

The Magical World of Organic Montana

How it All Began

Deep in the caverns of the sassi of [Matera, Italy](#) in 2014, Francesco Montemurro plied us with wonderful, airy loaves of durum wheat bread, cut into giant slabs to soak up the delicious funghi cardoncelli e pomodorini (fresh trumpet mushrooms and cherry tomato sauce). “Be careful you don’t fill up on the bread,” he warned, seeing us indulging on the aromatic slices. It was the beginning of our love of all things wheat, which later morphed into all things Triticum. Durum wheat, *Triticum turgidum* subsp. *durum*, is a tetraploid wheat (28 chromosomes) versus 42 in the hexaploid wheat we grow in Iowa. “This is not just regular wheat/flour/bread,” Francesco insisted we know: “It is DURUM wheat (pronounced with an Italian accent, rolling the “R” as DUHR-em), which is healthy!” It’s true durum wheat/flour/pasta has a lower glycemic index than regular wheat, which translates to a delayed release of glucose upon consumption. Our last stop in Matera was at a bakery to pick up Durum loaves to share with aficionados waiting at our sabbatical home in Rome.

Fast-forward nine years to the organic wheat variety trial we are growing at the ISU Neely-Kinyon Farm in Greenfield, Iowa. Varieties with names like ‘Expedition’ and ‘Shelly’ are situated next to the ‘Climate Blend’ winter wheat developed by Steve Jones, wheat breeder at Washington State University’s [Bread Lab](#) as a mix with characteristics that are “resilient in climate change.” The drought in June 2023 that left us 5 inches below normal rainfall will be a good test of that! The amber heads swirl in the breeze, inviting poetry at every turn. My extrapolated haiku:



Wonders of Wheat

Sharp awns warn you away
From fat kernels straining in their hulls
Dotted with garnet-jeweled lady beetles
Harvest is at hand!

July 6, 2023: Organic wheat at ISU Neely-Kinyon Farm

Before harvest, however, we head for Montana to take in the Organic Wheat Capital of the U.S. It’s not just Bob Quinn’s town of Big Sandy, Montana, population 596, with the entrance sign to the town boasting “Home of U.S. Senator Jon Tester,” but there are other “big” in Montana, like Big Sky, Big Timber—you get the picture! And it’s true: everywhere you look, you’re surrounded by SKY.

Bob Quinn's Ranch, Big Sandy, MT:
organic Indian corn in foreground;
organic kamut in background



The Montana State of Mind

Heading for Havre, Montana, to visit Anna Jones-Crabtree and Doug Crabtree, the organic farmer dynamic duo, also wheat and lentil growers, we were shocked to come upon a sign reading “Canada 5 miles.” Not paying attention to geography, we wondered why just “Canada”—and not an actual town’s name; someone later reminded us it’s a warning to anyone needing to ditch something before reaching the border guards. The French-Canadian influence permeated into the town’s name, originally called “Bullhook Bottoms,” but later changed to Havre, in deference to the original homesteaders’ ancestry, tracing to Le Havre in France. The Montana pronunciation morphed into a two-syllable town name, with a strong A, as in “HAVE-er” compared to the soft, one syllable, barely audible R at the end, in the French language.

People talk in terms of the “Hi-Line” here, as the region around Highway 2 in northern Montana is called. Stretching from North Dakota to Idaho, the area boasts weathered farmsteads, stately grain elevators, and unusual field colors of lemony canola abutting the golden barley and purple-blue flax. The area also hosted the Great Northern Railway which brought sizeable wealth to the town and is the same tracks used by Amtrak to deliver Anna and Doug to the LaCrosse, Wisconsin, station for their keynote at the MOSES conference last year. Trains also take Doug and Anna’s grains to [La Milanaise](https://vilicusfarms.com/index.php) an organic milling family in Quebec, who prides themselves on high-quality, identity-preserved, organic end products. On Vilicus Farms: <https://vilicusfarms.com/index.php> we talk about building capital from organic grains turned into delicious organic cereal, bread and beer. And getting more people into organic farming!

Anna and Doug’s idyllic fields of intercropped organic barley and yellow pea bear witness to the words on their webpage: “Vilicus Farms grows a diverse array of organic heirloom and specialty crops with a cropping practice focus on soil-building and carbon sequestration, pollinator friendly conservation tactics, and minimum disturbance tillage practices.” They show us detailed, color-coded records of the fields of their 20 unique crops planted annually in their 5- to 7-year crop rotations, and the 26% of their land planted in permanent pollinator-friendly habitat, striving to promote diversity and resilience across the landscape.



Doug Crabtree and Anna Jones-Crabtree
Vilicus Farm, Havre, MT

Anna, an engineer by training, with a Ph.D. in Civil Engineering and a specialization in Sustainable Systems, never stops thinking of ways to tweak the farm and bring more people into the farming world. Her quote: “The only way we are going to thrive on this planet is to work on our relationship with nature.” Bee-laden sunflowers surround the two Tiny Houses they’ve built to house interns and visitors and connect with their extensive work with Xerces Society. Doug, the master tinkerer with a family farm background and years in organic production and certification, talked climate change and how the winter wheat was 2-4 weeks late, due to extremely dry weather in 2022. Even though they were getting unusual, abundant rains in 2023, the impact of planting the wheat last Fall into dry soil will decrease yields.

