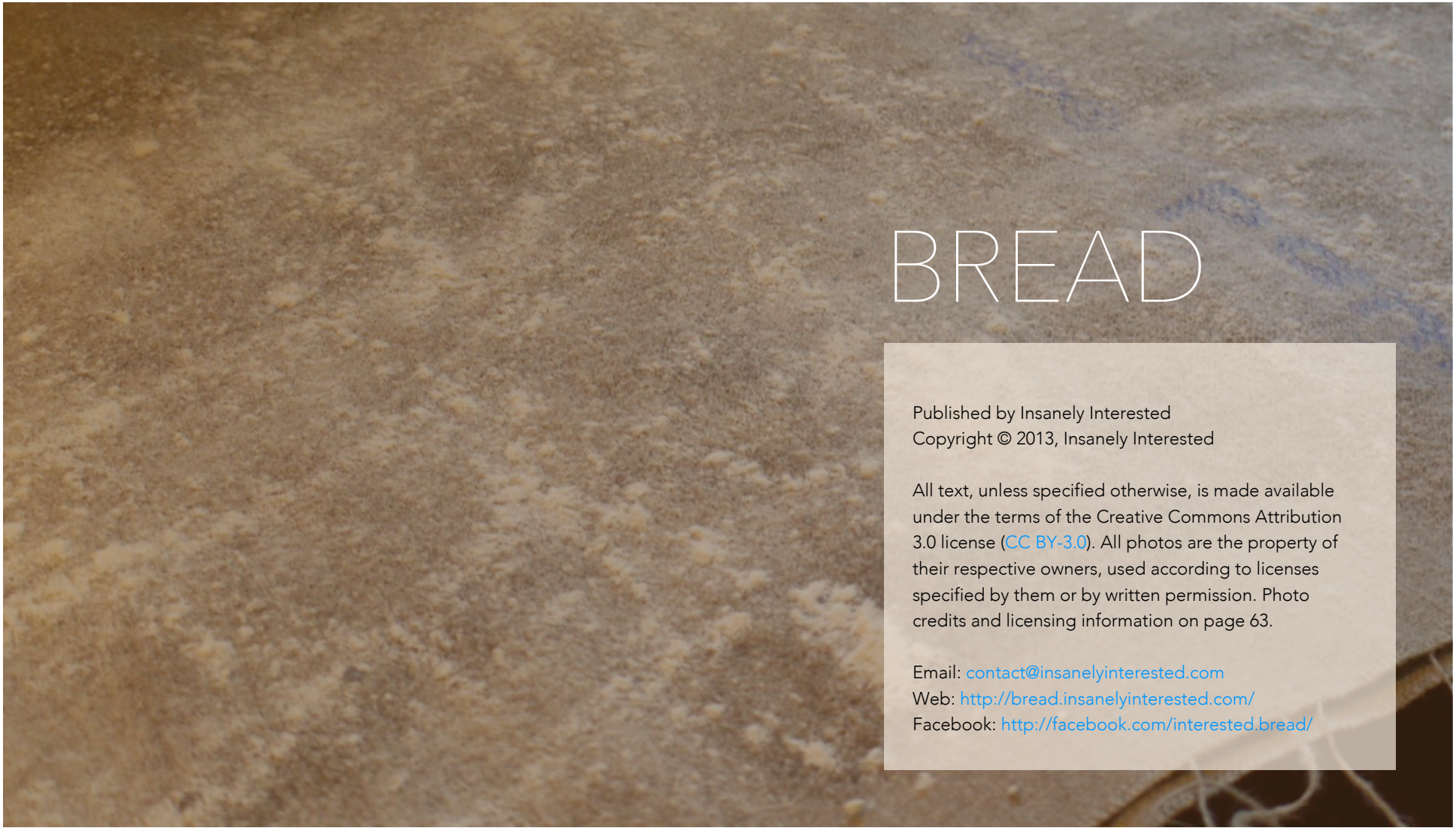
BREAD

JUNE 2013



BREAD

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WELCOME!

GREETINGS from a warm and sunny Finland. Winter is finally just a distant memory and as I write this, we are enjoying weathers even Mediterannean countries would be proud of.

