

Brian Lorentzen

Most woodworkers use boards. This guy makes the boards.

by Spike Carlsen

THE FIRST THING I NOTICE as I walk into Brian Lorentzen's cutting shed is a just-opened 26" dia. walnut log sitting on a Wood-Mizer bandsaw mill. Then I notice Brian shaking his head at the shiny ends of the 3/4" lag bolts he's just sawn through. "I love what I do," he explains in waggish dismay, "because every time I saw into a log I feel like a little kid at Christmas—I never know what I'll find inside." And while the first cut on this particular log hit a pair of old hammock hooks, Brian soldiers on, (after digging the bolts out of the log and replacing the saw's blade), because the next cut just might hit the jackpot.

Addicted to wood

In 1990, the notion of sawing lumber was nowhere on Brian's radar. As a machinist and machine designer he was more interested in metal, motors and computers. But while clearing land for the house he was about to build Brian began thinking that the massive fallen oaks must be good for something other than firewood. "I thought, hmm, I wonder if I could get boards out of these things—

that was how naive I was," he jokes.

Brian hired a sawyer to mill some of the logs on site, and as the sawyer worked, Brian saw magic unfolding before his eyes. In 1998, he bought his own sawmill, took a kiln-drying course at the University of Minnesota and a lumber grading class through the National Hardwood Association.

Eventually, Brian cut and dried the lumber for the doors, staircases and cabinets, built most of the furniture and crafted all the stained glass windows for the house. Of course, that was after he'd completed all the carpentry and masonry work on the structure.

Fifteen years later I encounter a 54-year old man with such passion for turning logs into lumber that he has 100,000 board feet of it tucked in every nook and cranny of his garage, basement, shed, kiln and house. In addition to boards showing spectacular grain, Brian's inventory includes burls and slabs showing more of the same. He has quartersawn shedua stacked in the kitchen pantry and a mini-van-size stack of padauk in his office. He hauled out

three bobcat loads of bird's-eye maple through the bedroom window last year. "When woodworkers walk through the house," he says, "they always pose the same question: 'You're not married are you?'"

Brian loves wood of every race, color and creed. Given the opportunity to purchase 15,000 board feet of tigerwood, leopard wood, padauk and other exotic woods a few years ago, he sold his DeLorean to create the room to store more wood.

Over the course of a long morning, Brian points out so many "once in a lifetime" boards that I figure he must have as many lives as Samantha, his omni-present shop cat. Brian moves from pile to pile, sliding out quartersawn oak, flamed maple and crotch walnut boards. He pauses before a 20" wide by 3" thick slab of elm and waxes, "This is the most perfect log I ever sawed." When asked if he has a personal stash of wood he'll never sell, Brian smiles and unflinchingly responds, "Oh yeah." At this point, I realize I'm in the presence of a man who knows every flame and fleck of every board he's ever cut.

Finding great wood

Located just outside St. Paul, Minnesota, Brian finds a plentiful supply of oak, elm, maple and other boulevard trees. For clear, straight-grained lumber he seeks out canopy trees—ones that shed their lower limbs early in life—that can yield a 15- to 20-foot log with nearly zero knots. Many of his logs are veneer grade. As his storehouse of woods has grown so has his selectivity in the logs he saws. He now prefers logs at least 3' in diameter, crotch woods and other logs "that are fun."

Though Brian occasionally fells a tree on his own, he prefers trees "with the gravity already taken out of them." He gets most of his logs through word of mouth and a handful of tree services he's built relationships with over the years. "People say there are no big trees left, but that's not true," he



PHOTO COURTESY OF BRIAN LORENTZEN

Walnut book-match 2" x 28" x 72"

"Boards that would be difficult to use independently come alive, when they're book-matched," Brian says.



Stacks of stored lumber turn Brian's three-stall garage into a labyrinth of woodworkerly delights. A car seems out of place.



Walnut crotch book-match 2" x 60" x 60"

According to Brian, freshly cut walnut has a distinctively greenish tone that oxidizes within a few days to dark brown. Here the oxidized color appears at the ends.

EDITOR: TIM JOHNSON | PHOTOGRAPHY: JASON ZENTNER, UNLESS NOTED



Like most woodworkers, Brian stores treasure boards in his shop. In Brian's case, about 20,000 board feet of treasure.

explains. "Some of the best logs come from people's front yards. There are amazing trees in the inner city and in farmer's fields. Ironically, many sawyers won't touch these trees for fear of hitting metal and ruining a blade. I hate hitting metal, but some logs are so extraordinary, I'm willing to take the risk."

