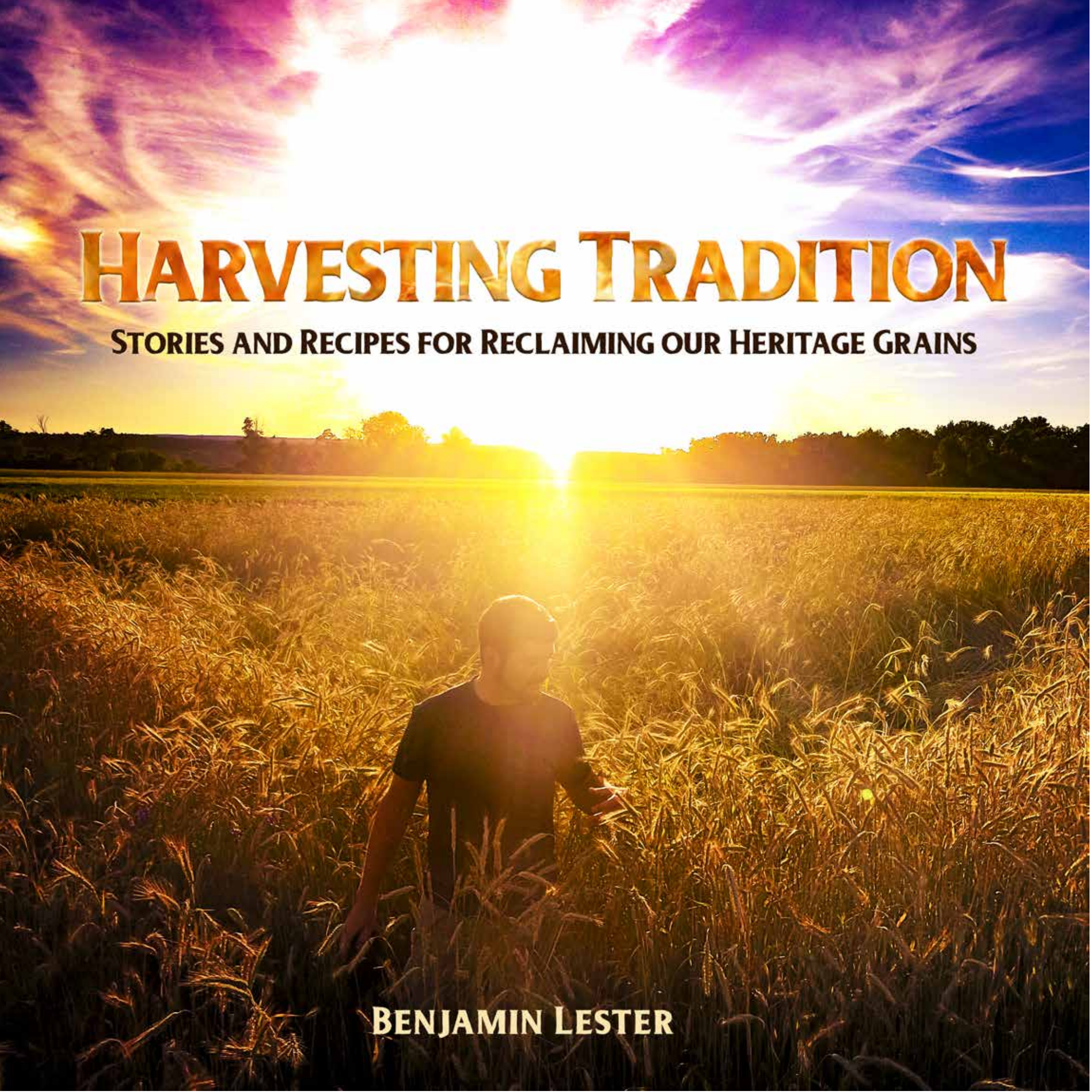
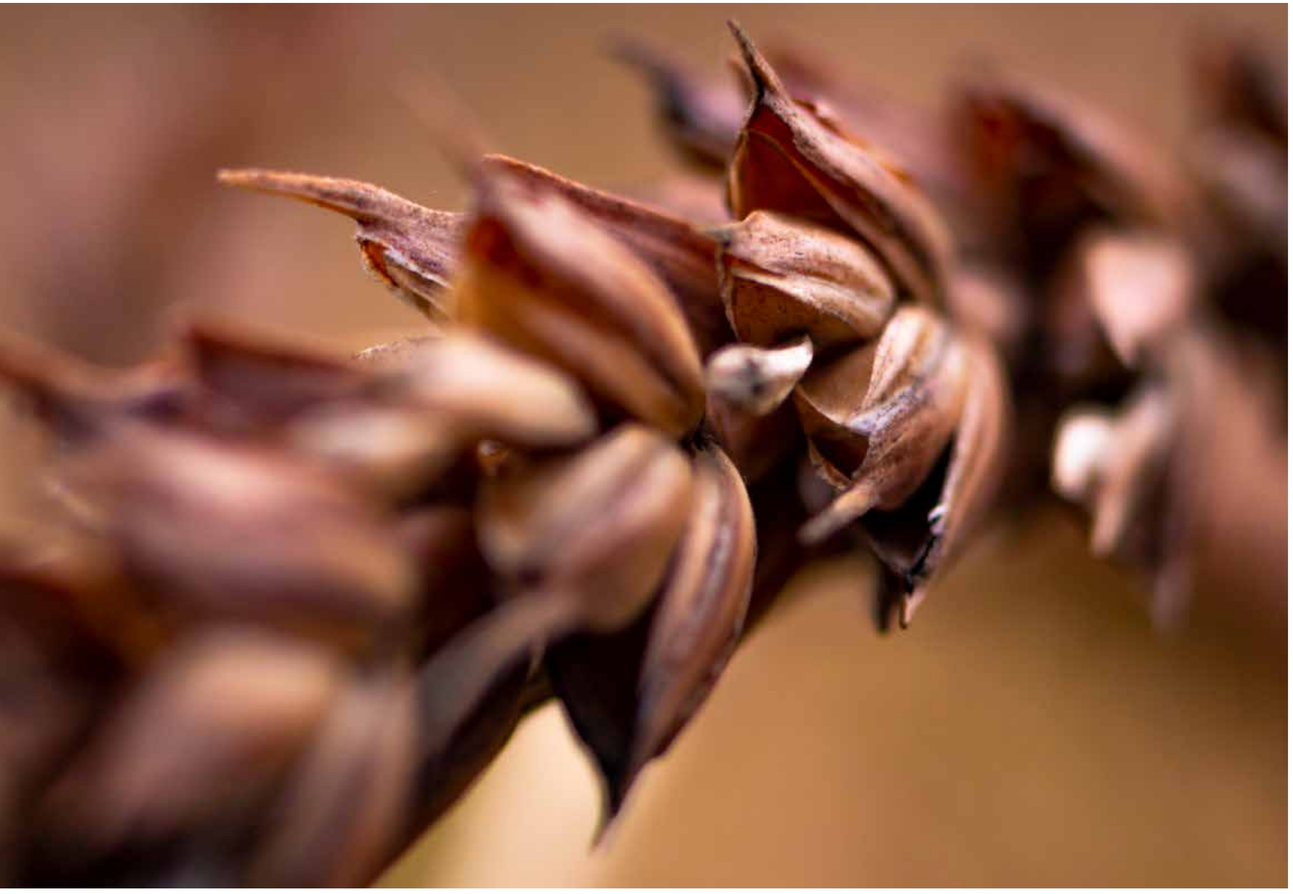
Harvesting Tradition

