

WORLD•WATCH

VISION FOR A SUSTAINABLE WORLD

This Old Barn, This New Money

by Brian Halweil

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THIS OLD BARN, THIS

**TOBACCO FARMERS ARE IN TROUBLE. EXCEPT,
THE ONES WHO HAVE DISCOVERED A**

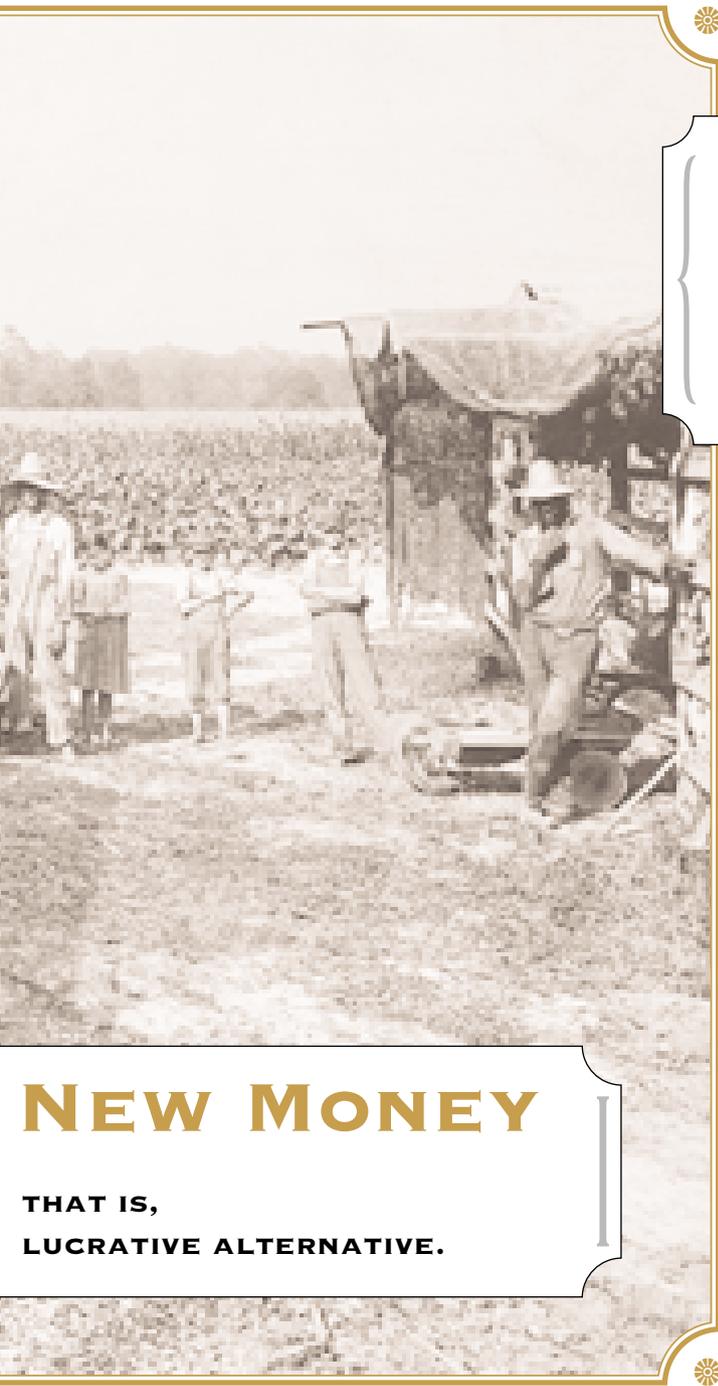
 **BY BRIAN HALWEIL**

From the outside, this old barn in Sticklelyville, Virginia looks like any other barn you might find among the remote mountain hollows of Appalachia. Rough pine and hemlock siding keeps out the rain and wind. Chestnut and oak beams hold up the roof. Rows of curing tobacco plants hang from the rafters, their tints of lemon, orange, and mahogany reflecting the autumn colors of the surrounding hillsides.

