

Part of the series: *History of Woodworking in Vermont 1791 – Today*

# Vermont's Forests

Forests are Vermont's most abundant and important natural resource. They provide timber for lumber and wood products, wildlife habitat to preserve the diversity of species, and nutrients for healthy plant life. They help control temperature and precipitation, prevent erosion, and contribute to clean water. Forests give Vermont its "Green Mountain" identity and lure people to hike, take a spring wildflower walk, hunt, snowshoe, or ski. Their brilliant fall colors attract visitors. Most importantly, Vermont's forests are a sustainable resource.



IT IS ESTIMATED THAT FOREST COVERED 90% of Vermont land in the 1760s, when many towns were chartered. Travelers in the 1700s would have found extensive forests of various species that were 6 feet in diameter and as high as thirteen-story buildings, some more than 300 years old.

Photo by Eric Beaudin

*"Much of the largest part of Vermont is yet in the state in which nature placed it. Uncultivated by the hand of man, it presents... a vast track of woods, abounding with trees, plants and flowers, almost infinite in number, and of the most various species and kinds."*

—Samuel Williams, L.L.D.  
The Natural and Civil History of Vermont, 1794

**George Perkins Marsh** of Woodstock was a U.S. Congressman, statesman, and conservationist. He published *Man and Nature* in 1864. The book was a sobering warning about the perils of altering the balance of nature, as he saw happening in Vermont.

*"Steep hillsides and rocky ledges are well suited to the permanent growth of wood, but when in the rage for improvement they are improvidently stripped of this protection, the action of sun and wind and rain soon deprives them of their vegetable mould... They remain thereafter barren... producing neither grain nor grass."*

—George Perkins Marsh, *Man and Nature*, 1864



George Perkins Marsh circa 1850. Courtesy: Library of Congress, Prints and Photographs Division



Photo: Ken Folger/Photo

### VERMONT FOREST FACTS

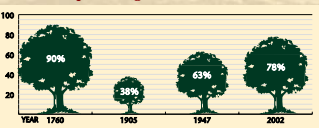
- ◆ Vermont has 4.6 million total forest acreage. Essex County has the most forest: 90%. Chittenden County has the least: 61%.
- ◆ 76,000 private landowners own 82% of Vermont's forests.
- ◆ The federal government manages 6% and the state government and towns manage 8% of forests in the state.
- ◆ 60% (2.8 million acres) of Vermont forest land is under active forest management.
- ◆ Vermont forests contain over 117 million cords of wood, averaging 26 cords per acre.
- ◆ The annual timber harvest is about half of what the forests grow in a year.

Source: U.S. Forest Service Forest Inventory and Analysis, 1997

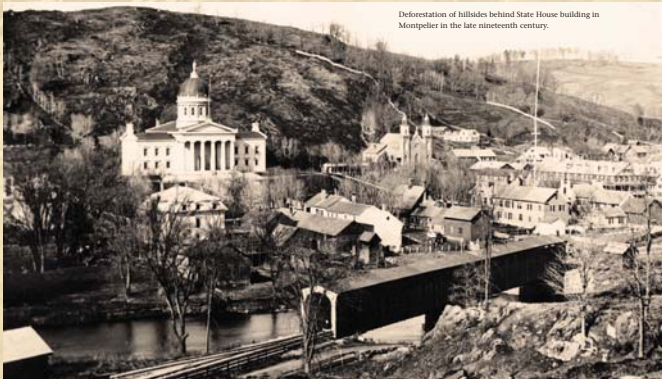
Marsh's writings roused public interest and Vermonters pressed state government to take action. In 1933 the federal government established the Green Mountain National Forest. Advocates believed it would foster new forestry and recreation programs and boost wood products and tourism industries. They were right.

Currently, the Vermont Department of Forests, Parks and Recreation has responsibility for the conservation and management of public land. Non-profit organizations such as the Vermont Land Trust and the Vermont Woodlands Association are taking steps to conserve and manage private land. Land use practices and attitudes have changed over the last 75 years. Professional foresters, scientific knowledge, conservation values, and stewardship activities on public and private land have replenished and rejuvenated forests. Healthy forests now dominate the Vermont landscape.

### Estimated percentage of Vermont land as forest



Deforestation of hillsides behind State House building in Montpelier in the late nineteenth century.