Stories and Recipes for Reclaiming our Heritage Grains



Benjamin Lester

HARVESTING TRADITIONS



HARVESTING TRADITION

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RECIPES, WORKSHOPS, AND CSA'S

FARM FEAST

In loving Memory of my Father, James Matthew Lester

and

for my dearest Mother, Margaret Lester

My two wonderful, truly good parents



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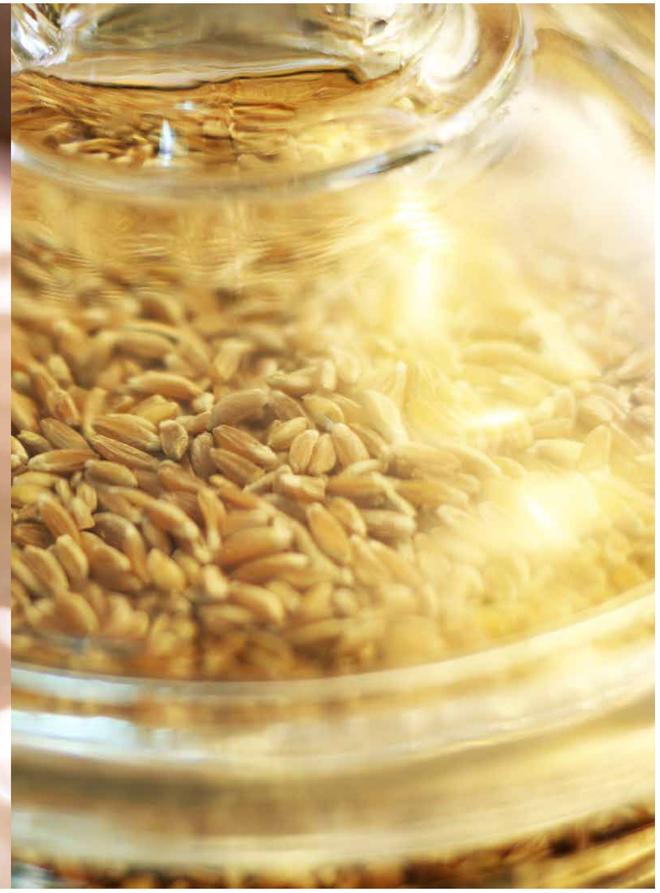