At times like this, I enjoy walking in nature, listening to its sound, looking at its colors and textures. Sometimes, I even bring my bread with me—back to its roots as a part of nature.

But how green is our daily bread?

This is a question I have been wanting to explore for quite a while: bread is a staple food, a big part of culture, and healthy too. But growing the grain needed for just a single loaf requires a lot of farming ground, water, and energy. Milling the flour adds its cost, as does finally baking the bread.

It's all relative: bread is more ecological than meat, but handpicked berries eaten straight from the forest beat them both. But you will have to eat a lot of them to be filled, so maybe the question needs to be set in a different way?

WHILE EXPLORING the ecological impacts of bread making, I got in touch with bakers whose work I found sustainable.

Maybe surprisingly, they weren't focused on questions such as whether it's better to heat the oven with wood or electricity, or if it's better to use organic or non-organic flour. They were looking at a bigger picture.

In that picture, everything happens within a community: a baker bakes bread

for a group of people who live within a reasonable distance from her, using seasonal ingredients grown in the same area, with the help of her friends and neighbors.

In that picture, food is appreciated.

It is a gift from the baker to those who buy it. A bond that brings them closer to each other—in the words of Seth Godin: "All these interactions are art. Art isn't only a painting; it's anything that changes someone for the better [...] Art cannot be bought and sold. It must contain an element that's a gift, something that brings the artist closer to the viewer, not something that insulates one from the other."

WHERE DO WE FIT in in this picture? There are many spots available: we can be the patrons who support local craftsman bakeries that make bread as art, we can be home bakers who give the gift of bread to our immediate neighbors, or we can be the small bakery that brings the community together.

Whichever way we choose, from this appreciation grows a bigger picture that has the power to make not only bread but our entire lifestyle more sustainable, all the while making them more enjoyable as well.

IN THIS ISSUE

IN THIS ISSUE of Bread, we will dig deeper to the questions of sustainability, through interviews as well as some research, ideas, and tips. From the home baker's perspective, we look at ways to make our baking as sustainable as possible.

We will also take another look at the ethical side of bread through the work *International Community Bakeries* does to help some of the poorest people in the world help themselves and their communities through bread making.

BUT WE ARE NOT going to keep our hands off the dough either. This time, it means digging a bit deeper into shaping.

GET IN TOUCH

AS ALWAYS, I'm looking forward to hearing from you.

Whether you enjoy what you read or have ideas for improvement, I want to hear what you think.

You can email me at or post your comments on the magazine's Facebook page. I read all the mail I receive and do my best to respond in a reasonable time frame.

Also, the magazine is still new and as an independent publication doesn't have much marketing force behind it, so if you have friends who you think will enjoy what the magazine offers, feel free to show your copy and let your friends know about what we are doing. Every mention is appreciated.

Thank you for reading, and happy baking!

— *Jarkko*


"There are no mistakes. You might do it differently next time, but that's because you did it this way this time. Perfect, even if you say too much this too little that. It's you and please be yourself."
— Tassajara Bread Book

SHAPING BREAD

IN PREVIOUS ISSUES of Bread, we have talked about flour, fermentation, and baking as well as many other details of bread making, but only briefly touched on shaping.

While a sloppily shaped loaf of bread will have the same nutritive values as a well shaped one, it will not produce a beautiful oven spring or the pronounced ears we like to see in our breads. So, it's about time to dig deeper into the topic.

As Peter Reinhart writes in Crust and Crumb, "Great bread is primarily a result of dough technique and only secondarily of oven technique." By mastering shaping, you will get great results even in a regular home oven.

We will start by looking at shaping in general, and then go through the most important bread shapes: round loaves or boules, batons or bâtards, and baguettes.

Let's get started.

WHY WE SHAPE BREAD

THE MOST IMPORTANT goal when shaping bread is to build tension into the dough so that it can maintain its shape throughout the final rise and baking. This matters when making all kinds of breads, but most so with breads that are not baked in tins as they don't have any

external support to keep them in shape.