The barn stands in the shadow of Powell Mountain, a long, thin sandstone ridge in the southwestern cor-

ner of Virginia that is wedged between eastern Kentucky and Tennessee, about midway along the Appalachian mountain range that stretches across the eastern United States from Georgia to Maine. The Powell River runs below and parallel to the ridge, through the prime farmland it has carved out over the millennia—now Powell Valley. The next ridge to the south is Clinch Mountain, flanked by its own valley and river. Stone Mountain is to the North.

What sets this barn apart from its neighbors is the recent addition of a new refrigerator and packing shed for vegetables—one of the reasons why a handful of local



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PHOTOGRAPH AT LEFT:
TOBACCO HARVESTING AND CURING, WILSON COUNTY, CA. 1926

For generations, local farmers have gathered in barns at this time of year to bundle their cured tobacco for auction. But this year, Askins has been working to rescue the last of his organic bell pepper crop from the coming frost. He has brought 61 boxes of peppers to the barn to be sorted, cleaned, and boxed in the new packing shed. The peppers are bound for an Atlanta branch of Whole Foods Market, a U.S. chain believed to be the largest organic foods retailer in the world.

Other local growers have come here to admire Sam Askins' harvest and plan what organic crops they will raise next year themselves—mainly for Food City, a local grocery chain—and to discuss the reasons they are all kicking tobacco in favor of organic farming.

"I used to get sicker than a dog, with fever, burning skin, and nausea, if I wasn't real careful with the chemicals I sprayed on tobacco," says Askins. He became particularly leery of flumetralin, a plant growth inhibitor and herbicide marketed as Prime Plus, that farmers use to control the suckers that sprout at the base of the tobacco plant in spring. "I usually ran a low grade fever, with my skin itching and burning, when I used Prime." The chemicals may have affected the environment, as well. "You don't hear bullfrogs or toads anymore, because we've poisoned the streams and creeks with our chemicals," he speculates. He also describes the symptoms of nicotine poisoning from handling the ripe tobacco plant: sudden nausea, dizziness, and headaches. The other growers, all of them at least third-generation tobacco farmers, nod in agreement.

The shift underway in this tail end of a state renowned for its flavorful tobacco is representative of a trend throughout the United States and the world, as farmers beset by falling prices, and tired of dealing with chemicals, switch to organic crops to protect their livelihoods. Askins will receive \$26 for each 25-pound box of his organic bell peppers, as compared with the mere \$8 he'd get for a box of conventionally grown peppers.

As of the spring of 2003, there were 40 growers who had made this transition in Virginia, along with another 18 in nearby North Carolina. Together, they

NEW MONEY

THAT IS,
LUCRATIVE ALTERNATIVE.

growers have gathered here on a rainy morning. The men sit on stools and boxes in a new office built into the barn's loft. The office is solid, but unpainted and without finishing touches. Despite the very traditional hanging tobacco (a local grower—not present—is renting the space), a big change is brewing here.

Among the unlikely pioneers who have come to discuss this change is Sam Askins, a 54-year-old farmer whose family has been raising tobacco in nearby Russell County since 1786. "Growin' 'bacco is a *bad habit*," Askins says with a chuckle, as he adjusts his bright orange hunting cap. "So I quit."



Bayard Wootten, North Carolina Collection, University of North Carolina Library at Chapel Hill

TOBACCO FARMER AND HIS THREE SONS, 1930s

now manage a total of 550 acres—more than four times the amount of land turned over to organics just two years ago, but still only a tiny fraction of land in the tobacco belt.

Despite this small scale, I saw signs in this gathering that, contrary to the popular notion that you can't teach old dogs new tricks, we humans may not be just creatures of habit. The "old dogs" notion may well have its deepest roots in places like this, where traditions gain strength and permanence as one generation passes them to the next. But if stubbornness is innate to humans, so too is the ability to adapt to new circumstances. In fact, our prospects for saving life on Earth may well depend on such adaptability.