ACKNOWLEDGEMENTS

Capsicum annuum
Capsicum annuum - Köhler–s Medizinal-Pflanzen-027.jpg
Scientific classification e
Plantae
Angiosperms
Eudicots
Asterids
Solanales
Solanaceae
Capsicum
C. annuum
Binomial name
Capsicum annuum
L.
Varieties and Groups
C. annuum var. annuum
C. annuum var. glabriusculum[1]
Capsicum annuum var. bola (aka var. ñora)[2]
Capsicum annuum ‘New Mexico Group’
Synonyms[3]
Capsicum abyssinicum A.Rich.
Capsicum angulosum Mill.
Capsicum axi Vell.
Capsicum bauhinii Dunal
Capsicum caerulescens Besser
Capsicum cerasiforme Mill.
Capsicum ceratocarpum Fingerh.
Capsicum cereolum Bertol.
Capsicum comarim Vell.
Capsicum conicum Lam.
Capsicum conoide Mill.
Capsicum conoides Roem. & Schult.
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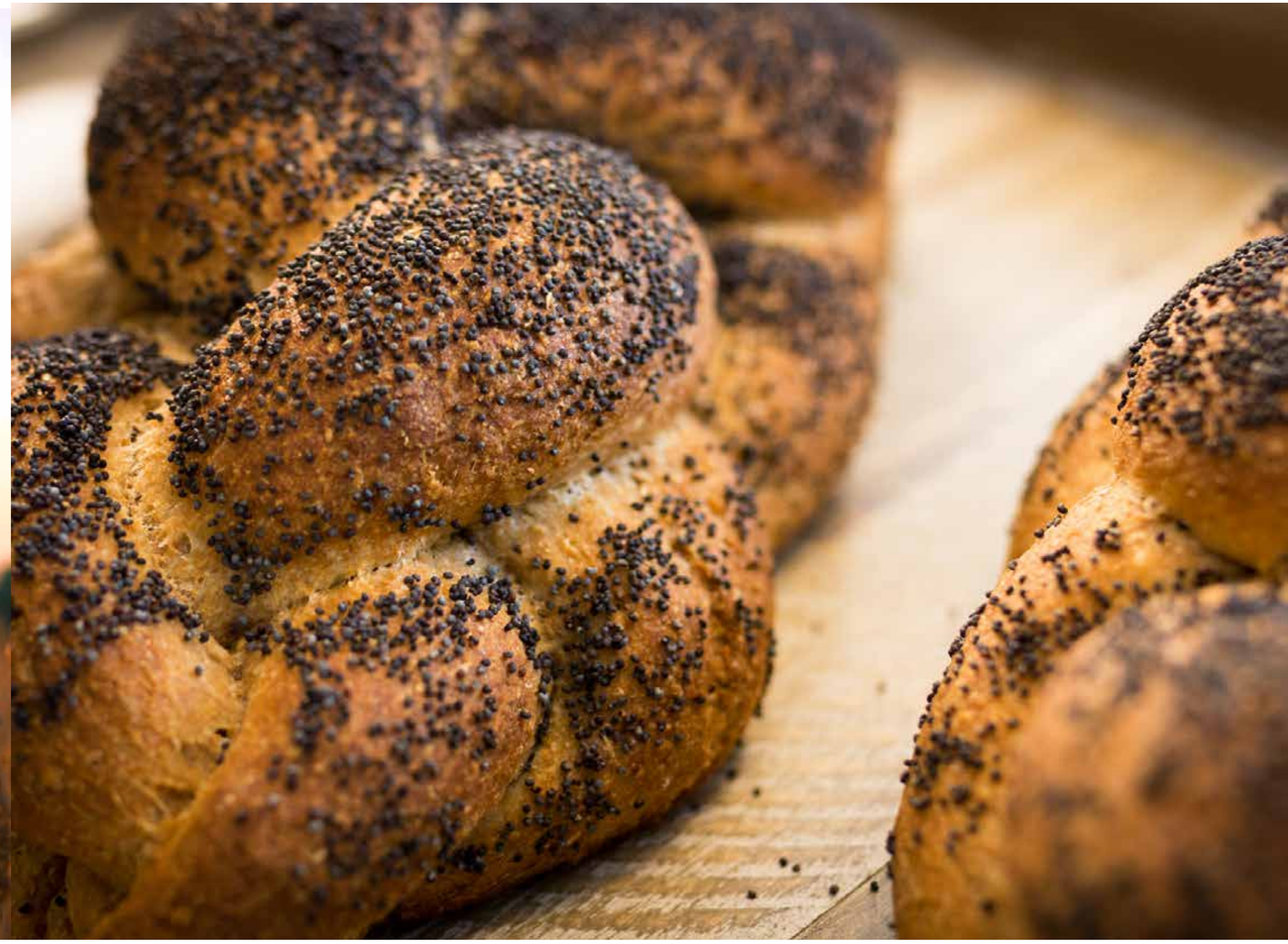

"The Most Wonderful Story I know is, perhaps, that this bread, thousands of years old though it is, is not yet finished in the baking. Botanist, famer, miller, and baker are stillexperimenting with it. The entire story of bread goes very deep–its social and technical, religious, political, and scientific story"

H.E Jacob "Six Thousand Years of Bread"

The Richness of Connection

We absorb the most valuable lessons from our parents through how they live their lives. My father, a computer scientist, loved his kitchen, revered heritage grains, and always sought out foods with connection, flavor, and vitality. His father, the Head of Alcohol Studies at Rutgers, became passionate about baking after a trip through France in the early 1950s. Upon return, he lined his home oven with fire bricks to simulate the baking quality of the ovens he saw in Europe. He boiled bagels, fermented doughs, and injected steam into the bake to facilitate a proper Maillard reaction in the crust.

Ancient wheats and heirloom rice lined our cupboards when I was growing up. My father used a burr coffee mill to grind his own flours and always found the kitchen to be a primary source of both pleasure and contentment. He sought food that was special, authentic, and meaningful. While traveling in Costa Rica in the 1990s, he befriended a coffee farmer and stayed with him for several nights. They wrote each other afterward, and my father bought green beans from his farm and roasted them in his kitchen for many years.

I roasted coffee in my father's little old toaster oven until it finally gave out last year. This is how food creates meaning in our lives. It is the connection we have to the history or "heritage" of our food source and of all the people connected with it.

My father was also an accomplished flutist, and initially I followed his musical inclinations more than his gustatory ones, pursuing music as my main creative pursuit from the time I was about 10. I was always inspired and nourished by his love of cooking though, and I grew up in a sort of craft kitchen; an immersion experience. Breakfast consisted of homemade pancakes, crepes, bagels, or muffins. Lunch was leftovers punctuated by milk shakes and yogurt smoothies, and dinner could be anything from gumbo to Buddha's delight, spaghetti and meatballs, or pad thai. All were made from the best ingredients he could find, and inspired by his travels and the people and food he encountered around the world.

