

PEOPLE **SAVING** PLACES

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OFF THE GRID
MILL REVIVAL

PALM SPRINGS
BEFORE
MIDCENTURY
MODERN

PHOTO ESSAY
ARCHITECTURAL
AMERICANA

A photograph of a small, two-story stone schoolhouse with a gabled roof and a chimney. The building is situated in a vast field of tall, golden-brown grass. In the background, there are rolling hills and mountains under a blue sky with scattered white clouds.

CLASS ACT

SCHOOLHOUSES IN RURAL MONTANA



Back to the

Sally and Tony Grassi weren't looking for a mission; they were just out for a little fresh air. But on a springtime stroll from their son and daughter-in-law's farm in Freedom, Maine, something like a mission is what they found. Next door to the farm, where Sandy Stream descends through Freedom's sleepy village center, stood a picturesquely derelict 19th-century mill. "We walked past the mill and the pond and the dam,"

Tony says, "and I thought, 'What a cool old building.'"

The scene had inspired similar thoughts in others, no doubt. But the Grassis would take matters much further, embarking that day in 2004 on a course that would lead to their buying the property and rehabilitating it into a mixed-use structure with a school, restaurant, and office space. The project would ultimately involve not just restoring the



It took a village to resurrect a ramshackle mill in the town of Freedom, Maine

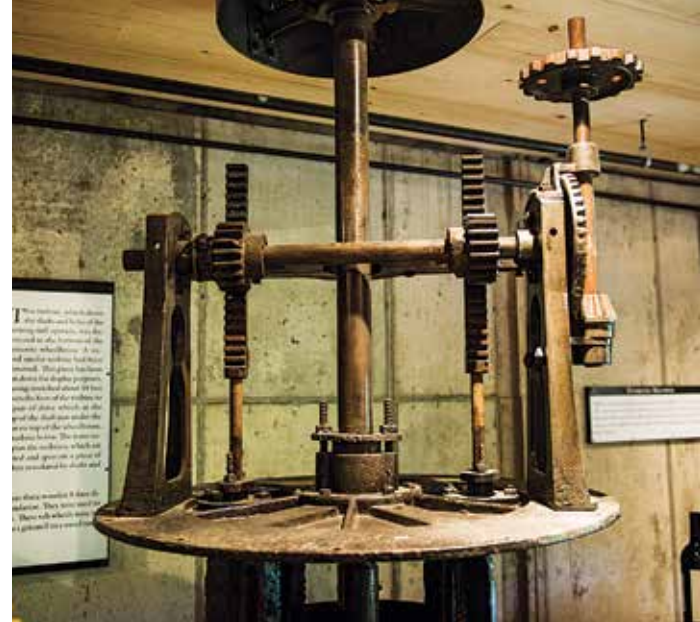
Grind

by
Bruce D. Snider
photography by
Brendan Bullock

historic building and dam, but also generating environmentally friendly hydroelectric power, boosting the local farm economy, and once again making The Mill at Freedom Falls what it had been for more than a century: the beating heart of a thriving rural community.

Coopers Mills, Weeks Mills, Bar Mills: Maine place names often reference their origins. And in the late

18th and early 19th centuries, when many of the state's inland towns were founded, access to water power was essential. "Any community of any size just about always started at a mill site," says Christi A. Mitchell, architectural historian at the Maine Historic Preservation Commission, who helped the Grassis get the Freedom mill listed on the National Register of Historic Places. "It was the center of everything."



Without a sawmill and gristmill nearby, she says, “there was [often] no way to get wood to build your house—other than hewing logs—or to grind your grain.” Mills later formed the backbone of local industry, Mitchell adds. “They evolved to do what needed to be done. There were lath mills, stave mills, stone polishing mills.” Wooden waterwheels generally gave way to water-driven iron turbines and, later, to electrical power, but mills remained central to small-town rural life well into the 20th century.

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BUILT AS A GRISTMILL IN 1834, the Freedom mill served local farmers by grinding their grain into flour, mostly for household use. A two-story timber-frame structure, the original building stood on a 20-foot-high granite foundation laid in part on the bedrock of the stream bed. Water diverted through the cellar drove horizontal wooden tub wheels (unlike the vertical waterwheels seen in pastoral paintings, these were fully enclosed), which turned three pairs of millstones via vertical shafts projecting through the floor. Converted around 1894 to a wood-turning mill, it produced dowels, spools, broomsticks, and tool handles. Beginning in 1913, a sawmill on the opposite bank of the stream delivered sawn-up logs to the turning mill in carts, across a narrow-gauge railway bridge.