Their Community Supported Stewardship Agriculture [CSSA](#) project includes more than food: it allows anyone to backstop their work through a donation system based on supporting their stewardship operations on one acre for \$100 per year. In return, subscribers can follow their adventure through regular communications.

On the way back to Big Sandy, we pass a sad road sign: “For every white cross, off to heaven,” making one acutely aware of the “Road Warrior” Montanan and the need to stay alert on the long distances between towns here. We’re intrigued by the “Virgelle Ferry this way” sign in the middle of wheat country, and only later, through Bob Quinn, find out he has taken this one-car ferry many times to cross the Missouri River, which almost abuts his farm! Suddenly, the lonely 20-ft pontoon by the side of the road, with a “Party Boat-\$4,000” sign on it, makes sense to us: we’re in River Country! On the bumpy, four-wheeled approach to the Missouri River several days later, giant sandstone megaliths appeared like an alabaster Stonehenge in the distance. Carved through erosion when a shallow sea was in Montana 150 to 65 million years ago, these rock shapes range from castle mounds to Bob’s favorite, the hamburger rock!

At Ma’s Cafe in Loma, Montana, the taxidermic fish on the wall represent some of the trophies the owner, Charlie, has landed from the near-by Marias River, named after Merriwether Lewis’ (of Lewis and Clark fame) cousin named Maria, after stopping here in 1805: shovelnose sturgeon, walleye, pike, catfish and smallmouth bass. In the morning, I view anglers gently casting in the foggy mist a la “A River Runs through It” and beg Bob for a day of fishing, but we have too much to cover, he apologizes. He’s invited eight ag researchers, medical professionals, and environmental media folks to hash out details for a new research institute, focusing on organic ag for the western U.S. Plains region: [Quinn Institute](#)



White Cliffs, Missouri River, near Big Sandy, MT



Ma's Café, Loma, Montana



Trophy fish at Ma's Café



Bearspaw mountains in the distance



Hail pounds Quinn ranch

One day at Bob's ranch, we witnessed a swirling BLACK cloud bearing down from the Bearspaw mountains-its butte shaped as a bear's paw, according to Native legend. "Bob," I gasped, "that looks like HAIL coming." Bob said patiently, as one must be in this vast countryside, "It could blow over to the other side." But within 10 minutes, hail balls the size of quarters pounded the windows and skittered across the lawn, coating everything with a snow-white appearance in July, which presently melted in another 10 minutes. With the vagaries of climate change, hail events were becoming more common, along with drought. Last year, the region only received TWO INCHES of rain, which is extremely low, even for dry farming country. This year, however, it had already rained 12 inches-five more inches than our normally temperate Iowa summers!

Another great organic Montanan, Margaret Scoles, head of the [International Organic Inspectors Association](#) grew up on a small ranch near Broadus, MT, purchased by her father who refused to put a bathroom in the house, opting for the simple life instead. She grew up in the 1960-70s doing her homework by kerosene lamp or a light connected to a generator, since her father had an argument with the electric cooperative, and also refused electricity for the house. This independent spirit arose from her grandparents on both sides, who were among the 1919 homesteaders. The slogan of “Food will Win the War!” egged Montana’s homesteaders to plow and plant, even in the face of the upcoming drought and bank failures of the ‘20s and ‘30s. According to UM historian, Derek Strahn: “If Montana’s history has been shaped by one telltale pattern, it is the cycle of boom-bust development so clearly embodied in our homesteading and mining experiences. It is this factor – more than any other – that has shaped our character and cultivated our resiliency. Without hope and hardship, we simply would not be.”



Margaret Scoles and husband Bob

Like so many native sons and daughters, Margaret moved back to Broadus, MT, in 1981 after graduating with an agriculture degree from the University of Arizona, working her way through the University on a Workstudy program with a barley cytogeneticist who also taught her Plant Genetics. Blending her love of science with a love of farming, she and her husband, Bob, have been ranching since then, amidst Margaret’s shepherding of hundreds of organic inspectors in the U.S. and across the globe. “Any person on Earth who has taken an IOIA training has been affected by Margaret’s indefatigable efforts to improve the integrity of organic farming, production, distribution and sales,” wrote a nominator for her Organic Trade Association award in 2018. It’s her “no-nonsense; straight-shooter; get ‘er done” attitude that cheered me the most when I worked with Margaret, and I often wondered: “Is this the Montanan way?”

So next time you bake bread with delicious kamut flour from [Breadtopia](#) in Fairfield, Iowa, remember the mighty Montanans who may have grown the crop for you. We anxiously await news from the Quinn Institute in their search for solutions to “address global challenges like climate change, drought, desertification, ag chemical pollution and chronic disease.”