Dinner and baked goods were essential to a good day. He sought out international markets and local organic food co-ops, as well as up-and-coming bakeries to satisfy his craving for authentic and interesting foods. He had a small herb and vegetable garden and always stopped at roadside farm stands for the best seasonal produce. He brought home organic yogurt from a small dairy in New Hampshire and explained to me that "this was the good stuff." My friends liked to stay for dinner, though it was a strange experience for most of them, having grown up on frozen factory-made dinners and school cafeteria lunch. They could taste something different. They'd say, "Your dad cooks some weird food, but it's good." My best friend from high school, Rob, and I always appreciated that we had it good when we were at my dad's table. There was no doubt about it.

In the fall of 2000, when I was 19, I was down in my basement music studio at my mother's, practicing percussion, when I was called by my mother to pick up the phone. It was my dad. (My parents had separated.) I couldn't call him back? It was extremely unusual for my father to call me like that, and I was concerned. It was not unfounded. He had been experiencing stomach pains for several months and had been to the doctor again. The news was not good. He had been diagnosed with pancreatic cancer and would most likely lose the battle to it in the next six months.

My world was rocked. My father was my best friend. At 53, he was recently remarried, enjoying his life more than ever, and could not believe the news. Once pancreatic cancer is detectable, it's almost always too late. My step mother, Nancy, sister Jessica, and I took care of my father throughout his illness, and he passed away the following May. I was devastated, but I didn't realize how much. I'd been holding back much of my grief for half a year and I wasn't about to stop, although these things have every way of catching up with you, and in time of course they did.

I'd been accepted to Bennington College the year before, and while my father was sick decided to matriculate the following autumn. When I arrived at Bennington I was still holding myself together, but over the first month or two I began to fall into severe depression. I simply could not move my body at times. It was as if my body was leaden.

Resilience and Reconfiguration

Despite my intense grief, I somehow found myself with a new friend. I didn't realize it at the time but in hindsight I think I was drawn to her because she helped me remember and feel connected to my father. Adrie was smart, well-read, creative, and loved food and cooking. Introverted but sweet and feisty, she was my new best friend and eventual partner in next level food exploration.

Keeping the memories of my father alive was and still is very important to me. I have come to realize that the intersection of the memories of my father and the shared love of cooking with my new partner was a profound way for me to keep my father's spirit alive. Food slowly became the centerpiece of my life and then my work. I now think that my father's passion for cooking and baking in the kitchen was his way of staying connected to his father.

In my early twenties I was still deeply connected to and working in music. My father had believed in me and supported me throughout my musical journey. I felt I had to continue my music without him. But food allowed me to find my way back to him. Gastronomy soon became my new calling.

A□□□□ □□□ I □□□□□ □□ S□□□□ A□□□□□□ in the summer of 2002. We started our first organic vegetable garden and grew heirloom tomatoes whose size and lusciousness I will never forget. We frequented farmers markets and discovered Pioneer Valley's incredible wealth of small passionate artisans working tirelessly to make nourishing and meaningful food available for their families and community. Adrie went to culinary school at CCI, and I studied alongside as we began to work in restaurants and bakeries and to dream of a space where we could offer our own spin on genuine, taste-sizzling, and nourishing foods; a space for community food culture to grow, evolve, and thrive.

Early in 2005, we began to discuss the idea of selling baked goods at farmers markets. We looked into the licensing and production process, and it turned out to be a reasonable summer project. We licensed the residential kitchen we rented to produce baked goods for sale around the valley.

To our absolute surprise and delight, our little bakery, Wheatberry, would be a tremendous hit. We sold out at farmer's markets every week. We got a wholesaler's license so we could sell to retail outlets as well and scored one wholesale account after another. We hadn't planned to pursue this as a full-time business, but we couldn't ignore the fact that people clearly wanted what we had to offer. It was game on.

We began to look for a retail space for our bakery. Finally, in 2007(?), after 2.5 years in a startup kitchen, we settled on a spot on Main Street in Amherst across from the Emily Dickinson Museum, where we would spend the next seven years innovating, growing, and baking up a storm. There were, however, other storms brewing as well. The first was the birth of our daughter Ella, and thankfully it is the only storm from that period that is still whirling. Ella was the bakery baby. She was adored and loved and probably ate too many chocolate croissants. Her presence amplified my thoughts and concerns about the future. This was love. And it was serious work, but we couldn't imagine what was around the corner.

By December of 2007, our little business had mushroomed, and we were in deep. It all seemed to be a great and profitable challenge until February 2008. Failed crops in Russia and China, combined with greatly increased demand for meat and milk in developing countries, caused commodity grain prices around the globe to triple overnight. Wal-Mart began to ration rice, and bakeries were paying three to four times what they had been for their main ingredient. This was a problem.

On the bright side, we won the Young Entrepreneurs of the Year Award from the Massachusetts Small Business Association and our innovative "farm to fork" bakery was featured in The Boston Globe's food section. These were a couple of bright spots in the midst of a once-in-a-century economic downturn.

As the 27-year-old owner of a small, mission-driven business, I wasn't well prepared to deal with this sort of economic crisis. Something had to give for my sanity's sake, and we decided it would be the wholesale side of our operation. At that point it accounted for about half of our sales and we figured we could make it work with our retail business. But of course we had no idea that the Great Recession was right around the corner. That fall when the housing market crashed, we were stunned just like everyone else. Customers came in to ask if we were okay. We cut staff to the bare bones and began to brainstorm about what to do next. Entrepreneurial spirit is built into my core. I've been in business for myself since I was 16 and have built my work process to find opportunity and positive social leverage in changing circumstances. The bigger the change the bigger the opportunity. This was a big one.