The turning mill operated until 1967, when it succumbed to competition from larger manufacturing companies, the depletion of local hardwoods, and the growing popularity of plastics. The Grassis’ fateful encounter with the property came in the nick of time. The dam had seen some maintenance over the years, but the mill building had been essentially abandoned to the elements. The foundation was badly damaged; several shedlike additions that wrapped around the original building were beyond redemption. Remains of the long-abandoned sawmill structure were lodged in the stream.

The Grassis are committed preservationists, but while Sally was captivated by the historic building, her husband had his eye on the stream. A retired investment banker and former chairman of the Nature Conservancy and American Rivers, Tony had worked for years to restore migratory fish populations by removing hydroelectric dams on Maine’s Penobscot River. At the Freedom mill site, however, he saw a dam worth saving.

“What got me was the stream, and trying to see if we could get hydropower that was really green,” he says. He checked with his friends at the Nature Conservancy, who found no history of Atlantic salmon or alewife runs on Sandy Stream. “They said, ‘That’s a dam that should probably stay rather than go,’” he says.



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LEFT, CLOCKWISE FROM TOP

The restored Mill at Freedom Falls houses a school, offices for a nonprofit, and a farm-to-table restaurant; The top half of a steel turbine excavated from the mill’s foundation; Architect Christopher Glass outside The Mill School’s entrance, which incorporates an original sliding door; Tony and Sally Grassi, the mill’s owners; “Marriage marks” etched by the original builders to identify connecting timbers

ABOVE

An existing dam retains the mill pond, part of Sandy Stream.

“So I ended up in the strange position of developer.”

Only then did he look closely at the building. The timber frame of the original gristmill structure remained remarkably intact, but the floors were in poor condition. Cedar shingles were falling off the exterior walls. Birds flew through the empty window openings. Inspecting the interior with general contractor Jay Fischer proved both inspiring and cautionary. “I fell through the floor upstairs,” Tony says. “Fortunately just one leg.” But a structural engineer’s report showed that repairs were feasible, so the project advanced to the next step: securing a stack of permits from entities ranging from the Federal Energy Regulatory Commission to the Maine Office of State Fire Marshal and Department of Environmental Protection.

Gaining the support of the town was especially important to the Grassis. By then, Freedom (population 719) had grown so accustomed to the mill as just part of the scenery that when Tony studied zoning regulations for uses permitted on the site, he found none. “Nobody thought about this building when they drew the zoning map,” he says. “You couldn’t get permission to do anything.” He would have to bring the matter to Freedom’s annual town meeting.

Myrick Cross attended the meeting that day, and he listened with interest to Grassi’s proposal. A retired Episcopal priest, Cross grew up on a dairy farm near the center of town. “I remember coming home from school and hearing the singing sound of the saws in the sawmill,” he says. “Freedom used to be a bustling community, with businesses and industry and good energy.” The parents of a schoolmate owned the mill, he recalls. “My classmate made a skirt out of dowels



ONLINE EXCLUSIVE:
For a link to the 30-minute documentary film *Reviving the Freedom Mill*, visit PreservationNation.org/online.



CLOCKWISE FROM TOP

The building before restoration; The mill during the restoration process; Original belt-drive mill equipment hangs from the ceiling of The Lost Kitchen restaurant.

and wore it on a float in the Fourth of July parade.”

After the mill closed, he says, “the town fell into disrepair in a lot of ways—not just the buildings, but the psyche of the community, as well.” A new generation of farmer-entrepreneurs has brightened western Waldo County’s outlook in recent years, and Cross believes a revival of the mill could build on that development. Most at the meeting agreed, according to Grassi. “We came up with half a dozen potential

uses, and the town approved them all,” he says.

Making good on that social capital, the Grassis knew, meant not just fixing the building, but also finding tenants who would truly benefit the town. They didn’t have to look far. The couple has two grown children: Prentice Grassi, an organic farmer who lives and works within view of the mill, and Laurie Grassi Redmond, a state-certified teacher who lives in the nearby town of South China. Redmond



had taken a few years off to raise her daughters, ages 5 and 7, and now she was looking for two things: a teaching job for herself and the right school for her children. Prentice's wife, Polly Shyka, had an idea that would supply both, Redmond says. "Polly told me, 'I've been thinking about the highest and best use of that mill space.'" And she suggested a school.

Redmond had already decided that running an independent private school would require too much

time away from her family. "But then Prentice asked, 'What if you had a pop-up school, with 10 kids or so?'" she says. "And that started to become feasible." She explored other locations, but the mill won out. "The mill is the richest possible place," she says. "You have the falls, the stream, the wetlands, the woods, the hydro-power, the millstones—years and years of curriculum."

