

Producing whole wheat breads at larger scale

 bakemag.com/articles/12963-producing-whole-wheat-breads-at-larger-scale

More than a dozen retail bakeries across the country are joining a bold new initiative to offer unique versions of soft sandwich breads that are made with simple — and fewer — ingredients including 50% to 100% whole grain flour. Branded as the Bread Lab Collective and organized by top bakers working with Washington State University's prestigious Bread Lab, this initiative involves a national group of craft bakers, millers, teachers, students and wheat breeders who joined forces to create pure and simple whole wheat sandwich bread that appeals to all.

"There's much greater interest across the country today in clean food, healthy food," says Amy Emberling, co-managing partner of Zingerman's Bakehouse, based in Ann Arbor, Michigan. "By returning to artisan techniques, intentional ingredient choices and including freshly milled whole grains, we're able to connect to our communities, our land and our traditions in a meaningful, nourishing way."

In late 2019, Zingerman's Bakehouse introduced State St. Wheat, a five-ingredient sandwich loaf created to bring the nutrition and flavor of artisan baking to the sandwich bread aisle. Though State St. Wheat looks and tastes familiar, the way it's made — with only natural ingredients and no added preservatives — is quite different than a typical sandwich loaf. The 1½-pound loaf sells for \$5.99.

"We talk about this as a more familiar bread, which is naturally leavened with no additives," Emberling says. "It has a mellow flavor, not too sour, and the color is not off-putting. With this project, we are really emphasizing flavor first. If we tell people, it tastes really good, people will try it. We started selling it in our stores in August. It has been really well received."

Others involved in the Bread Lab Collective's sandwich loaf program include King Arthur Flour Bakery in Vermont, Barrio Bread in Arizona, Seven Stars Bakery in Rhode Island, Breadfarm in Washington state, Prager Brothers in California, and Elmore Mountain Bread in Vermont. Each bakery's recipe is different, in keeping with local taste and ingredients and with each bakery's flavor and process preferences.

Ten cents of every Bread Lab Collective loaf sold will benefit the Bread Lab's efforts in support of appreciating the cultures and traditions that define what we eat, and to continue its role in moving food systems forward in more meaningful and just directions.

Another prominent baker who is part of the movement is San Francisco three-store retailer Jane the Bakery, which features a 900-gram whole grain sandwich bread. "It's a soft, sourdough bread that is perfect to get to more people," says Amanda Michael, owner of

Jane the Bakery. “We’ve seen a huge increase in that: high quality comfort food.”

The Bread Lab Collective features soft, sliced loaves that are made with seven or fewer ingredients in formulas developed by King Arthur Flour’s Jeff Yankellow, making them a good source of both whole grains and fiber. It is a long-fermented bread with none of the “non-food” items commonly found in this type of soft bread, such as dough conditioners, vital wheat gluten, flavorings, colors and preservatives. The shelf life is five days, after which it should be frozen. The Bread Lab Collective’s sandwich loaf program aims to improve access to nourishing bread, crafted by artisan techniques, made of seven or fewer ingredients, with at least 50% whole grain flour.

“We hope the launch of State St. Wheat inspires other artisan bakers to join us, so Bread Lab Collective sandwich bread is available in every state,” Emberling says.

Hazim Tugun, one of the bread managers at Zingerman’s Bakehouse, explains their new State St. Wheat sandwich loaf is made with half Michigan-grown organic soft white wheat (freshly milled on site) and the remainder being hard red spring wheat milled at 90% extraction (removing the very coarse bran). Compared with other whole grain breads, “we want to make it a little lighter,” he says. “It has a really nice crumb with a yellowish hue. There is heartiness to it, but it is still soft and tender.”

Emberling further explains that State St. Wheat is not dense with a little more chew. They make a scald to add an extra level of moisture and sweetness. For those not familiar, a scald involves soaking milled grain in near boiling water and letting it stand for some time. The very mild sourdough bread is also made with 3% olive oil and 6% honey — “we upped the honey enough to add a sweet appeal,” Tugun says.

About The Bread Lab

Director and wheat breeder Dr. Stephen Jones of the Washington State University Bread Lab Plant Breeding Program oversees research on thousands of lines of wheat, barley, buckwheat and other small grains to identify those that perform well for farmers, and that are most suitable for craft baking, cooking, malting, brewing, and distilling. Selecting for flavor, nutrition, and distinctive characteristics, samples of the most promising varieties are brought into the Bread Lab for analysis to determine the product that best utilizes and manifests their unique characteristics.

The Bread Lab began in 2011 in a small laboratory in the Washington State University Mount Vernon Research Center. Today it occupies 12,000 square feet at the Port of Skagit and includes the Bread Lab research and baking kitchen, a cytology lab, the King Arthur Flour Baking School at the Bread Lab, a milling laboratory and a professional kitchen.

While making a difference in the local community is a priority, the Bread Lab is trending toward a greater impact across the country, and Dr. Jones is looking for new ways to

incorporate specialty grains into everyday bread. “We are working more on the accessibility of what we do,” he says, adding that he is working with rye and buckwheat for soft sandwich-style bread. Dr. Jones breeds wheat to be used at 100% extraction, as opposed to those designed for white flour.

“We breed the lines of buckwheat and wheat to improve the environment by requiring fewer inputs in diverse organic systems while capturing carbon and being high-yielding, nutritious and flavorful,” he explains.

To better understand the emerging grain revolution, it is worthwhile to note there are ancient grains (like einkorn and teff that trace back to the dawn of civilization), heritage or heirloom grains (like Turkey Red, the predominant variety in Kansas, first planted in the 1870s) and local, modern grains that offer improved disease resistance and higher yield potential. Following the progression of wine, beer, cheese and other craft industries, American bakers are busy introducing craft breads baked with organic flour from local wheats. Varieties with names like Red, Red Fife, Rouge de Bourdeaux, Warthog, Elgin and Espresso are part of the new language spoken between local farmers and craft bakers seeking to differentiate. Some wheats are heritage, others are modern varieties — grown locally. Each brings a distinct flavor.

US farmers harvested 38.1 million acres of wheat in 2019, according to the US Department of Agriculture, accounting for 1.96 billion bushels. Make no mistake, this is massive, and the local grain movement accounts for less than 1% of it. “We work with thousands of acres. We’re not going to feed the world,” says Dr. Jones. “We have no illusion that things are going to change on a grand scale. We just want to help communities. And these little grain communities are starting all over the country.”