Courtesy: Vermont Historical Society

Part of the series: *History of Woodworking in Vermont 1791 – Today*

# Logging and Milling in Vermont

Early settlers in Vermont were eager to establish farms. They cleared the forest to create agricultural land and provide wood for building and heating homes. They burned trees for potash and for charcoal to fuel iron furnaces—commodities they could sell. By the mid-1800s logging surpassed agriculture, with Burlington the third largest lumber port in the country. Large areas in the landscape were logged. Landowners did not renew the timber resources, which resulted in soil exhaustion, loss of wildlife, erosion and flooding, increased fire danger, and a significant reduction of the state's greatest natural resource: its forests.



Lombard Log Hauler.

**Men cut trees with axes**, and later used a bow saw or two-man crosscut saw. Logging methods changed little until mechanized equipment was introduced. By the 1940s, logging operations were beginning to use crawler or wheeled tractors and mechanized skidders instead of horses. Some companies laid temporary rails for small steam railroads into logging works.

*"We used to drive the team to the woods... and when we got a bobsled load... we'd head down the mountain, standing on top of the logs, driving the horses... We didn't get a chainsaw 'til 1951... Trees were four and five feet across. We would start in the morning, and we'd saw one tree down before noon... We didn't have to have gas, we just had to have a good meal."*

—John Messier, Brookfield, Vermont Folklife Center interviews, 1988–89

Loggers use chainsaws and machines for felling trees, lopping branches and tops, and pulling trees to a logging road. They clean up with chippers and sell the chips to power plants for fuel and to paper mills.

*"The biggest change I've seen is mechanization in tree felling. The machine grasps and saws, picks the tree up off the stump while it's standing, then lays it down. This minimizes residual damage."*

—Richard Holden, Allard Lumber, Brattleboro

Oxen pulling log sled. Photo courtesy of William Goe.



C.H. Stevens Lumber Company sawmill, Granby, 1890.

Logging and milling in Vermont continue to be small-scale operations, with about 800 independent businesses. In 2002 the state had 168 sawmills and veneer mills. Loggers are supported by training and certification programs

that include topics such as equipment and safety, first aid, forest ecology, water quality and erosion control, and woodlot management. The forest today is the result of repeated harvests by Vermonters applying common sense and sound scientific knowledge to sustain their heritage of the work and the landscape.



David Birdsal, Director of Logger Education to Advance Professionalism (LEAP) administered by Northeast Forest Stewardship Project.

*"We have a computerized sawmill. It assists fellows in setting the saws, determines what to saw next. It's a big efficiency."*

—Joe Gagnon, Pittsford



Quarter-sawn lumber (below) produces a vertical and uniform grain pattern but yields fewer and narrower boards than flat sawing (right).

Courtesy of the Northeast Council at www.northeastcouncil.org.

Part of the series: *History of Woodworking in Vermont 1791 – Today*

# History of Vermont Wood Products



In the late 1700s every town had several individuals who made functional items from wood. As the population increased, demand for wood products spurred the establishment of small wood products industries. Since the 1870s wood products have been the single most important manufacturing industry, creating an identity for many Vermont towns. In some towns, wood industries provided income for the majority of the population. Owners of the mills and factories became community leaders who took responsibility for the commercial and civic growth of their towns.



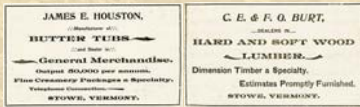
Photo courtesy of Stone Historical Society

In 1930 President Franklin Delano Roosevelt referred to Stowe as a national example of “local industry fed by central power, using the raw materials and native skills of the countryside, workers living on the land.” He was impressed by the integration of farming and small manufacturing in profitable small town industries.

*“In a valley in Vermont, a woodworking factory...has been so successful that the trend of population to the city has been reversed. Every state could be dotted with small country industries.”*

—President Franklin Delano Roosevelt

C.E. & F.O. Burt Company truck loaded with butter tubs c. 1920. (below) Typical ads from local Stowe companies promoting their products and services.



Courtesy of Stone Historical Society



**Bristol Manufacturing Company** was the largest maker of caskets in the country, a business so profitable they discontinued making baby carriages.

**Estey Organ Company** of Brattleboro built over 500,000 pipe and reed organs from 1853 to the 1950s. For years, Estey was a household word worldwide.



**Granville Manufacturing Company** has been producing the same two products—wooden bowls and siding—on the same 19th-century machinery for the last 150 years. Customers buy the one-piece turned maple bowls for their functionality, but also for their Vermont authenticity and quality.



Photo courtesy of Granville Manufacturing Company



**Stoware** opened in 1933 after refrigerated bulk transport of milk made the local butter tub company obsolete. Its household woodenware was made from local maple and birch logs and decorated by area residents. The company capitalized on Vermont's wood identity by advertising “DeLuxe Woodware Specialties—From the Green Mountains of Vermont” in Boston and New York markets. Another enterprising resident developed a successful mail order business selling “The Sweetest Story Every Told” by A. Maple Tree — small book-shaped boxes made from local wood and filled with Vermont maple sugar.