BOTTOM LAND, BOTTOM LINE

"The financial return is very attractive," says John Mullins, a 35-year-old who is part owner of the converted barn. Mullins has been around tobacco since he was a kid, but decided to raise Prudens Purple tomatoes, yellow Yukon potatoes, and half a dozen other heirloom vegetables—all organically—several years ago. (Heirlooms are traditional varieties not available from large-scale commercial producers.) Mullins says that whereas he netted about \$2,500 from his best acre of tobacco this past season, he cleared roughly \$20,000 from a nearby acre of organic grape tomatoes. "Grow-

ing tobacco is like riding a dead horse," he allows.

For years, a U.S. government-administered quota system stabilized the price of tobacco and offered farmers a level of financial security unprecedented in agriculture. (The rate for tobacco averaged about \$2 per pound, about the same price that a corn farmer can expect for a bushel weighing 56 pounds.) But the quota system has collapsed in recent years as American cigarette makers use more and more cheap imported tobacco from Turkey, Brazil, Zimbabwe, and other developing countries. Today, an estimated half of the tobacco in a cigarette sold in the United States is foreign grown, according to Department of Agriculture statistics.

Despite this shrinking domestic market, farmers in these hollows remain bound to tobacco by history and habit. Their communities were originally formed around the rhythm and traditions of growing, harvesting, curing, and marketing tobacco. When a nonprofit group called Appalachian Sustainable Development first began helping tobacco growers raise and market organics in 1995, it found that among the majority of the farms, resistance to change was pervasive. "A few back-to-the-landers, some hippies, and one Amish family quickly got on board," recalls the group's head, Anthony Flaccavento. After that, despite the profits, very few of the traditional farmers seemed willing to make the leap.

Those who did produced mostly on a very small



TOBACCO FIELD, WILSON COUNTY, CA. 1935

scale, to sell at farmers' markets or to neighbors who would subscribe to a season's worth of produce. "We mostly preached to the choir," Flaccavento says, "which kept our production capacity and our capacity to reach out to more traditional farmers fairly limited."

Then, in 1999, the group started to market their produce through the Food City chain under their own label, Appalachian Harvest—a trademark intended to capitalize on the strong cultural identity of the area. "Farmers and their wives began seeing the label when they shopped," giving the work some legitimacy and piquing the interest of the "old boys" network of tobacco growers, according to Flaccavento. The number of participating farmers jumped to 25 in 2001, then to 40 by the end of 2002. Appalachian Harvest produce began appearing in stores and restaurants throughout Virginia, as well as in North Carolina, Washington, D.C., and as far north as Philadelphia.

FORGET THE FLUMETRALIN, BRING ON THE LADYBUGS

Tom Peterson, an organic farmer who runs the sustainable agricultural program for Appalachian Sustainable Development, says that organic vegetable and fruit production requires an entirely different approach. "Tobacco is an industry not particularly interested in [the mature plant's] appearance," he says, explaining

that tobacco farmers essentially market crinkled and burnt looking leaves. "Appearance can make or break an organic vegetable farm."

Organic farmers need to learn about different pests and plant diseases, watering requirements, and tools. They have to think about proper pollination, something that isn't even a concern with tobacco, which is raised to maximize leaf growth and prevent flowering.

Instead of having to worry about blue mold on tobacco, the new organic farmers have to deal with another plant disease common in humid regions: early blight on tomatoes. Instead of cutworms infesting tobacco fields, they cope with the striped cucumber beetle. The smallest scar from this pest early in the season can result in a mature cucumber that is bent and unmarketable.

As Peterson explains, organic farming generally results in fewer pest outbreaks, as insect and plant diversity build to provide a wider range of natural defenses. But "we still need to ease people into this new approach," he says. To control early blight, for instance, he encourages the growers to trellis their tomatoes to assure good air flow through the rows. Ladybugs and lacewings may be brought in to eat the eggs of the striped cucumber beetle. The beetle can also be contained by planting broccoli, nasturtiums, marigolds, or catnip.