But this is not all there is to shaping. The tension built in shaping also helps in achieving good oven spring by keeping the gases from escaping too easily when the bread is baked. The gases push the dough to each direction, expanding the loaf to every side.

In Bread Science, Emily Buehler lists a couple of additional goals for shaping: shaping removes gas from the dough, splitting gas bubbles into smaller ones. This gives the dough a longer time to ferment and creates more places for the newly released gases to enter, which in turn helps create a uniform, even texture with gas bubbles of about the same size everywhere in the dough.

Now, this is not something you always want. Many bakers—myself included—really like irregular holes and therefore try to be careful not to remove too much of the gases from the dough when shaping. It is a matter of taste and of the type of bread you are hoping to achieve. Big holes in a sandwich loaf lead to jam dripping on your lap, but the same holes in a sourdough loaf are simply beautiful.

IN GENERAL, everyone agrees that you should touch the dough as little as possible while creating as much tension as possible. It is a hard balance to achieve, but one that comes with practice.

As Dan Wing writes in The Bread Builders: "Shaping must stretch the gluten net of the dough in all directions, as it will be stretched by its growing gas cells. Seams on the dough roll must be sealed to prevent unrolling as the bread proofs and bakes, but the dough must be handled gently—a difficult balance to achieve."

START WITH PRE-SHAPE

SHAPING BEGINS when you divide the rested dough into pieces of desired size.

What the size should be is be a matter of preference, defined by the size of your proving baskets, or maybe by the final product weight you want your bread to have when it leaves the oven. If aiming for a specific final product weight, you will need to take into account the effect of water evaporating during the baking. According to Wing, a loaf of bread loses about 2 ounces (or 50 grams) of weight per pound (450 grams) when baked. That is approximately 12 % of the total weight.

I often divide a 1 kilo dough into two 500 gram loaves or three loaves at about 330 grams each.

Use a scale to scale the pieces so that

"Shaping must stretch the gluten net of the dough in all directions, as it will be stretched by its growing gas cells. Seams on the dough roll must be sealed to prevent unrolling as the bread proofs and bakes, but the dough must be handled gently—a difficult balance to achieve."

they are all the same size instead of just eyeballing the loaf sizes. This has a number of benefits.

First, if you bake more than one loaf at a time, by making them all exactly the same size you won't have to worry about one bread being ready before the other. Always dividing the breads to same sizes will also help you judge the readiness of the proofed bread. When you bake loaves of the same size many times, you will learn to decide visually, what a loaf of that size should look like when it's ready for the oven.

To divide the dough, start by flouring the work surface very lightly. In all, during the shaping, try to use as little flour as possible so that you don't accidentally change the consistency of the dough.

Make sure you have enough room to work with your dough, then take it out from the bowl on the work surface. Gently press the dough down and fold it in thirds so that you have a long piece of dough that you can easily cut into pieces of desired size. Try to estimate the size as closely as possible, then cut and gently lift the piece of dough on your scale. If the piece of dough is too heavy, snap a piece off until you reach the right size. If, on the other hand, there isn't enough dough in the piece, add some.

AFTER DIVIDING the dough, it's time to pre-shape. Pre-shaping prepares the dough for the final shaping by aligning the gluten strains and building some initial tension in the dough.

Pre-shaping is a gentler version of the final shaping. Some bread authors recommend always pre-shaping into rounds, others recommend different shapes depending on the shape you are making: a round pre-shape for boules and batards and a loose log shape for baguettes. Try both approaches and use what works for you. For the actual shapes, see the shape specific sections below.

Don't make the pre-shape very tight as then there will be more room for doing some corrections to the shape in the final shaping.

After pre-shaping, place the piece of dough on a lightly floured surface and continue with the next piece of dough.

Let the dough rest for 10 to 30 minutes until the gluten has relaxed and the dough has softened a bit so that it is ready to be shaped again. This step is called the *bench rest*.

The duration of the bench rest depends on how well fermented your dough was before the pre-shaping. For fully fermented dough, the rest period is

shorter than for a younger dough.

If later, during the shaping you have difficulties and the dough seems to resist shaping, you can repeat the rest before continuing with the shaping. Also, if you notice that the dough doesn't keep its shape well, you can repeat the pre-shaping again before moving on to the shaping.

