

# Carolina Ground

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Jennifer Lapidus and Stewart Wedthoff

## CLOSING THE GAP BETWEEN FARMER AND BAKER

The 2012 wheat harvest has begun in the Carolinas. Grower Kenny Haines informed me in late May that Billy Carter of Carter Farms in the Sandhills of North Carolina had begun cutting his TAM 303 the weekend before. TAM 303, though a sad moniker for this regionally adapted hard red winter wheat, was the first of the bread wheats that our bakers tried when the prospect of working with North Carolina-grown grains first surfaced. It is one of the varieties that came out of USDA-ARS wheat breeder Dr. David Marshall's Uniform Bread Wheat trials, the effort since 2002 to breed for and develop bread wheat varieties that can withstand the heat and humidity of the Southeast while also performing well in the bakery.

It's been over three years since we bakers first pulled chairs into a circle and began discussing the concept of working with North Carolina growers. A group of us – seven bakeries and one spent baker (me) came together for our first meeting in February 2009. Outside the confines of our bakeries, where fermentation times, hydration, and dough performance rule, we could entertain the idea of working with bread flour grown in the Carolinas.

That first meeting took place just after the profound spike in the price of wheat – later called “the 2008 Wheat Crisis.” This was a big impetus for us, pushing us to consider stepping outside our comfort zone and to take a good long look at our reliance on commodity flours. Even so, it was not until we actually tried the flour made with North Carolina-grown TAM 303 that the momentum for this project gained ground. And now here we are, this many years later, actually doing it.

And what does it actually look like? Clean grain of single varieties in one-ton totes. Our mill room contains grain from four different regions of the state – from far Eastern North Carolina to the Triangle, the Sandhills, and the Western Piedmont. We are milling: Turkey Red (an old variety with a wonderfully complex flavor profile); three of Dr. Marshall's varieties: hard red NuEast, hard red TAM 303, and hard white Appalachian Wheat; Arapaho, a modern hard red wheat (though not regionally adapted, it was grown under favorable conditions); and Wrens Abruzzi Rye, a rye variety that has been grown in the Carolinas since the time of the Civil War. We've just begun doing some simple blending as a result of bake tests

and experimentation. We found that of the modern varieties, we like the TAM's performance better than the NuEast, but its flavor pales in comparison, so we are blending 50/50. With others, like Turkey Red, we are producing single variety flours. And our method of milling: on demand, fresh to baker, stone ground.

Our mill is a 48” Osttiroler stone-burr grist mill made by the Green family in Austria. Going back to stone is one of the most exciting facets of the local flour movement. Roller mill technology, employed by most modern mills, strips away and separates out the bran from the germ and endosperm. Roller milling, although wonderfully efficient, sacrifices flavor and nutrients for speed and efficiency and the extended shelf life of its resulting flour. We embrace flavor, uphold flavor as fundamental. We don't need shelf life because we are milling on demand to our community of bakers. And we don't require industrial speed, as we are a micro-mill, with top projections of about 350 tons of flour per year, or around a ton of flour per day. The average output of an industrial mill in the US is 12,000 cwt/day or 1,200,000 pounds – 600 times more flour than Carolina Ground will produce at full capacity.

We are part of a new wave of industry focused on quality over quantity; we engage our bakers for feedback and direction. And thus far, it is working. After just two months in production, here's some of what our bakers have to say: Dave Bauer of Farm and

Sparrow Breads says, “[The mill provides] potential to make better bread. It's a richer experience, and I think that's what being a baker is all about. Like a winemaker who has grape variation year to year. We've been removed from that experience for too long.” He continues, “Now these flours are alive. They have personality, they fight with you, but you get the reward.” Baker Steve Bardwell of Wake Robin Breads says of working with these flours, “I am getting convinced by our customers that there is a basic difference between our flour and the industrial (roller-milled) flours. I am pretty sure that people like Jen [me] and Dave [Bauer] have always said that freshly milled, really stone-ground flour is different, but I just didn't understand what they were talking about – I am beginning to understand it.”

“We embrace flavor, uphold flavor as fundamental.”

– JENNIFER LAPIDUS

And what about our growers? A major impetus for launching this mill has been to establish fair pricing based on real value removed from the pressures of the global commodities market. Last fall I had the pleasure of visiting with grower Kenny Haines. While riding in the tractor cab with him as he dragged a land planer on the field he was preparing for planting



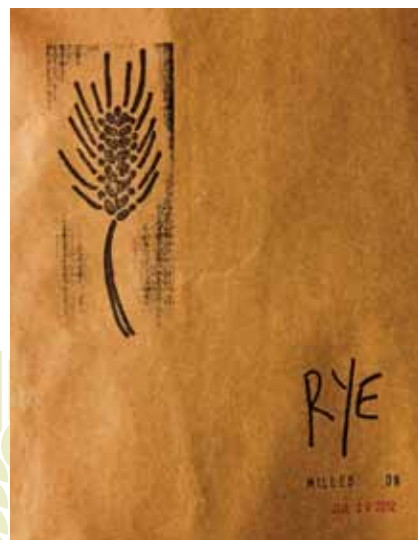
our NuEast seed, we talked. He described some of the costs that the farm must incur which they have no control over. He pointed to a small metal blade on his land planer that they needed to replace – it cost close to \$1,000 just for that small piece of metal. And they are still strapped to the cost of fuel for their tractor and combine. The rise in the price of steel meant they were able to put in only two grain bins with their newly acquired grain and seed cleaning equipment instead of the four bins they had originally planned for. As I listened, I watched out the window as the land planer smoothed the dirt, creating a ridged uniform pattern in the soil, readying the land for our seed.

I know that by working to close the gap between our farmers and bakers, we are heading in the right direction, but completely separating ourselves from global economic pressures is sadly not so simple.

Last week Kenny said our Turkey wheat and NuEast are just turning from green to a golden hue. Once harvested, samples of the grain will be tested for protein, falling numbers (a test that indicates if there is any level of sprout damage), mycotoxins, moisture, and test weight. Joe Lindley of Lindley Mills in Graham, NC, has offered to do thorough lab testing on the grain. A big thank you to Joe for this offer, as he continues to show his commitment to North Carolina growers and bakers alike. He is producing an NC-grown TAM 303 roller-milled flour, a foundational flour which is the perfect compliment to the stone ground flours Carolina Ground is turning out. We do have it good here in the Carolinas. ☀

For more information about Carolina Ground, visit [www.carolinafarmstewards.org/carolina-ground/](http://www.carolinafarmstewards.org/carolina-ground/)

ALL PHOTOS: JOHN DICKSON



The 48-inch, Osttiroler stone mill at Carolina Ground.