

particular interest to Dave Gell, who describes it as a “super-tree – everything the common black locust has, only more.” A native of Virginia, the tall and rigidly straight shipmast locust was imported to Long Island and the Hudson Valley. From there it has since spread to locations in central New York, notably the Finger Lakes region. The tree was not, in fact, used for ship masts but for ribs and planking, where the hardness of the wood gave it an advantage even over traditional oak. Commonly reaching 100 feet, its size and straightness make it an excellent timber tree, yielding more useable board feet than standard black locust.

Gell started the Black Locust Initiative (BLI) in 1996 in response to a local teacher’s proposal that schoolchildren learn skills in arithmetic, graphing, biology, and general ecology principles through hands-on work in the woods. Since then, the BLI has established regular programs and workshops that introduce people of all ages to forestry and forest management techniques, with black locust as the focal point.

Pacing around a paper-crowded table outside his modest home in the middle of a dense woodlot, Gell ticked off the main reasons he has become interested in promoting shipmast locust as a tree ripe for timber management:

- It’s a fast grower, gaining more than 4 feet in height per year on good sites.
- Although heavy and hard as nails, the tree makes versatile lumber.
- The black locust is a legume, fixing nitrogen in the soil that benefits the forest around it.
- Shipmast locust shows the best resistance to rot and insects, including the locust borer, making it the best candidate to replace pressure-treated lumber.

Gell and BLI volunteers have been working out the best method for propagating the shipmast locust, which normally doesn’t produce seed pods. The shipmast locust, even more than regular black locust, is a root-sprouter, so making selective root cuttings that contain adventitious buds is the best way to go. The samples, taken from genetically superior trees, are carefully gathered and stored, then planted in prepared clearings amid other woodlot species. Gell does not believe in monoculture row plantations like those in Hungary, for example, where black locust growing stock imported from America has become a major timber tree.

Instead, his vision for the future of shipmast locust is to grow it in a diversified forest culture.

*From left: Dave Gell building a farmer’s market stand made of weather-resistant black locust; Jennifer Gell plants black locust seedlings in a clearing among conifers. This nursery project is in a woodlot behind Interlaken Elementary School in Interlaken, New York; a shipmast locust and its offspring.*

“You can do the row planting, but you’re sure not going to get as good lumber,” he said. Then, pointing to his chickens rooting around in the leaf litter at his feet, he added, “You can put chickens in cages. The thing is that trees like to be in a forest.”

One idea Gell is actively pursuing these days is turning acres of conifer plantations in the Finger Lakes into nurseries for shipmast locust and other hardwood species. The plantations were created in the late 1920s and early 1930s as part of a state-government plan to reclaim old agricultural land for timber production and watershed protection. Now the rows of mature spruce and pine stand largely abandoned, not worth the cost of harvesting. As nursery sites for fast-growing trees like shipmast locust and catalpa, mixed with slower hardwoods like red oak and white oak, Gell believes these plantation could evolve into healthy, diverse forests with trees of different growth stages that are harvested in a sort of crop rotation. He calls this approach to growing and managing timber “progressive forestry,” and he spent part of 2004 working with a group of students on just such a nursery site in the Finger Lakes. Funding for this pioneer project came from a Sustainable Agricultural Research and Education grant from the U.S. Department of Agriculture.

“The biomass is already there, and thermal and moisture issues have already been solved for good growing conditions on healthy soil,” Gell explains. “It’s a low-value timber site at the moment, so a cost-benefit analysis favors using these forests as nursery places for a more valuable timber tree.”

But Gell is not concerned with timber industry economics in any numbers-crunching sense. Rather, the economic calculus of the BLI focuses more on the value of environmental stewardship and community needs. The BLI has even developed an invoice for their projects that contains a bottom line for “green accounting,” a measure of environmental benefits offsetting the dollar value of the work done.

To Gell, his most important work is reaching out to children who will be future stewards of the forests. BLI board member Carl Leopold, son of pioneering ecologist Aldo Leopold and himself a passionate environmentalist, has been an admirer of Gell’s for many years. “The big promise of the initiative is that it reaches kids, and they get just taken away by the great fun of it all,” he said. “Dave Gell has a lot of support from the schools in the community, and it’s just great that the kids can learn in such a constructive and ecologically sensitive environment.”

“You might have a kid in the fourth grade who plants a black locust with his class,” Gell mused. “In 30 years it’s going to be a 70-foot timber tree. He can say later, when he’s a member of the school board or a parent of school-aged kids, that he planted that tree that they can now use to build a playground. It’s a tree that can bridge the generations.”

It’s also a tree that may eventually provide a natural alternative to toxic pressure-treated lumber. Whether or not it will be grown in industrial quantities has yet to be seen, but the first steps toward that goal have been taken.

EBEN McLANE IS A NEW HAMPSHIRE NATIVE WHO CURRENTLY LIVES AND WRITES IN THE FINGER LAKES REGION OF NEW YORK.



COURTESY OF DAVE GELL