United States Department of Agriculture

Profiles IN CONSERVATION

Mike LaVecchia.

Hanging Ten Sustainably

Maine surfboard maker creates beautiful and durable blend of form and function

By Glenn Rosenholm

Nolan Collins pencils in marks on a partially assembled surfboard.

What started out as a hobby among friends and a labor of love grew into a successful and sustainable niche business for one business owner.

Mike LaVecchia, 51, and his small crew are making cool, lightweight custom wooden surfboards day in and day out in their facility, Grain Surfboards, in the coastal Maine community of York.

So how does someone get started in the hollow wooden surfboard manufacturing business?

Interestingly, LaVecchia, an avid outdoor enthusiast, did not spend his childhood in New England's rural countryside or on a beach in Malibu. Instead, he grew up in South Orange, NJ, a suburb of New York City. There were more urban places outside of New York City than South Orange, he said, but where he lived someone could hop on a train and arrive in the Big Apple in 20 minutes.

Stacks of lumber drying in the sun. The boards will eventually be used to make new wooden surfboards. Wood, grown locally and sustainably, makes up 99 percent of the material used in Grain Surfboards.

Despite the urban setting, his love for the outdoors and for rapid movement started early on. "I grew up skate boarding, snowboarding, and being on boats. I always loved the outdoors. It's great to make something that brings all of that together," he said.

His keen interest in these active outdoor sports eventually brought him north to Vermont. LaVecchia's path to his current successful state started at Burton Snowboards. He worked there for about 12 years, from the mid-1980s to the late 1990s. He started at the factory and later moved to assistant manager at a retail store and eventually, into marketing.

Boredom set in, however. "I left (Burton) because I had grown tired of the industry. I tend to be someone who needs to be really interested in what I'm working on," he said.

"After Burton, I decided to spend more time working on boats. I bought and chartered a couple traditional sailing boats; one was a schooner and one was a friendship sloop. I started that business in 1996, and in 2001 I started working for the Lake Champlain Maritime Museum."

He spent 4 to 5 years working on a replica schooner. "That was a super project with great people, using local materials, and that led to starting Grain. I thought about building surfboards while we worked on the schooner project," he said.

"We would drive down to the coast regularly to surf on the weekends. We looked and found a great rental house in 2005. We started building surfboards for fun in our garage (and basement)."

Thin "bead and cove" strips are used to build up the rails during construction of the surfboards.

Three-foot-long adjustable metal clamps hang against the wall, ready for use. Clamps are used to hold wooden surfboard pieces together until the glue dries.

He said his eventual business started out simply as a labor of love. "The first couple surfboards, there was no intention about building a business. The next couple boards were for family and friends."

While he was building surfboards, LaVecchia got a job out of Portsmouth, NH, for Gundalow Company, a nonprofit that built and now operates a replica of an historic boat.

"During that first year, 2005, we started working out of the basement," he added. "Eventually, the business grew into what it is today. We started selling finished custom surfboards in 2005, and in 2006 we started selling kits."

Evolving Construction

Surfboards have been built commercially out of wood since the 1930s, he said. Those were some of the first hollow wood boards to be built. Prior to that, surfboards were mostly built by individuals and were solid wood and weighed upwards of 150 pounds. LaVecchia said making hollow wooden surfboards back in the 30's instead of solid ones would take the weight down from 200 lbs. to about 80 lbs. "They were boxy, but they worked, and they were the first hollow boards that could be sold."

Foam took over the surfboard manufacturing industry beginning in the 1950s because it was easier to build with and to shape, and it was lighter, he added. "For the last 50 years foam has been the main material used in modern surfboards."

"When we started building wood boards, Clark Foam was still supplying foam blanks, the big oversized boards used to make surfboards," he said.

According to Wikipedia, Clark Foam provided about 90% of the United States supply and 60% of the world supply of surfboard blanks in 2005. Despite foam's popularity in surfboard construction, Clark Foam closed its doors that year due to increasing environmental restrictions concerning the production of foam. As the website noted, "The abrupt closing of Clark Foam sent shockwaves through the industry and left surfboard shapers scrambling for new suppliers. Since Clark Foam closed, surfboard manufacturing has turned to new and innovative materials."

"That started a chain reaction [as] people who love the ocean realized they were surfing on boards that were extremely toxic," LaVecchia said. "That news story raised our visibility and it served to increase sales."

There were some other folks building wooden surfboards, he said. This served to increase demand for more natural materials.

Hollow wooden surfboards are a natural and sustainable alternative to foam. "For 1,000+ years, people have been surfing with solid wooden surfboards," LaVecchia said. "In the 1930s, a guy named Tom Blake, an engineer, started to design surfboards that were lighter yet strong. He is credited with a lot of the innovations in the surfing industry."