**Newton & Thompson Manufacturing Co.**, who cut and milled its own timber for its “novelty” products, was a mainstay of Forestdale's economy. In 1850 Andrew Newton invented the automatic machine for turning small parts that revolutionized the industry. Hundreds of thousands of identical items could be produced in a short time.

**Roy Brothers** mill in East Barnet was said to be the second largest producer of wooden croquet equipment in the 1920s and '30s, making as many as 40,000 sets per year.



Photo courtesy of Roy Brothers

Part of the series: *History of Woodworking in Vermont 1791 – Today*

# History of Vermont Wood Furniture



During the late 1700s to mid-1800s there were more than 900 cabinetmakers that produced a variety of sophisticated styles popular in Boston, New York, and Philadelphia. Some were trained in the city; others honed their skills as apprentices in Vermont towns. Many opened workshops and showrooms in town centers across Vermont. They advertised their trade in local newspapers, enticing those with means to purchase the latest styles. They took pride in their work and extolled their abilities in their ads. Many signed their pieces.



Secretary made in Middlebury, circa 1820, cherry, birch with maple and mahogany veneers. Courtesy of Henry Station Museum of History.



Bookcase made in the shop of Hastings Warren, circa 1825, cherry and pine with mahogany and birch veneers. Courtesy of Henry Station Museum of History.

**Vermont furniture** was usually built from local woods; exotics like mahogany and rosewood had to be ordered from Boston or New York. Some cabinetmakers developed a “Vermont look” to their furniture, using a mix of brightly colored or figured wood to call attention to a piece. Consumers of modest means might have a piece of “faux” grained furniture painted to look like an expensive wood.

**Patterson Chair Company**, a three-generation family company in Norwich that made parts for Victorian-style chairs, purchased in 1874 a “New Giant Waterwheel...to drive a Board Saw to get 1000 board feet in one hour...” In 1895 it added an 80 horsepower gasoline engine to help run the sawmill and workshops.



Page from Patterson Chair Company catalog. Courtesy of Norwich Historical Society.

Tall case clocks were popular. Simple clocks built in rural areas often had wooden works while elegant clocks had cases with inlay and fine movements. This c. 1805–1810 clock has works by a well-known Rutland clockmaker **Nicholas Goddard**.



Tall case musical clock. Courtesy of Bennington Museum.

**Hastings Warren** of Middlebury produced custom and ready-made furniture for a fashion-conscious clientele. This Empire cabinet-bookcase, inscribed with his name, was built around 1825 from local white pine and cherry. Its fine mahogany and satinwood veneers, carved ionic columns, and jigsaw work are evidence of a highly skilled cabinetmaker.



By the mid-1800s cabinetmakers improvised and developed specialized tools that improved the efficiency and quality of their work and enabled mass production. Furniture manufacturers printed catalogues, employed traveling salesmen, and sold wholesale to stores. Some developed markets abroad, like the **Hale Furniture Company** in Arlington that made regular shipments to Latin America.

**H.T. Cushman Company** in North Bennington, founded in 1870, produced wooden novelties. By 1900 it was manufacturing 150 different pieces of furniture including Mission furniture, Smokers' furniture, and its popular “Colonial Creations” with a “scuffed” maple finish that looked 150 years old.

*“I have never been...engaged in any business which I enjoyed so much as the cabinet shop...I felt contented and happy, and never aspired to any distinction than that connected with my trade and improvements in the arts.”*

—Stephen Douglas, apprentice to Nahum Parker of Middlebury, 1828; 1860 candidate for president.



Armchair, circa 1815–1830. Courtesy of Bennington Museum.

Part of the series: *History of Woodworking in Vermont 1791 – Today*

## Contemporary Woodworkers



Vermont woodworkers are spread over the state, most working in rural shops and small towns much as they did two hundred years ago. They pride themselves on the quality of their work and business relationships. Many have national and international reputations. Some work exclusively with hand tools, reproducing or interpreting traditional designs and products or creating imaginative, unique items. Others use state-of-the-art computers, laser woodcutters, and automatic routers. They make a wide range of products that are functional, innovative, and decorative. The motivation for many contemporary woodworkers comes from living in a beautiful, peaceful, natural environment.



Photo by Mary Joanne Parker

**Vermont Utensils** in Williamsville is a family-owned business that makes nineteen different gourmet kitchen utensils handcrafted in Vermont, using primarily Vermont-grown species. The company wholesales to many nationally known retailers that sell the products under their own name. Orders can be for as many as 20,000 pieces at a time.

