



HORSE- POWERED LOGGING:

A Once and Future Past

A SMALL BUT DEDICATED GROUP DRIVES A
RENAISSANCE OF HORSE-PULLED LOGGING IN THE
SOUTHERN APPALACHIANS AND BEYOND.

Story and photography by Andrew Jenner

THE WHINE OF CHAINSAWS, some distant, some near at hand, fills the steep, heavily wooded Shenandoah Valley timber lot near Greenville, Va. Working in teams, groups of experienced loggers select specific trees – mostly mature, imperfect or poorly sited tulip poplars and various oaks – and attack the trunks just so, using a technique known as “directional felling.”

And so they proceed, methodically, thoughtfully downing certain trees such that they’re oriented for easy extraction but cause minimal damage to their neighbors in descent. All the while, the loggers are also paying careful attention to what they don’t cut, identifying promising young trees and opening canopy space around these to prime them for growth.

After the felled trees have been “bucked” (trimmed and cut into usable logs), it’s time for the horses. Responding to commands from their driver – seated atop a chariot-like logging cart – each two-horse team snakes through the woods, turns and reverses into position. Once a log has been chained to the cart, the horses lean into their harnesses and drag it down toward the landing at the forest edge, where a crane will add it to the stack of logs and later, load them all onto semis bound for the sawmill.

At first blush, this affair – Biological Woodsmen’s Week 2012 – is a curious blend of antiquated and contemporary: modern chainsaws, safety equipment and semi trucks paired with teams of Percheron, Belgian and Suffolk horses, trained and



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put to productive use as humans have been doing for millennia. The loggers themselves, though, say their techniques and ideas are thoroughly modern ones that happen to borrow heavily from the past.

“These heritage-based cultural activities have a clear place in the present, and a more important place

in the future,” says Jason Rutledge, the Copper Hill, Va., founder of the Healing Harvest Forest Foundation, a nonprofit that promotes the practice of “restorative forestry.”

“This is complex,” Rutledge continues, standing in the woods, aglow beneath the bright autumn sun. “This is not hillbillies in the woods playing with horses.”

Rutledge, an organizer of Biological Woodsmen’s Week, was joined for the event by about 30 horse-loggers from eight states. The group spent a week in October harvesting tens of thousands of board feet of timber from a large woodlot on an Augusta County, Va., farm as a way of practicing, promoting and celebrating restorative forestry.

“It’s not about being old-timey ... What we’re demonstrating is that it’s still a relevant method for extraction,” says Mitch Goldman of Fauquier County, Va., one of the participants in Biological Woodsmen’s Week.

Restorative forestry, with its emphasis on selective,



Far Left: A team of Suffolks share horse-whisperer secrets as they wait to drag another log out of the woods.

Left: Tulip poplar and oaks are the major hardwood species harvested in the Shenandoah Valley.

Below: Labor-intensive horse-powered logging leaves behind a far smaller trace on the forest than diesel-powered machinery.

low-impact harvesting and use of animal power to extract timber from the woods, sits at the opposite end of the logging spectrum from the standard diesel-powered, clear-cutting tendencies of industrial forestry. And that's exactly where Rutledge, first introduced to horse logging as a boy by an illiterate sharecropper in Southside Virginia, is launching this "quiet, bottom-up revolution" that he hopes will reinvigorate rural communities and create jobs while restoring the planet.

He calls it a "tree-roots movement" – one of many such turns of phrase he employs, part sociology professor, part agitator, part lumberjack. He sees a direct link from our petroleum-soaked, chemical-dependent way of life over the greater part of the last century to cancer epidemics and extreme weather events, but he self-identifies as an "environmental actualist," distinguished from a garden-variety environmentalist by the dirt under his fingernails and the calluses on his hands.

"We're trying to create an economic situation

that's more beneficial to everyone and the environment," says Rutledge.

While it's a modern, forward-thinking vision, it's also severely complicated in the practical sense by our economic system that rewards efficiency and quantity over care and quality. That puts horse loggers at a disadvantage in terms of man-hours per board-feet. A man with a pair of Percherons can't keep pace with a skid loader, and a logger with a chainsaw can't level a forest as quickly as one at the wheel of a feller-buncher (a tree-cutting machine so awe-inspiring and terrifying that it's well worth looking up on YouTube).

