. The swirly grain was challenging, but he managed to rough out the curved parts with handplanes, refining the shapes further with a round-bottom plane and a scraper. The finish is an oil-based polyurethane.*

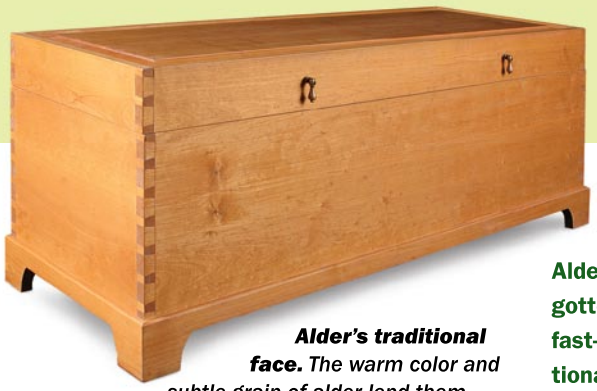
CLARO CONFUSION



There is a lot of conflicting information about claro walnut, much of it misinformation. To clear up the confusion, I went to forestry expert John Shelley at the University of California, Berkeley. Claro walnut, commercially important as rootstock for English walnut orchards, is a real species of wood, native to northern California. The native species of walnut in California is *Juglans californica*. That seems simple enough, but the claro confusion comes from the distinction between the northern and southern varieties. The northern variety (*Juglans californica var. hindsii* or *Juglans hindsii*) is the highly figured, richly colored wood I'm referring to here. The southern variety (*Juglans californica var. californica*) is more like eastern black walnut.

Latin name: *Juglans hindsii,* aka Hinds black walnut
Average price: $6–$20 bd. ft.
Specific gravity: 0.51
Percent shrinkage, green to kiln-dried:
Tangential 7.8
Radial 5.5
Tangential/radial ratio 1.41

Photos, this page: Dean Powell (top right); John Birchard (bottom left)



Alder's traditional face. *The warm color and subtle grain of alder lend themselves to traditional work. This blanket chest made by Josh Finn (finished with a three-part oil mixture) captures the conservative characteristics of the wood.*

Alder

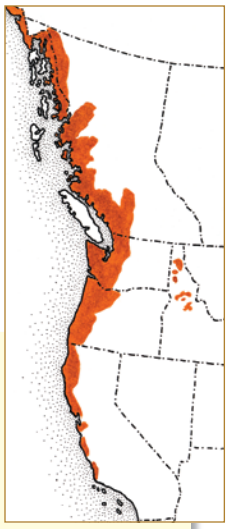
Way better than its reputation

Alder, a member of the birch family, is a beautiful wood that has gotten a bad rap—being dubbed "poor man's cherry." Because it is fast-growing and abundant (therefore inexpensive) and takes stain and other finishes exceptionally well, many cabinetmakers stain alder and pass it off (knowingly or not) as cherry.

Left natural, this fine-grained wood has a warm amber color with reddish tones. There is little or no difference between the heartwood and sapwood, so the color and texture tend to be very uniform and the grain is fairly straight. Select-grade alder is not visually overpowering, so it will never distract from the design of a piece. If that sounds mundane, knotty alder is also widely available and can add a different interest to the wood.

Alder is on the softer side of hardwoods (close to mahogany) and tends to decay quickly in the elements, so it is not a good choice for outdoor applications. But it is wonderful for furniture and turnings. It's very stable, machines well, is a pleasure to work by hand, and doesn't dull blades excessively.

The light, warm color doesn't darken quickly as cherry does. It tends to age and color more like maple: warmly and very slowly, not changing much with time.



User-friendly. *Because alder isn't extremely hard, it isn't a chore to chop a lot of dovetails in it, and it won't have you turning to your sharpening station every 10 minutes.*

RED INSIDE

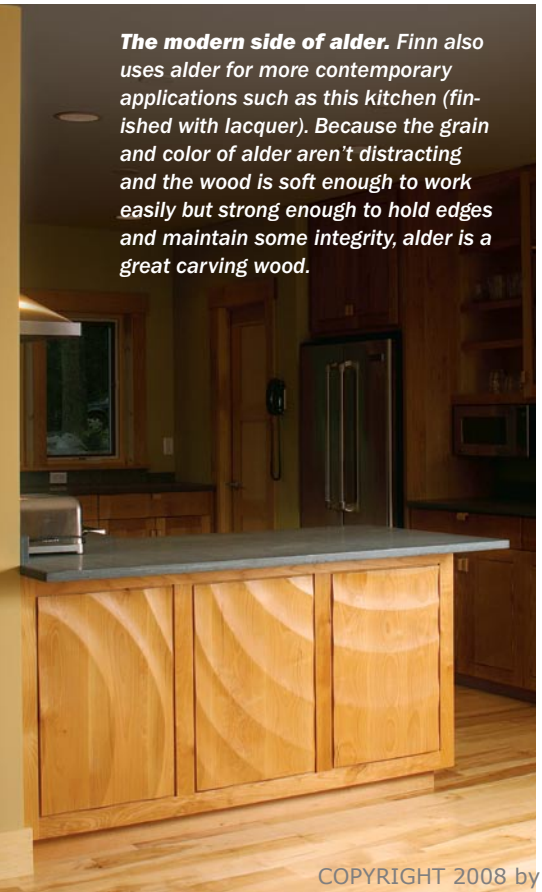
Red alder actually has extremely white bark like the palest of birches, only it doesn't peel as a birch does. Scratching through the outside layer of the bark reveals a rich red, and the wood (nearly white when first cut) turns a reddish amber as it is exposed to air. Alder also plays an important ecological role; it's known as a nitrogen fixer because its root system hosts a bacterium (*actinomycete Frankia*) that draws nitrogen from the air and enriches the soil, benefiting nearby plants and organisms.

Latin name:
Alnus rubra
aka western alder,
Oregon alder,
Pacific coast alder

Average price:
$3–$5 bd. ft.

Specific gravity: 0.37

Percent shrinkage, green to kiln-dried:
Tangential 7.3
Radial 4.4
Tangential/radial ratio 1.65



The modern side of alder. *Finn also uses alder for more contemporary applications such as this kitchen (finished with lacquer). Because the grain and color of alder aren't distracting and the wood is soft enough to work easily but strong enough to hold edges and maintain some integrity, alder is a great carving wood.*

HOW TO GET WESTERN WOODS

If you can't find these woods locally, you'll have to have your order shipped, sight unseen. Many suppliers have photos online, but you still must rely on them to send nice wood (a subjective thing), charge a fair price, and send it in a timely, cost-effective manner. It's helpful to know your supplier. Get recommendations from other woodworkers, or start with a small order as a test. Call and talk with somebody about what you want. If the person on the other end is knowledgeable and helpful, you are off to a good start. A few suppliers that I have used successfully are Almquist Lumber (www.almquistlumber.com); Whitethorn Hardwoods (www.whitethornconstruction.com); and, for claro walnut, Burls and More (www.burlsandmore.com). You can also go to www.woodfinder.com.

Don't mail-order wood when you are pressed for time. Wood orders are heavy and can cost a lot to ship by air. Have the order shipped ground, a slower but cheaper option.