*"I personally talk to the people who call about orders. Whether a company is large or small, they know they can talk with me.*

*That's good for business."*

—Kevin Moore, President, Vermont Utensils

**Alan Stirt** of Enosburg Falls is a nationally recognized bowl maker who crafts his unique pieces almost entirely from Vermont black cherry, butternut, hard and soft maple, ash, and yellow birch that he gets from local firewood cutters, farmers, and loggers. He uses a small chainsaw mill and a home version of a lathe that can cut several bowls from one chunk of wood.



*"Utilizing elements of pattern, line, weight, texture, and form... I seek a balance between the dynamic and the serene. By playing with the tension... I create pieces that have life."*

Ceremonial bowl by Alan Stirt.



Maple Landmark employees aboard miniature wooden train at factory showroom.

**Maple Landmark Woodcraft** of Middlebury, founded in the 1970s, is one of the largest manufacturers of wooden toys in the U.S. Its award-winning line of Vermont-made toys includes the Name Train and MY Train wooden railroad systems. The company uses native maple, pine, and cherry to produce classic wooden products that will last for generations.

*"Maple in the company name paired with our location in Vermont is valuable to our business. We live and make products by the rules and wisdom that our society developed over 100 years."*

—Mike Rainville, President, Maple Landmark Woodcraft



Turned wood cowboy hat by Johannes Michelsen.

**JoHannes Michelsen** of Manchester Center makes baseball caps, garden hats, top hats, and cowboy hats...from wood. Using grinding tools and devices of his own design, he turns 100-pound Vermont hardwood logs and burls unusable for other purposes into hats that weigh six or seven ounces. Customers all across the country purchase the hats to wear, display, and collect.

*"I think that Vermont has more artists and artisans per capita than any other state. It seems like there's a vortex of activity in so many Vermont towns."*



Part of the series: *History of Woodworking in Vermont 1791 – Today*

## Uniquely Vermont



**Authenticity. Integrity and honesty. Craftsmanship. Tradition. Creativity. Quality. Lasting value.** Many consumers find it easy to describe why they buy Vermont wood products: Made-in-Vermont furniture or crafts evoke a sense of well-being—a feeling that they are helping to preserve a way of life.

Photo by Thomas Aron, Jr. Courtesy of Farmhouse Mills



### Vermont's forests and forest products

craft shows, fine galleries, museums, national and international magazines, and television programs each year. Vermont woodworkers and manufacturers actively demonstrate their commitment to preserving the environment. Many obtain their wood from certified forests. Some utilize wood that in the past would not be saleable, such as waste wood that is too short or has imperfections in the grain. Some give sawdust to farmers for cattle bedding or wood scraps to neighbors for kindling. Makers of wooden bowls cut several pieces from the same chunk to reduce waste. Partnerships have formed between Vermont foresters, loggers, woodworkers, manufacturers and others who share goals of healthy forests and a healthy wood products industry.

industries are fundamental to sustaining the rural character and economies of Vermont communities. From forests to sawmills to finished products, there are more than 500 wood products companies that employ almost 12,000 Vermonters. Woodworkers and wood product manufacturers view the state's rural character, small communities, and distinct identity as motivating factors for high quality work and as assets in marketing their products.

Vermont wood products enjoy an excellent reputation in the marketplace and the art world. Many have won prestigious awards. Vermont furniture, wood turnings, carvings, and other types of woodworking are exhibited in national

*"We do have some competitive advantage—a little bit of it comes from our proximity to abundant raw materials that are prized worldwide. More of it is intangible and rooted in where we live and how this place informs our business and aesthetic values.*

*We live and work in a place and a culture that historically has placed a higher value on small villages with small, simple, understated but well-designed structures that inform all of our aesthetic sensibilities; a culture that historically has been more prone to preserve and reuse than to tear down and replace.*

*Most of our businesses are small and located in small communities. It's much easier in a small business to know everyone and to instill in that organization a commitment to quality."*

—Tim Copeland, Copeland Furniture



The Bridgewater Mill, home of Charles Shackleton Furniture.

Courtesy of Shackleton Thomas Fine Handmade Furniture & Pottery

Photo by Ron Paul, Courtesy of Dave Lafont

The facility of Newport Furniture Parts and Newport Gliders in the heart of the village of Newport in Northern Vermont.