Red Lammas Whole Wheat French Bread

Fermentation technique – Cool Control

I love the perfect simplicity of French bread. Flour, water, salt, and yeast, combined correctly, can produce a crackling, chewy, sweet, and caramelized crust with a moist, airy, and supple crumb. Almost any variety of hard wheat will do, but this recipe lends itself beautifully to heirlooms such as Red Lammas wheat and Oberkulmer spelt, as well as newer organic varieties such as Redeemer. Once you've chosen your variety of wheat, you can also choose whether or not to lighten your flour by sifting. Any degree of sifting will do, as will entirely unsifted whole flour - so sift to taste!. You may want to decrease the amount of water slightly with lighter flours. Roll the top in seeds to create a lovely accent, and roll all manner of fresh herbs, cheeses, etc., into the loaf during shaping, if you so desire. Not only is this recipe incredibly simple but it's also incredibly versatile as you can make everything from boule's, rolls, baguettes, epis, pizzas, and pan loaves.

This recipe is essentially failproof and has been tested by dozens of people with incredible results time and time again. The key is not to rush anything, so let time do most of the work for you. Use a thermometer to keep track of the various temperatures involved. Learn the simplest and most effective way to achieve that perfect burnished toffee crust!

The process is as simple and elegant as French bread itself. Stir together the 4 ingredients in a 2-4 quart bowl, cover and place in the fridge for 6-12 hours. Take the dough out and shape it into a loaf, placing it in your proofing basket or loaf pan, and then return it to the fridge for 6-12 hours to slow rise (or put it on your counter for about 1.5 hours). This long, slow fermentation and slow rising gives the bread its fantastic flavor, incredible crust, and extended keeping quality. When the loaf has risen, preheat your oven to 450 for 25 minutes and bake until perfectly browned and 200 degrees in the center.

Once you are familiar with the process, each step will take less than five minutes, so the active time is under 15 minutes. While this loaf can be finished in as little as 12 hours, start to finish, giving it extra time will increase the flavoral and textural components. This also allows tremendous flexibility and ease in your schedule for each active step. Mix in it in the morning, shape it in the evening, and bake it the next morning. Or mix it in the evening, shape it in the morning, and bake it in the afternoon or evening. The second schedule suggested here is best for your first attempts because you can monitor the final rise a little more closely during the day than in the middle of the night. It also creates a wider baking window, creating increased flexibility for folks with busy schedules.

Ingredients:

1lb 5oz flour
2 Tsp fine sea salt
½ Tsp Instant Yeast
2 cups water at 90 degrees

(You may need to adjust the water temperature to correct for very hot conditions in the summer or cold conditions in the winter but 90 is a good starting place and tends to work for about 8 months of the year.)

Too see the video tutorial I amde abthis recipe go to localgrain.oirg/frenchbread.....)!

Directions:

1.Scale and mix your 4 ingredients. The dough mixture should mix together with just a touch of elbow grease. No kneading. The dough is moist but not wet. It should cling to itself but not stand up tall or tight. Your mixing spoon should cut through the dough without quite picking it up when it is fully mixed. Check your dough temperature. Around 85 degrees is generally the temp to go for.

2. Cover and place in your refrigerator for 6-12 hours. You want it to rise about 50% or from 1 quart of dough to 1.5 quarts. It will work fine if the dough rises as little as 30% or as much 100% but 50% is the sweet spot. If your fermentation gets stuck because of poor yeast or cold temp you can always add time and warm to move it along. The degree of rise is the most important indicator of dough maturity.

3. Once your primary fermentation is complete turn your dough out onto a lightly floured work surface. Gently pat out excess gas allowing some to stay in the dough. Fold and roll the dough into a round or a log depending on your desired shape or be as creative as you like. Place in your proofing basket.

4. Cover your shaped loaf and return to the fridge for it long, slow final rise. It needs this time to fully develop all it's potential character and unlock it optimum keeping and eating quality.

5. 30 minutes prior to baking pre-heat your oven to 500 degrees.
Slash and load your fully risen loaf on a sheet pan, in your loaf pan, or onto your baking stone and toss 3 ounces of water onto the bottom of your oven being careful not to get any on the glass door.

6. Bake for about 40 minutes or until the crust is a rich mahogany and the temperature ion the center is 200 degrees.

7. Cool for a few seconds and then tear in!! The common idea that a loaf can be ruined by cutting in too soon is simply untrue and works against pleasure and satisfaction. When a loaf comes out of the oven it is fully cooked or in technical terms the gel has set. The thing to be careful of is wrapping it up while it is cooling which would trap the steam being released and make the crust soggy and encourage mold growth. I believe the misnomer is a confusion between these problems.




Ancient Traditions and our Human Origins

It's easy to take for granted the food systems we engage in on a daily basis. In order to fully appreciate and understand our food traditions we have to first understand the origins of our humanity. As I'll explain, They are actually one and the same. Humans all the way back to our ancient ancestors of nearly two million years ago, The habilines began to eat increasing amounts of cooked food due to the enormous survival and procreative advantages of eating cooked food and their ability to leverage this connection. In order to fully understand the heritage of our ancient and heirloom grains first you need to understand what makes us human or rather, what made us human.

Our ancient ancestors 2.5 million year ago were a small partly upright great ape known as Australopithecus. They had split from what would become our gorilla cousins 6 million years before and as they developed the ability to use and then make tools they evolved into homo habilis the first of the great apes referred to as homo classified in the same genus as we are. This is debated with fervor because homo habilis or "human handyman" was very similar to Australopithecus. Except for their intentional manufacturing of large quantities of stone knives and a small increase in overall size they are largely quite similar. It is the evolution to homo erectus arguably the first "true human" as not only was his size substantially larger but his brain size in proportion to his body size was nearly doubled! What was responsible for this enormous increase in size not only of body but our extremely unusually large brain size. The answer according to Harvard's Anthropological biologist Richard Wrangham is cooking. Humans are the cooking ape. And while it's true that without homo habilis and the development of tool making we may not have have learned to cook but the tools were habilis, cooking birthed homo erectus. The first of our ancient ancestors that could walk into a store today without animal control being phoned. He could certainly be fitted for a suit.