Also, if when you place the dough on the table, you notice that it could use some more strength, especially with slowly fermented bread such as sourdough, this is a chance to use some more force and stretch and fold the dough one more time. After that, leave the dough to rest on the table

In Tartine Bread, Chad Robertson writes: "Generally speaking, if the dough is divided too early, you need more time and maybe an additional shaping with a 15-minute rest in between. […] Divide the dough too late, and you'll need to shape the dough swiftly and gently, keeping as much air intact as possible. In this case, you'll want to bake sooner rather than later."

IF YOU ARE busy and the dough feels strong, it's possible to skip the pre-shape step (I do this quite a lot, actually) and move directly to shaping the final loaf. Again, you want to analyze the feel of the dough to decide if it can be shaped at one go and will still keep its shape properly.

SHAPE THE LOAVES

IN THE FINAL SHAPING, you define the final form of the bread you are making. Same principles as in pre-shaping apply, you just need to be more careful and use a bit more force to create the correct shapes.

Take one pre-shaped piece of dough and flip it upside down so that the seam side now faces up. Handle the dough with as little flour on the surface as possible—remember that you are building tension, and for this, a little sticking to the surface can actually be beneficial. As Robertson writes: "Tension builds when the dough slightly anchors to the work surface while you rotate it."

When you shape the dough, be decisive but gentle. Easier said than done, I know. But as Paulo Sebastião told us in the previous issue of Bread, most home bakers are rather too gentle than too forceful in their shaping.

Close all seams to make sure the loaf keeps its shape throughout the proofing and baking. And if you notice that the

"Tension builds when the dough slightly anchors to the work surface while you rotate it."

dough resists shaping, let it rest again.

On the other hand, if the dough tears, you are using too much force and the dough can't build more strength. It's ready.

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LET'S GET STARTED with the shapes.

I have found the boule—or round loaf—to be the easiest to work with, so if you are new to shaping bread, I suggest you start from there and move on to the more complex ones as you feel comfortable doing so.

In the end, only practice makes you perfect, and as always, be kind to yourself: we are making bread to eat it, so if everything doesn't always go as you hoped, you still got a delicious loaf of bread! Every baker does things a little bit differently, so there is no one right way to shape bread.

"The journey the dough takes is as individual as the baker himself," Dan Lepard writes.

SHAPE 1: BOULE

THE ROUND LOAF, often called by its French name, *boule*, is my favorite for many reasons: it is rather simple to form, looks good when slashed, and perfectly fits a dutch oven for baking.

A professional baker will roll two of these at a time, using only the friction between the table and the dough to build tension, but I still haven't learned how to do it so I will stick with the two hand method that leads to equally good results with less practice.

1. BEFORE SHAPING a round, divide your dough and pre-shape it into rounds (using the same method as for the final round loaf, only less tightly). Leave to relax for 10 to 30 minutes.

2. LIGHTLY FLOUR the table, then flip the piece of dough over itself so that the seam side that used to be below is now facing up. The amount of flour needed depends on the stickiness of your dough —sometimes, with a low hydration dough, you may not need to flour the table at all!

3. FLATTEN THE DOUGH a little, but be gentle so that you don't expel all of the air from the it. Then grab one corner of the dough with your dominant hand, stretch a little, and bring it to the middle of the dough. Press to make it stick.

4. ROTATE THE BALL, and repeat the action with the next corner.

5. REPEAT until the dough starts to feel tight, from four to eight times depending on how strong the dough was to start with.

6. FLIP THE LOAF so that the smooth side now faces up again. Place your hands below the dough, one on its left and one on its right side. Then, as Daniel Stevens explains in Bread: River Cottage Handbook No. 3: "in a fluid motion, bring your hands together under the dough, at the same time sliding the forward hand back and the back hand forward. This both spins the dough and stretches the upper surface down and under."

7. YOU WILL NOTICE how tension builds in the dough as you stretch the upper surface towards the bottom of the ball. When it feels good and holds its shape nicely, place the ball in a floured panneton basket or on a floured cloth (also known as the couche).

Leave to rest until ready to bake.