Part of the series: *History of Woodworking in Vermont 1791 – Today*

## Contemporary Furniture Makers



Across Vermont, in workshops small and large, skilled cabinetmakers continue the long tradition of furniture making. Some make reproductions and adaptations of early styles. Others create innovative one-of-a-kind pieces. Others blend tradition with personal expression. All contribute to the evolution of a Vermont-style approach to furniture making that unites the skills of the builder, imagination of the designer, needs of the customers, and characteristics of the wood. Vermont furniture does not have one definable style, but much of it has common characteristics: it is made mostly of North American hardwoods, much of it from Vermont; it is simple in design; it makes the most of the wood's grain; it has a natural look; and it is beautifully made.



Pompanoosuc Mills craftsman Horace Pike installs the doors of a custom cabinet in solid cherry for a customer in New York City.

**Pompanoosuc Mills** began in 1973 in East Thetford. The company produces two hundred pieces of New England and Mission style furniture a week, each built individually from native woods. Pompanoosuc Mills sells through its own showrooms in six states. It is the largest build-to-order furniture company in the country.

*"We are responsible citizens who produce a product that is worth what it costs. The story of our company is that our products are from Vermont, made by Vermonters who make a good living while making good furniture."*

—Dwight Sargent, Founder & President

**Charles Shackleton** Furniture Makers of Bridgewater builds contemporary interpretations of classical pieces. The company's fourteen skilled woodworkers each build one piece at a time, from milling the wood to applying the final finish and signing it.

*"I want to show the hand work, the evidence of hand tools, and a feeling that someone made that piece of furniture. Mass-produced furniture has lost that feeling. It's missing personality."*

Bill Potach handplaning at Charles Shackleton Furniture.

Photo by Thomas Aron, Jr.



Rick Schneider made the acorn and oak leaf relief carving for the restoration of the governor's chambers in the Vermont Statehouse. It was cut in planer to make a continuous vine border around the cornice in the room.

**Rick Schneider** of Vermont Custom Woodworking in Monkton specializes in architectural woodworking. He makes striking spiral staircases, deep relief carvings, 3-D sculptures and fine furniture. Most are one-of-a-kind and limited edition pieces.

*"My work has become more mechanized. I can create three-dimensional designs from laser-scanned models. The computer is connected to a robotic router. The machine does the basic carving, and I use hand tools to carve the surface."*

Cherry and walnut double-level spiral staircase by Rick Schneider. 25 feet high, 7 feet wide, with a 75-foot continuous handrail.



Part of the series: *History of Woodworking in Vermont 1791 – Today*

## Contemporary Furniture Makers



"The Vermont furniture industry is always about solid wood," says one furniture maker. Today it is also about forest sustainability and prudent use of wood resources. Fine cabinetmakers are making use of wood that not long ago was deemed unusable. Some are using only "certified" wood, grown in a forest managed according to criteria for sustainability.



Bruce Beeken and Jeff Parsons in their shop at Shelburne Farms. (above right) The Peltosner bench was designed and made for Shelburne Museum.



Photo by Sandy Wilkins

**Beeken Parsons** is the creative, furniture making partnership of Bruce Beeken and Jeff Parsons located in the historic farm barn at Shelburne Farms. Their work for fine homes and college libraries is based upon principles of clean design, focused craftsmanship, and a strong material presence that is closely linked to sustainable forestry practice. They select, saw, and dry unusual types of native woods that root their work firmly in the traditions of Vermont furniture.

*"We believe that 'character wood,' with knots, heartwood, sapwood, and mineral streaks, brings a natural beauty to our furniture. We highlight rather than eliminate these characteristics; they give our furniture soul."*

Photo by Eric Gilbert Fox



Asymmetrical chairs and Cascade lingerie chest by Steve Holman.

**Steve Holman** of Dorset does non-traditional, often whimsical work. His furniture may have jaunty angles, sweeping curves, or novel shapes; or it may be handsome and practical. He works with many varieties of wood, both local and exotic.

*"The seed of inspiration comes from the customer. I enjoy working in lots of different styles to fulfill their needs and desires."*



Photo by Chuck Nelson

**Janet Collins** of Ryegate makes custom furniture in traditional styles, incorporating elements from various examples of 17th- or 18th-century furniture. She especially likes to work with figured and richly-colored burls and woods. Her meticulously made pieces often feature detailed decorative hand work. "Carving is a form of one's signature," she says.

*"The early designs are beautiful. I look for the most figured maple I can find. I've bought some from a man who seeks out particular trees, mills the wood, and sells it to violin makers. That wood is really 'alive.'"*

Curly maple Queen bed by Janet Collins. (right) Janet at work in her studio.



Photo by Hilary Ryan