The most important discoveries of humankind have largely been foresightful response to naturally occurring phenomenon. In other words when humans experience natural phenomena they can comprehend, experiment, and learn to leverage natural occurrences for there benefit. In "Catching Fire: How Cooking Made Us Human" Harvard's leading anthropological biologist explains that without cooking food our knife wielding ancestor Homo habilis(Our first ancestor to make large amounts of stone tools, simply could not have evolved into homo erectus and

How Cooking Made us Human and Farming brought about civilization

"Fossil evidence indicates that this dependence arose not just tens of thousands of years ago, or even a few hundred thousand, but right back at the beginning of our time on earth, at the start of human evolution, by the habiline that became homo erectus. Brillat Savarin and Symons were right to say that we have tamed nature with fire. We should indeed pin our humanity on cooks."

Richard Wrangham - Anthropological Biologist, Harvard University

eventually homo sapiens without cooking because the only way a human can yield enough energy from food to support the enormous energy hungry brains we have developed is to cook our food. Our teeth , jaws and digestive systems were able to grow much smaller while our brains grew bigger. Cooked food needed much less chewing and digesting. Cooking food yields on average twice the energy compared with eating raw foods and is the only logical explanation for the growth of the astoundingly large human brain and emergence of humans therefore. We are the cooking ape.

It is most likely that for thousands of years it was a lucky accident like most great discoveries from the prehistoric world. Fires burned across the savannah lit by a lightning strike or started from the lava seems in east central africa. After these fires burned out in their wake they would leave behind charred fruits, nuts, seeds, bugs and even entire roasted animals both big and small. Our ancient ancestors, australopithecus, like the much noted "Lucy" would wander through the burnout and get fat on the high calorie, efficiently digested cooked foods. Over hundreds of thousands of years they gradually began to not only seek out and wait for this to naturally occur but to eventually take the raw ingredients and place them on or next a fire to produce the same result. A highly beneficial and life altering food source.

Control of fire clearly took a long time to master but the benefits were obvious and profound. Our brains grew and grew the more we cooked our food. The adoption of the stone tools required for meat eating and hunting only explains the evolutionary shift from australopithecus to habiline and not habiline to Homo Erectus. Eating raw meat...even lots of it doesn't yield enough energy to sustain a human in a fully reproductive state. When modern humans eat even mostly raw foods, women Lose their menstruation and men have greatly diminished sex drive and physical performance. Weight loss, depression, and immune system function all suffer. Cooking made us human but our ancient grandmothers gardens eventually led to Farms and gave us civilization.

Without cooking there are no people. No other creature on earth does this. In fact we are so adapted to a diet that includes largely cooked food that when modern day humans try to sustain a raw food diet reproductive capacity essentially goes away and health is greatly compromised. For these reasons a raw diet will never be adopted by humans but There is a new food system and it could lead to the development of a new species of human. It is the modern industrial processed food diet. Increasingly humans have handed over the 2.5 million year old tradition of growing and cooking our food within our communities we have handed this job over to industrial manufacturing of "new foods". These "new foods" are profoundly different from our traditional foods and for the first time in human history we are seeing the brain of Homo Sapiens actually shrinking quickly since the adoption of the modern or SAD(standard American Diet)diet. It is certainly the cause of a massive health care crisis in our country and around the world. Perhaps the new species will be named Homo Pestilens that assumes these people will be able to survive the adaptation to these highly processed industrial foods. It's not looking good though.

The Journey from Garden to Farm

Without consistent surplus food there can be no civilization. In order for people to devote their time towards pursuits other than gathering, and eating food and procreating(which is what most organisms do almost exclusively), the society has to produce, store and cook enough food to support "artisans", "engineers" or "scientists" and the development of the related industries. It was the food system revolution known as The Dawn of Agriculture that is the basis for civilization. But the first and most essential food system revolution was to cook our food. This gave birth to our genus Homo from our closest ape ancestor the Habiline, and eventually led to our species Sapiens.

It wasn't for another 1.8 million years of stone tools and fire roasted foods until we showed up on the scene. Homo Sapiens, or "wise human" named by us of course in honor of our humility. We took tool making and fire roasting food to new levels and eventually would discover the process of cultivating gardens…..?

Farming was actually the first form of industry and allowed the groundwork to be laid for the industrial revolution that would mushroom nearly ten thousand thousand years later. Tool making, cooking, gardening, and farming are the quintessential forms of human technology and perhaps of humanity itself since they are so intrinsic to who we are. Cooking and farming were the first forms of true human industry. Nothing more remarkably separates and connects us to the rest of life on earth. While our use and impact on other life and material resources make us increasingly connected our broader feelings of connection seem to be diminishing. It's a fascinating paradox.

To cultivate a process through trial and error is how all life evolves but we humans have taken the awareness of this process and used our understanding of cause and effect and our especially heightened abilities of observation, experimentation, and information leveraging ability to essentially(at least for now) win the evolutionary race. We can manipulate the ecosystem around us so much more profoundly than any other life that we find ourselves verging on too powerful. Genetic engineering, carbon pollution, nuclear technologies all threaten our own existence and yet we wield them with abandon. It is also quite ironic that the technology that lead to our existence(controlled fire) is now so impactful it is causing global warming.