Aubrey Raper, who runs a similar transition program for the Appalachian Sustainable Agriculture Project in

western North Carolina, thinks that tobacco growers in this part of the country, where small farms are the norm, might be ideally suited for the hands-on management of organic vegetable production. Most growers already keep vegetable gardens for household use, canning, and possibly some roadside marketing, he says. And the rich soils and long growing season mean that local farmers can grow pretty much anything they want.

Both Flaccavento and Raper feel that local government agencies and agricultural universities have not been as helpful in this transition as they could be. “The State Department of Agriculture has been scratching its head for years about what to do instead of tobacco,” while ignoring the exploding consumer demand for organics,

Raper says. “We are just a little wheel, a small gear in the giant machinery.”

Ross Young, extension director for nearby Madison County, North Carolina, agrees that more can be done to help farmers shift out of tobacco, but says the organic effort is “just one small program” among many possible alternatives. “It’s tough,” says Young, “because developing scientific research and extension materials relevant to organic farming doesn’t happen overnight.”

The work being done by Flaccavento’s and Raper’s groups is partly underwritten by money from the 1998 landmark settlement between state attorney generals and the tobacco industry, which sets aside funding for each state to help farmers convert to other crops or businesses. The Virginia Tobacco Indemnification & Community Revitalization Commission, created from settlement money, provides about one-third of the \$500,000 budget for Flaccavento’s Appalachian Sustainable Development Project, including most of the funding for the converted tobacco barn.

With the average tobacco farmer in this area now in his 60s, change here is slow. But Warren LaForce, who is 29 and farms 15 acres with his father in nearby Dungannon, Virginia, anticipates the emergence of some new local traditions. LaForce went to the University of Virginia for three years to study environmental science, then to Iowa State for a year to get some background in horticulture. He left before finishing his degree to take over the family farm—an unusual decision among young people in this part of the country, who often use college as a way out of farming. Many of Warren’s friends have left the area. He has stuck around, but he’s not stuck in old ways.

LaForce recently attended a conference on sustainable agriculture in Durham, North Carolina. He returned brimming over with ideas for his own farm,



North Carolina Collection, University of North Carolina Library at Chapel Hill

including the use of mobile greenhouses, mushroom compost, and production of organic seedlings to supply local growers.

Broad shouldered and with a mind for numbers (“He’s a walking calculator,” his mother chuckles), LaForce rattles off statistics to assess each scenario—labor time per plant, seedlings per square foot, profits per acre. “I can fit 958 seedling trays in our new greenhouse. We’ll say 1,000. Uh, 72 plants per tray. We use 72-cell trays for retail and 48-cell for growers because they use plants with bigger rootballs. That’s about 70,000 plants for an organic transplant business. I can





TOBACCO WAREHOUSE, WAKE COUNTY, CA. 1920

plant a 72-cell tray in four minutes. I did 15 trays while watching a basketball game last night. We'll sell five seedlings for a dollar at our farmstand. Seventy thousand will net about twelve thousand dollars."

At the conference in North Carolina, LaForce noted that the most seasoned organic growers only had 10 to 15 years of experience, compared with local farmers with 50 years of tobacco growing experience. "When I'm my dad's age," he says, "I want to be the guru of organic vegetables." He imagines a day in the future when younger growers struggling with a pest or drainage problem will come by his house to pick his brain.

LaForce has now grown organic cucumbers, tomatoes, squash, peppers, and other vegetables for Appalachian Harvest for several years. Each year, as his expertise grows, he shifts more and more of his family's land permanently into organic production. This past season, for the first time, he made more money selling organic produce than tobacco. "I got into organic for the money," he says with a smile. "But I'm staying with it, because it's the right thing to do."

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