Soon after Grain Surfboards started production on its custom surfboards, they started selling kits to people to make their own surfboards at home. The kits were a hit, he said. "We were selling kits and people enjoyed building them, but some people felt it was too complicated to do alone.

Marine plywood is used for the internal portions of the boards. These parts are cut on a CNC (computerized numerical control) machine and are based directly on the computer model of each shape.

John Hamblett, an employee at Grain, handles a strip of wood used in the construction of wooden surfboards.

John H. tapes a fin box into place while a resin hardens.

Closeup of the rail of a wooden surfboard during an early stage in the fiberglass process.

So we started the classes in 2008 to accommodate people who needed help getting their boards built."

He said they use mostly northern white cedar from a small mill in Maine near the Canadian Border. "It's all wood that's grown sustainably," he said. "It's about 95 percent northern white cedar. We also use a little western red cedar for accents, which for the past 5 years has been 100% recycled from a deck that was torn off and replaced on a house close by."

"We make all surfboards one at a time and custom built," he added. Start to finish a surfboard takes about 50 hours to build over roughly 2 weeks.

Many hand chisels and planes are used in making wooden surfboards.

LaVecchia summed up his business strategy this way: "It was never about making money; it's been about doing what we love and believe in. It's a niche business, but we're paying our bills and enjoying every day in the shop."

Working with Sustainable Wood & People

"About working with wood, it's all I ever worked with," he added. "We can use traditional tools. It's clean and quiet. You don't need all sorts of personal protective gear. It's beautiful too. We've built maybe 800 boards altogether since we started, plus the kits, and we've taught hundreds of people how to build them."

Hand planing wooden surfboards generates a lot of wood shavings. The leftover wooden scraps are often given to local farmers for livestock bedding.

"The magazine *Wooden Boat* asked us (years ago) if we wanted to teach a class at their boat building school. The first year we declined, and the following year we accepted. I've taught classes before. I've been in customer service enough, even at the maritime museum. One of my business partners was a teacher for the University of New Hampshire, and he worked on ships," he said.

LaVecchia spoke about the value of using sustainably grown wood from local forests. "We like knowing where the material is coming from. We're proud to be in Maine supporting Maine businesses. We're a part of their business, and they're a part of ours. If you start buying materials from someone far away, you just don't know them. There's no accountability."

Completed custom surfboards are stored in a rack before shipping.

Mike LaVecchia stands proudly beneath the sign for his company, Grain Surfboards, in York, ME.

"We've been up to the mill that we buy from in Portage, Maine. It's called the Maine Cedar Store. Over the years we'll check in and talk with the appropriate authorities. We heavily rely on the mill owner and his sources of logs."

Concerning the importance of manufacturing wooden surfboards sustainability, he said, "It's everything to us. If we run out of material we're out of business. We want to make sure our resources are available for future generations. We're even very conscious of our waste and reuse of wood."

Today, about 8 to 10 people work at Grain Surfboards in various capacities, he said. They all share his passion for building beautiful, useful, and durable products, one at a time. Despite their commitment to excellence in manufacturing, it's not all about work 24 hours a day, though.

LaVecchia has been surfing for about 15 years. He still loves surfing and being on the water. Six years ago he bought a wooden boat and lives on that now in Kittery. When he has time, he still loves to go surfing locally at York Beach and other spots nearby. He also sometimes likes to try surfing the waves in other locales far away.

So far he's been up and down the "Left (West) Coast" and the East Coast, as well as Costa Rica and Scotland.

Visit Mike's Grain Surfboards website for more information.

Mike (right) and Brian discuss the air filtration system, which is used to keep the air clean and safe to breathe during the milling operations.

Leftover wood scraps are used to heat the manufacturing room, leaving nothing to waste. The company prides itself on its adherence to sustainable principles. Use of local and sustainably supplied wood sources, manufacturing efficiency, resource reutilization, and minimal use of nonnatural elements are all part of their manufacturing process.

Closeup of a very old surfboard and logo. The people at Grain highly admire and revere their predecessors in the industry.

Hand-drawn doodle art reflecting the company's creative culture can be found in spots throughout the manufacturing facility.

Closeup of a highly detailed surfboard fin from Grain's archives shows wear after 10 years of use. Customization is a central part of Grain's customer focus.

Closeup of a local nautical chart in the shop.

The Grain Surfboards logo adorns every finished surfboard.

A view of their shipping room shows signs of organization and efficiency.

A recently completed surfboard shines in the spotlight.

All photos courtesy of Glenn Rosenholm, U.S. Forest Service.

United States
Department of
Agriculture

Forest Service
Northeastern Area
State and Private Forestry
11 Campus Blvd., Suite 200
Newtown Square, PA 19073

https://www.fs.usda.gov/naspf/

USDA is an equal opportunity provider, employer, and lender.