If the dough starts to rip while you are stretching it between your rotating hands, it is getting too tight. But don't worry: simply stop the shaping—the shape is ready.

SHAPE 2: BÂTARD

THIS SHAPE, described "an oblong-shaped loaf similar to a baguette but generally shorter and wider" by Paul Allam and David McGuinness in Bourke Street Bakery, is a common type of bread around the world. It can also serve as the starting point for shaping a baguette.

It is easy to cut to slices and with good scoring can lead to very beautiful loaves.

The shape is often called bâtard by its French name, but other names such as baton, torpedo, or log are also used.

1. START BY pre-shaping the dough into a ball. Some writers recommend pre-shaping into a loose log but from what I've seen, a ball is the most common pre-shape as it creates an even shape that ensures that the final shape is symmetrical.

2. ONCE THE PRE-SHAPED piece of dough has relaxed, gently flatten it into a rectangle, positioning it so that the shorter side faces you.

3. FOLD THE TWO corners furthest from yourself towards the middle (one by one). The Bourke Street Bakery book uses a clever way to illustrate this action: "As if you are building a paper aeroplane, fold it to create the nose cone."

4. WITH THE "nose cone" in place, fold it to the middle of the dough. Press tightly to secure the seam.

5. ROTATE THE DOUGH dough 180 degrees and repeat steps 3 and 4.

6. FOLD THE DOUGH into half and close the seam carefully using your fingers or the heel of your hand.

8. ROLL THE BÂTARD a little and place it in a panneton or on a floured couche.

SHAPE 3: BAGUETTE

THE BAGUETTE is probably the best known among bread shapes. Its crisp crust and long shape are known all around the world. And wherever the French have left their mark, be it in Haiti or in Senegal, the baguette is its surest sign.

As with all other shapes, there is more than one way to shape a baguette.

Some bakers flatten the dough and then roll it tightly, others start by preshaping into a loose log shape. My shaping method of choice begins with the bâtard shape presented above.

1. START BY shaping a bâtard following the instructions on page 14. Leave the bâtards to relax for 10-15 minutes.

If you are baking in a regular home oven, make sure to divide the dough in small enough pieces so the baguettes don't become too long to fit in your oven.

2. CONTINUE SHAPING the bâtard into a baguette: flatten the dough a little, then fold the top third of the oval into the middle of the loaf. Use the heel of your hand to press the seam tightly.

3. ROTATE THE DOUGH 180 degrees and repeat the folding to create some more strength to the dough. If the dough feels very strong already, you can move directly to step 4.

4. FOLD THE DOUGH in half and close the seam tightly. In Bread Science, Emily Buehler writes: "Moving from right to left, use your left hand to fold the dough over and your right hand to press the seam shut. Your left thumb presses out the backside of the baguette (opposite the new seam). You should hear gas bubbles popping."

5. ROLL THE BAGUETTE, being careful not to press too hard in the middle so that the baguette loses its shape or becomes longer than you can handle. If you like, you can roll the ends into pointy "spikes" to make the baguette look artistic and to give it some more crusty taste.

"If the baguette feels soft and weak, use the friction to add strength down the whole length of it." Buhler writes, and recommends simply pulling the dough towards you with two hands, starting in the middle.

"Remember to keep your hands on the table to prevent you from simply rolling the dough in an unproductive way."

6. PLACE THE BAGUETTE ON a floured couche for a final rest. Fold the cloth between the baguettes so that the baguettes maintain their shape and don't stick to each other.

HOW GREEN CAN YOU GO?

WE LIVE IN a fascinating world. One filled with problems but also with inspiring solutions.

Sure, we are faced with more than our fair share of bad news: We produce more food than ever, yet masses of people suffer from malnutrition and hunger. Carbon dioxide and other greenhouse gas emissions have skyrocketed and are now threatening to change the climate of the entire planet. Monoculture agriculture is bringing species of edible plants to the verge of extinction. We are fast emptying the planet's surface of its non-renewable resources. Millions of people lack access to safe water. Unemployment is on the rise around the world.

Lots of issues, as I said.

Yet, truth is that if we decide to take the issues seriously, there is a lot we can do—together.