It's a point Rutledge and his colleagues readily and happily concede. Horse logging is inefficient as assessed by the mainstream model. But framed in a different way (as a general rule, horse loggers tend to frame lots of issues in different ways), logging with horses represents something badly needed in rural communities throughout the country: jobs, lots of them; "green jobs" to put it in trendy economic development terms. More man-hours isn't an inefficiency,

Click to see the effort required to get a pair of horses to pull a giant poplar butt log containing almost 700 board feet of lumber off the mountainside.



Over the long term, however, say Rutledge and company, a healthier forest can sustain more frequent gentle harvests and actually return more money to the landowner.

Rutledge says. It's a job-creation tool.

Generally, loggers give private landowners an agreed-upon cut of the gross sales value of logs harvested from a particular tract. And (again, in general), because of labor costs, horse loggers have to keep a greater percentage of the overall sale to make money, meaning the landowner ends up with less if s/he hires a horse logger.

"Ends up with less" though, is again entirely a matter of perspective. Yes, the owner will probably end up with a smaller check right now. But if the horse logger is trained in the principles of restorative forestry, the owner will also end up with a healthier forest rather than a heavily harvested, degraded forest, or worse, a muddy tract of stumps. (Because of the high overhead associated with transporting and operating mechanized logging equipment, to "cheaply" and "efficiently" harvest a woodlot, conventional logging usually involves a far more intensive harvest to maximize short-term income).

Over the long-term, however, say Rutledge and company, a healthier forest can sustain more frequent gentle harvests and actually return more money to the landowner.

Ben Harris, owner of Sinking Creek Horse Logging in Roanoke, Va., compares the trees in a forest to stocks. You could cash them all in now. Or you could harvest a few, chosen to allow promising

young trees to thrive and appreciate rapidly, and keep coming back every so often, taking a few draws down here and there as the entire forest portfolio expands.

One final economic argument advanced by Rutledge involves the ecological services provided by healthy forests: carbon sequestration, watershed protection, biodiversity preservation, etc. These are quantifiable, but excluded from our present system. The sawmill's prices don't reflect the economic value of the forest that's (maybe) left behind once the harvest is over.

If that were the case, Rutledge says, horse logging would be a no-brainer everywhere. He hopes – expects even – that the day is near at hand. But it's not here yet.

Still, interest in horse-powered, restorative forestry is growing, up "1,000 percent" over the past decade or so, in Rutledge's estimation. Harris keeps himself and an employee busy with full-time logging work within a 70-mile radius of his home in Roanoke, and the eye-catching spectacle of a team of horses dragging logs around is great marketing to the neighbors, pretty much selling itself, he says.



Facing Page: A rut is all that's left behind after a log is dragged out of the woodlot, leaving behind a healthier forest than before.

Left: Lee Redifer of McGaheysville, Va., sits atop a logging cart, about to coax his Belgian draft horses to drag a large tulip poplar log out of the woods.



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Click to hear an interview with Sinking Creek Horse Logging owner Ben Harris.

Mitch Goldman has plenty of work in northern Virginia to make a living (but not a killing – a sentiment he expresses with pride, emblematic of another facet of the restorative forestry ethos: decent, dignified livings through good, honest work is all they're after).

One trend in favor of restorative forestry is increasing fragmentation of forestland ownership in Virginia. According to statistics from the US Forest Service, the share of privately owned forested tracts of 20 acres or less has crept steadily upward over the past decade, from 13.5 percent in 2001 to 16.3 percent in 2011. Because the overhead to transport logging equipment to a site remains the same regardless of tract size, smaller and smaller properties tip the economics – even in its conventional form – in the horse loggers' (or at least, the low-overhead loggers') direction.

Aesthetics also play a major role, Rutledge says. Most people who buy relatively small, wooded properties aren't interested in wringing every last cent out of their timber resources. They want to own a beautiful forest, and there again, low-impact, restorative,

horse-powered loggers enjoy an advantage.

"Restorative forestry leaves the forest intact, and that's what [these landowners] want. The timber value coming off their land is way down the list for their concerns," Rutledge says.

Today, the 25 or so active horse loggers whom Rutledge estimates to be working in Virginia still face big financial challenges. They remain in competition with mechanized loggers, and their primary market for logs remains the conventional sawmill that calculates payment on its conventional scale.

And yet, there are promising signs. Most of them have far, far more work available to them than they could possibly undertake, and Rutledge believes that a shift of consciousness has begun. The message of restorative forestry is finding a wider audience. More and more people are seeing the forest instead of the trees. They understand the ecological, economic, aesthetic and social value of healthy forests, and how restorative forestry enhances all of these, and how, in all sorts of areas of life, it's more important to focus on what you're leaving behind than what you're taking with you. ❧