She held public information sessions in January and February of 2012. Two months later The

CLOCKWISE FROM TOP
The Lost Kitchen owner and chef Erin French prepares for dinner service; Water flows out of the pond and toward the mill; The building's original entrance is now the entry to The Lost Kitchen.



ABOVE

Laurie Grassi Redmond, director of The Mill School, with her daughter Elsa in a light-filled classroom on the second floor of the original mill building.

Mill School was fully enrolled, with a waiting list. It currently operates three days a week, with 20 students between the ages of 5 and 12. The school is meant to function as a complement to homeschooling programs, which are gradually gaining popularity in Maine.

Shyka had an idea for another tenant, too. Chef and restaurateur Erin French was seeking a new home for The Lost Kitchen, her acclaimed restaurant in Belfast, Maine, 16 miles from Freedom. “I grew up two miles from the mill,” says French. “We’d parade

past it every Fourth of July. It’s where all the bad boys would get into trouble. They’d spray-paint it.” A renewed mill seemed the perfect home for French’s brand of “place-based seasonal food,” she says.

Not only were the building and the stream captivating, but her suppliers—including Polly and Prentice’s Village Farm—lay close at hand. “Probably 75 percent of the food I was using in Belfast was coming from within five miles of here,” French says. The building’s third tenant was another natural fit: the Maine Federation of Farmers’ Markets.

IN THE MEANTIME, Jay Fischer, who had built the Grassis' energy-efficient, ecologically responsible house in the nearby town of Camden, introduced the couple to architect and architectural historian Christopher Glass (a former chairman of the Maine Historic Preservation Commission). Arron J. Sturgis, a timber framer and past president of the nonprofit advocacy group Maine Preservation, visited the mill early in the Grassis' planning process, and the couple hired his firm, Preservation Timber Framing Inc., to complete structural repairs.

Early on, Sturgis made an observation that would prove crucial: Knowing the building would shake when the machinery was in use, the original timber framers had used the English tying joint, an especially rugged method of connecting wall and roof timbers. With such historic details, the building qualified for a listing on the National Register, which helped unlock the state and federal tax credits—totaling 40 percent of the eligible rehabilitation costs—that would make the project financially feasible.

Work began in April 2012, with the demolition of most of the shed additions and repair of the granite foundation. Sturgis' crew jacked the timber frame level, pulled it into plumb, and replaced rotten timbers using the same materials and joinery as the original framers. The 180-year-old carved Roman numeral "marriage marks" remain visible at some joints. To leave the frame exposed on the interior, Fischer's carpentry crew wrapped the structure in a skin of rigid insulation. Only the sharpest eye will detect a slight overhang of the shingled exterior wall beyond the granite foundation.

Historic preservation standards required that the rebuilt additions match up as closely as possible to the way they looked when the Grassis purchased the property. "If they were crooked," Tony says, "they went back on crooked." Glass enjoyed greater design flexibility with the sheds' interiors, where he located such modern accoutrements as stairways, indoor plumbing, and a heat pump system that will extract thermal energy from pond water to heat the building. A new hydroelectric turbine, which will be installed this winter in the powerhouse below the mill, will generate more than enough electricity to serve the building, feeding the surplus into the grid. Just as it did in the 1830s, the mill will derive all of its energy from the stream.

Tony Grassi also seems to derive energy from the stream. Gazing steadily at it from a south window of the gristmill—now part of The Lost Kitchen's dining room—he speaks freely and knowledgeably of its role as a wildlife habitat, its central place in the history and economy of Freedom, and the various and ingenious technologies that put its power to use.

As for The Mill at Freedom Falls' ultimate purpose, he says, "Sally and I started out not knowing what it




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ABOVE
Hydropower equipment will soon be installed in the mill's foundation, where the original water-driven machinery was located.

BELOW
Mill School students on the bridge overlooking the dam

was." But as the project advanced, their goals came clearly into focus. Historic preservation and environmental stewardship provided the motivation, and these values combined in service of a third: community.

"Using old buildings like these to rebuild communities really resonated with our belief in historic preservation and the need for infrastructure to support the farming community, and our view that Maine needs to be smart about how it grows, in order to preserve the essence of what it is," Grassi says. "Strip malls and highways are a disaster. If you could save these villages, bring back these communities, that's the way we'd like to see Maine grow." 

BRUCE D. SNIDER has lived on the coast of Maine for the past 14 years. A frequent contributor to *Preservation*, he is the author of the book *At Home by the Sea*.