In addition to bolts, bullets, chains and other forms of "tramp metal," Brian has even hit glass telephone insulators while sawing. He recalls one walnut log where he cut through three generations of bolts and screws—and went through three blades. "Sometimes you start on a log thinking you'll spend three hours and get 600 board feet of beautiful lumber, but you wind up spending three days and getting a bunch of firewood."

The art of making boards

As passionate about turning logs into boards as most woodworkers are about turning boards into furniture, Brian studies each log carefully in order to produce the most attractive and valuable boards. "The way a log is turned and cut can make the difference between an ordinary flat-grained board and a flamed or quartersawn beauty," he explains. "Commercial mills are concerned only with speed and yield. They'll take three minutes to saw a log that I'll study for an entire afternoon." Brian studied one triple-crotch walnut log for six months before he fired up

the saw. "I'm a treasure hunter for amazing wood grain," he claims. "I'm glad there's not a tape recorder running in my cutting shed," he says, "because all day long you'd hear me shouting to myself, 'Wow, look at that flake! Look at that figure!'"

Brian has made a science of cutting and drying wood. "Cut and dry boards the right way and 100% of them will be flat and crack-free," he explains. "Do it wrong and they'll be warping and twisting within hours." "Doing it right" is a long journey that takes three years or more.

Brian only cuts logs in cooler weather (under 70°), "to avoid mold and checking." When the logs first arrive, he coats the ends with wax. "Then I think about each log for awhile and how I'll saw it." He cuts logs up to 42" in diameter on his Wood-Mizer. A few times a year—when it's time to cut a monster log—he'll break out the massive center-pivot slabber that he designed and built. Powered electrically, it swings an 8' chainsaw bar in a horizontal arc and can saw logs up to 6' in diameter.

Once the boards have been sawn, Brian stands them vertically for several days to allow surface moisture to dissipate. He applies a coat of Pentacryl (a wood stabilizer used to keep green wood from checking) to the surfaces of thick wide boards and crotch pieces. Next, he carefully sticks the boards in the order they were cut from the log and uses ratcheting straps to hold the piles perfectly flat.

Then he shed-dries each pile for a minimum of one year for each inch of thickness of the boards it contains: A pile of 12/4 boards will be assigned a three-year wait, or longer. Brian disdains open-air drying because it exposes lumber to sun, rain and weather that's sure to cause degradation.

This first stage of the drying process is the most critical, according to Brian. "Checks and mold occur in this stage while the green boards dry down to 50% moisture content," he explains. "Once you get wood below 50% moisture content, such defects are much less likely to develop."

After shed-drying, Brian kiln-dries the wood at a low temperature for a month or more, ending at 130° to kill bugs and larva. (Yes, he designed and built the kiln.) The goal is 5% to 8% MC. At the end of this drying process Brian conditions the boards by flash-steaming them for about 30 minutes. Flash-steaming relieves case hardening created during the drying process. "It's like a sauna for wood," Brian says. After this spa treatment, Brian moves the finished boards into a conditioned space, where they're carefully stacked, like wooden treasure waiting to be discovered.

Why go to such trouble and expense? "You build something out of a bunch of narrow boards and it looks okay," Brian explains. "Build it with wider boards and it looks better. Build it with wide boards that are flamed or quartersawn and book-matched, and it's the first thing someone sees when they walk into the room. They're awed by it. That's what woodworking is all about." 🦺

Find out more about Brian (and browse through 600 web pages-worth of lumber) by visiting logs-to-lumber.com.

Spike Carlsen is the author of Woodworking FAQ, A Splintered History of Wood and Ridiculously Simple Furniture Projects. For more information visit spikecarlsen.com or facebook.com/spikecarlsenbooks.



Brian's Wood-Mizer handles logs up to 42" in diameter.

Red elm book-match
1-1/2" x 24" x 96"

According to Brian, the best figure and color in a log is typically in the first few boards, right under the bark.



To cut logs up to 6' in diameter, Brian designed and built his own pivoting log slabber for one-sixth the price of a commercial version.

Spalted maple book-match
2" x 30" x 120"

Descriptive quote from Brian: xxxx
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