It was the same process that allowed agriculture to develop. As men and women gathered seeds, fruits and roots to bring to their campsite(to cook) naturally they would try to capitalize on harvesting as much of whatever was available at the time, especially if it kept well. As foods were eaten, pits and anything that wasn't the best would be discarded into a pile around the campsite. As sprouting roots were discarded they too would send shoots into the ground and new roots would grow. This unintentional compost pile would evolve into the first garden as it became rich with organic matter and nutrients and the various viable seeds and pits that ended up in it would inevitably grow just as it does naturally in your compost pile at home.

Grass seed were one of the best finds for prehistoric man. They were nutrient and calorie dense and they kept very well compared to all their other food sources. Fruits and meats rotted quickly, roots sprouted and greened easily but grass seeds were hard and dry and could even sometimes be kept a whole year or more as long as they didn't get infested with bugs or rodents. When they did get infested the grass seeds, or grains, would be discarded off to the pile of failed food and inevitably it would grow and produce more seeds in 6-12 months. These would be easier to gather than grass seeds further away and naturally man((probably women actually) began to harvest, plant and tend these seeds. There was wheat in the fertile crescent, rice in the asiatic areas, and corn in the Americas. It is no accident that this happened to numerous different grass seeds in numerous different places in the world by numerous cultures. It of course happened for all the same reasons. When man cultivated grains accidentally his fortunes grew and when he did it on purpose the return was many fold.

For gardens to become farms there was one missing piece. The Yoke. Animals would be harnessed to greatly reduce the amount of laborers needed to grow food. It really happened very naturally. We'll discover the same pattern with the development with traditional foods. Bread, Tortillas, tempeh, Nan, tofu, etc...Are all the result of many happy accidents leveraged by numerous intelligent people and communities to improve their lives and the chances of their offspring. I call this the thrust of the technological tipping point and it all began with our food. I suppose you are what you eat...yeah? Yes quite literally.

Lazy Acres Farm – Hadley, MA

Alan Zuchowski

Growing Methods: Organic

Crops grown for the CSA:

Red Lammas Wheat

Nothstine Dent Corn

Popocorn

Beans

Passions for Real Food

From the day we moved to Main Street, one of our primary objectives had been to create a genuine farm-to-table operation. We were tired of seeing places advertise local foods and then find none on the menu or a single token local product. We would actually have local ingredients "whenever available" (the token way to say we want to profit from the idea but not deliver it) and in The Pioneer Valley they're almost always available. All of our meats, cheeses, and dairy were produced locally. More than 90 percent of our vegetables were grown locally, but interestingly, grain was hard to fit into this picture. I'll explain.

When we started, in 2005, certified organic flour from Champlain Valley Milling (NY) or Lindley Mills, NC (the mill company that makes King Arthur organic flours, whose conventional flours are produced by ConAgra) was about 15 cents a pound. By 2007 it was 25 cents a pound. Virtually overnight, in February 2008, it went to more than 90 cents a pound. So what did this have to do with our business? Everything, it turns out. It cost between 75 cents and $1.50 a pound to produce small-scale organic grains for wholesale. Suddenly, in 2008, local grains were no longer many times the price of their commodity counterparts, but nearly the same.

F□□ing □□□□□ □□□□i□□ □□□ng□□, I asked myself, "Where is the opportunity? How could we turn these disruptions into positive movement for the future?" There were a few farms growing a small amount of wheat, but there wasn't a lot going on in our immediate area. I asked a farm to grow wheat for us, but when I tried to get seed for them I learned that wheat seed was scarce. There were only one or two modern varieties available on the market, and it wasn't the type of wheat we needed. We wanted the genuine article, not something dreamed up in a laboratory or corporate boardroom. Real heritage wheat was all that would do. But where had all of our heritage wheats gone?

The impact of replacing our heritage grains with monocultures of hybridized and genetically modified grains, heavily processed and treated with innumerable untraceable chemicals throughout the production life cycle, is uncertain. On the one hand, we have heritage or landrace grains on which tens of thousands of years of civilization are based, and on the other, some neo-Frankenstein laboratory modified product with little established benefit, but enormous and possibly unretractable consequences. We do know that our country faces an unprecedented health care crisis. The epidemic of obesity, increased incidence of heart disease, diabetes, Alzheimer's, and cancer all stem from our unhealthy diet, which includes our over-processed GMO grains as the basic "feedstock" for food production

There are hundreds of thousands of varieties and many different species of wheat. As an avid grower of heirloom tomatoes, salad greens, and field squash, I wanted the heirloom equivalents for wheat. They were not available through seed catalogs, but it turns out that the USDA National Small Grains Collection holds tens of thousands of wheat seed germplasms as well as genetic tissues for most other small grains. I began the process of wheat trialling to find "landrace" wheats that would grow well in the soil and climate of The Pioneer Valley. The USDA sent me many small packets of about 30 seeds each, and I began to grow many tiny patches of wheat and other grains to find what would work best in our soils and climate.

Over the next year, while I immersed myself in growing wheat cultivars, perfecting agricultural production techniques, and conducting trials, I began to realize that what was really important was not just wheat or bakeries. It was about all of the heritage grains that we've lost to modern industrial and economic forces that prevail when production is hidden and costs are externalized. The community of local food eaters, foodies, and sustainable food initiatives needed access to all of our heritage grains, and the creation of a Community Supported Agriculture program based around grains and beans struck me as essential and thrilling. Thus, the Pioneer Valley Heritage Grain CSA was born. Some of my closest advisers thought I was crazy but I knew in my entire being that I was on to something.

