BOLTING TOGETHER

Baker's needs help miller grow bigger, better

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Bolted flour may sound like an ingredient from Frankenstein's bakery, but it refers to the process of sifting bran from stoneground flour. The term comes from using bolted cloth, and earns a new layer of meaning as it bolts together two Vermont businesses: Gleason's Grains and the Red Hen Baking Company. Ben Gleason has been growing and milling wheat in Bridport for 30 years. He sells his flour at co-ops and health food stores, and to bakeries like Red Hen. Red Hen's Randy George was using Gleason's Grains whole-wheat flour and thinking of setting up a sifting operation at the bakery so the flour would better suit his needs. When Ben Gleason heard the seriousness of the baker's intent, he decided to expand his operations.

"I needed more height and I needed more floor space," says Gleason. "In order to really have the thing work efficiently I needed the sifter to be up on the second floor."

Gravity is a useful tool in milling operations, and Gleason built a new building, extending from his original millhouse, which he now uses to clean grains. The cost of the project was significant, even with grants from the Vermont Farm Viability Enhancement Program and the Vermont Department of Agriculture. However, the expansion dramatically boosted his output: In 2010 he milled and sold 60 tons of grains—some of it grown by neighboring farmers—compared to 35 tons the previous year. So far, he's been able to meet the challenges of a larger operation without changing the family scale of the farm he runs with his wife, Theresa. Overall, they are pleased with the effort.

"I think the quality of my flours is better," he says.

The quality of his flour has always been high. He's always used a stone mill, which, if the stones are big enough, keeps the wheat berries from being heated in the milling process. This preserves vitamins and minerals. Stone mills create large particles of bran and much finer particles of endosperm and germ. Sifting is not inherently a part of stone milling, but the new bolter allows him to remove a portion of the bran without stealing the germ, too. Another benefit is that the coarser set of sifter screens allows him to clean straw and stray seeds from the wheat prior to milling more thoroughly than either the combine and cleaner.

The Gleasons have named their bolted flours Snake Mountain and Lemon Fair Sifted flours. Snake Mountain is made from hard red winter wheat, and Lemon Fair is pastry flour made from soft white winter wheat. These two types of flour are also available unsifted, and retail outlets still sell more of these than the sifted varieties.

"It's a hard product to promote because people don't understand what I mean by sifted, or what I mean by bolted," says Gleason. People perceive whole-wheat as the most sanctified flour, even though many home and commercial bakers mix white flour with wholewheat to make the dough easier to handle, and the bread less heavy. Using a stone-milled sifted flour instead of this combination would be more nutritious because the germ, and some of the bran, remains with the flour.

"We live in this whole-wheat-or-white world. In the United States we've been told to eat whole grains, which is of course a good thing to do," says Randy George. "But anything less than whole is out the window."

With the emphasis that the FDA has put on whole grains, a lot of products list whole grains as a selling point, regardless of how little whole grain a food contains. Bread made from 100% bolted flour, however, could not be labeled whole grain, even though nutritionally it would have far more going for it than a box of whole-grain Cheerios. The consensus on whole grains leaves little room for curiosity about flour. Even if people were hungry to know more, however, all of the advantages of stone milling and sifting won't fit on a tag in a bakery.

"In France and pretty much every European country, they have a system for expressing how much bran is in the flour, and it's sold at varying levels," explains George.

For example, French consumers know their flours by numbers that name the mineral content, which is read by burning a portion of the flour. The percentage of ash is an indication of how much bran a flour contains.

So how to spread the word to an informationsaturated public? Neither baker nor farmer has an easy answer. Gleason's sells a limited amount of flour in three-pound bags, and these have labels that tell a little of the flour's story. Staff at Red Hen, both the bakery and café, educates people as questions arise. George goes to the farmers market himself on a regular basis and talks to people about the bread and its ingredients.

"There are people who go for this bread," he says of loaves made from bolted flour. "They know what they like about it." Red Hen has always used some bolted flour—it just hasn't come from local farmers. He's been interested in this flour since he started baking naturally leavened hearth baked breads that have a percentage of whole-wheat flour, about 16 or 17 years ago.

"I felt—from my own baking, and also from the reading I was doing about this style of bread—that it was really best made with a high percentage of this type of flour," says George.

Bolted flour is a critical ingredient in Red Hen's starters. Prior to getting it from Gleason's Grains, Red Hen bought bolted flour from Heartland Mills in Kansas, an organic operation famous in flour circles for helping develop a heritage variety of wheat called Turkey Red. Quebec mill La Milanaise is another supplier of high-quality flour. Though Vermont is a tough climate for growing grains, Red Hen also uses flours from Nitty Gritty Grains of Charlotte and Butterworks Farms of Westfield.

Red Hen has more than doubled the amount of flour it uses from Gleason's Grains. In addition to the starters, Snake Mountain Sifted Flour is also used in the Vermont Miche and Crossett Hill round and batard. "And it's gotten better," George says. "It's absolutely a better bread than it's ever been."