When you know who grows your food, and they know the people they're growing it for, the whole equation fills with value for everyone involved. Meaningful personal relationships develop. Farmers get higher prices per pound while at the same time reducing waste. Consumers have access to affordable foods that are otherwise unavailable, hard to get, or very expensive. My role has been to demonstrate how to easily, healthfully, and joyfully you can integrate these ideas and foods into your kitchen. It's my labor of love.

A□ □□□ i□□□ □□r □ gr□in□ CSA took root, I was filled with hope and determination. In the economic chaos, I believed my response made fundamental sense. In the first year, my wheat and other small grain and dry bean trials had been very successful. Yields and quality were good on numerous varieties and could underpin the production for the CSA. I developed promotional materials needed to support the sale of shares, and built a website with the help of my good friend and co-conspirator Seth Seeger. We connected it to PayPal and began taking sign-ups for the inaugural season. I'd envisioned a five-acre mix of 10 grain and bean crops (wheat, oats, corn, barley, rye, spelt, emmer, flax, Tiger Eye, Jacob's Cattle, and Arikara beans) that would provide 25 shares for people in my immediate community. Almost immediately, 50 people signed up, and by the end of the enrollment season we had 90 grain CSA shareholders.

While this was our local response, we were far from alone. As we poured through the web looking for resources and connections to help guide our process, we were stunned by how many others were working on this front. There were burgeoning heritage wheat efforts in France and elsewhere in Europe, as well as in the Pacific Northwest and Alberta, Canada. Vermont, Maine, and New York all supported efforts like ours. There were the Northeast Grain Growers Association, spearheaded by the University of Vermont, and The Bread Lab forming at Washington State University. Even beer was on the line, as malted barley is the primary component, and if folks were going to grow their own bread, you better believe they were going to do the same with their beer. This was going to be an incredible adventure.

At the beginning of the first season I had arranged to work with White Oak Farm in nearby Belchertown. White Oak Farm had grown grains and beans for many years, but mostly as feed for animals. One of the many challenges we faced that first season was to find varieties that would be ideal as human food. While White Oak was a great starting point for this program, it was rife with issues. Arnie Vohringer, the owner/operator, was in his seventies and mostly retired. He had an enthusiastic and well meaning understudy in Adam Dole, who was alternately devoted to the project and not available or able to complete the critical steps in the process. It was my job to get them seed money and actual seed for the crops, while capturing the action with photography and writing for the website and newsletters. I also had to make sure things were on track for harvest, because I had $30,000 from member shareholders awaiting their grain shares.

We got the fields prepped and crops in the ground, and things were off to a great start. Germination was solid, and we were off. But challenges emerged as the season wore on. Cultivation of the beans was key if we were to harvest the five acres we'd planted. The cultivators needed to be fixed to work the soil. Alas, this didn't happen in time to get the crop properly tilled.

When the beans came ripe, they were too weedy to be harvested by the machine harvester. I began to organize farm shareholders to try to harvest manually. It was a great effort, but a dozen or so people are no match for five acres of beans, and we called it a day after harvesting perhaps a half-acre. We brought in about 300 pounds, when we'd hoped to harvest 3,000 to 5,000 pounds. The other crops were looking good though, so all was not lost. The corn was tall, and the wheat, barley, rye, and oats all looked decent. We were not expecting record yields, but the fields had promise. During this time we partnered with NESFI (the host organization for White Oak Farm) and others for a state grant from MDAR to build processing infrastructure for the grains. By the time the crops were ready to come in, we had a new (read refurbished) fanning mill to clean and sort the grains. We also had a dehuller to remove the hulls from those grains with hulls, such as spelt, emmer, barley, and oats.

All this grain was to be harvested by an old John Deere 40 combine harvester. The plan was to have it greased and tweaked in time for the harvest. But as the harvest dates neared, the combine was still not up and running. This was Arnie's department, as the mechanic of the group, but it was not going well. Nearly a week after harvest should have begun, we got the combine out into the fields. It was not too late, but it was too close a call. While all the efforts made by White Oak and partners were very appreciated, it became clear that this would not be a reliable source of production for the Grain CSA.

Bringing in the crops is just the first half of harvest. Grains need to be cleaned immediately before storage. When they come out of the combine there is a lot of chaff, weed seeds, and other foreign material. You have about 24 hours to get each crop cleaned through the fanning mill and into a storage bin with a large, powerful dryer running. Otherwise the crop can literally burst into flames.

With the exception of the beans, we had decent crops that year, but the yields were low. With 90 people signed up, I felt a lot of responsibility to get everyone a great share. A great idea needed a great product. First, Alan Zuchowski, a third generation farmer from Hadley MA, showed up at the NESFI/MDAR "Grainery" in Belchertown with the Nothstine Dent corn he'd grown and some very high quality bread wheat. He was there to use the new cleaning equipment and had found his market. Alan has been growing for the CSA as our lead farmer ever since. This rounded things out, but didn't account for the beans we needed. I'd been growing beans in the trials and decided I would specialize in growing the beans for the program, since that seemed to be the trickiest crop. We still needed beans for that year's share though, so I began to reach out to farmers in the region to see if anyone was growing beans. I found Cayuga Pure Organics out of Cayuga, NY. Not only did they have beans, but they had numerous varieties and other specialty grain crops like emmer and various heirlooms. We had beans. And a great first share.

Along with cooking and baking techniques and recipes that make use of the impressive harvests, this book tells the farmers' stories. It is dedicated to their hard work and commitment, as well as to the willingness of our consumers to support this endeavor. I like to think that, together, we are making a small but not insignificant difference in our collective efforts for a better tomorrow.

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(Pictures from grain cleaning winter 2009/10)

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