One person can only achieve so much, but when our efforts are combined, small actions can get us a long way.

A LOT OF these issues have to do with food. Speaking about climate change alone, in his book, How Bad Are Bananas?, Mike Berners-Lee writes: "The food we buy adds up to around 20 per cent of our carbon footprint."

My guess is that if we count in all side effects food has on our lifestyle, changing the way we approach food may have an even bigger impact than 20 per cent. A relaxed, appreciative relationship with food leads to a more balanced life where

you don't need to participate in the consumption culture to find meaning in your life.

I think Tom Hodgkinson says it well in his book, The Book of Idle Pleasures, when he writes: "There is nothing less harmful to the environment than doing nothing. Lying in a field and staring at the sky may be planet-healing."

He encourages us to find joy in things that don't cost money and fuel the competitive economy. When you do simple things and do them slowly, with people you like, you find joy in the moment and have a life you don't have to escape from, be it by buying new electronic devices or traveling to far away countries on holidays.

BUT NOW, I have waited long enough to say this: You can congratulate yourself! You have chosen to bake bread by hand, at home or in a small bakery, for your family or your local community. This is an important step towards a good, sustainable relationship with food and the planet that provides it.

On an overall scale, bread is product with a low ecological impact. And even better, there doesn't seem to be a big difference in carbon or other emissions whether the bread is baked at home or in a bakery.

A 800 gram loaf has the carbon footprint of about 1 kg in carbon dioxide equivalents (1 kg CO_2e). That's not very much: "Bread is good stuff: a year's caloric intake can be had for around half a tonne CO_2e. That's only 5 per cent of the 10-tonne lifestyle and one-sixth of the current UK diet." Berners-Lee writes. While for a sustainable level of carbon emissions, we should all live lifestyles with a carbon footprint of 2 to 3 metric tons, Berners-Lee recommends a "10-tonne lifestyle" as a first step—already "around a third lower than that of the typical UK citizen."

How big a footprint we should each take as our next goals is debatable, but either way, bread is not a bad choice at all. But that doesn't mean that there wouldn't be ways to make it better.

IN THIS ARTICLE, I am going to try and suggest further ways to build a greener lifestyle around bread and bread making. Some of the ideas are easy to implement, others require some more work—some might be utopia even—so take what you find useful and run with it.

The issues around bread come down to a few topics to tackle: energy, ingredients, and waste. And maybe most

"There is nothing less harmful to the environment than doing nothing. Lying in a field and staring at the sky may be planet-healing."

importantly: a general relationship with food.

ENERGY

ACCORDING TO Berners-Lee, about one-sixth of the carbon emissions of a loaf of bread come from the baking.

"Just over half the emissions of a loaf of bread come from the actual growing of the ingredients. About one-sixth is the baking. Transport is typically one-seventh, and the supermarket itself adds about one-ninth. The bag is a very small consideration—and if it helps to keep the bread fresh for longer, it is probably well worth it." he writes.

A Finnish research found that the growing of ingredients was responsible for 45 % of the emissions, the mill for 2 %, and the bakery for 40 %. As you notice, the number for the bakery is higher than that from Berners-Lee's calculations.

At 40 %, what happens at the bakery already starts to matter.

MOST OF THE emissions within the bakery come from energy usage, mostly from baking, and in most of the cases, from using electricity.

I haven't found good research comparing the impact from wood-fired ovens or ovens fired with gas with that of electrical ovens, so I must rely on more general advice. Whichever type of oven you use, you are using a lot of energy—do not let it go to waste.

To start with the most radical suggestion, there are some breads that don't need an oven for baking at all.

TO START with the most radical suggestion, there are some types of bread that don't need an oven for baking at all. You can bake many flatbreads on the stove—and I have even seen a pizza recipe that calls for baking in a pan on the stove. But that, to me at least, seems a step too far.

Assuming you want to bake more than flatbreads and don't like the idea of deep-fried pizza, you still need an oven.

ONE WAY TO SAVE electricity is to shift your electricity intensive activities, such as heating the oven, to the off-peak period when less people are using electricity: at night. This can lead to flattening the peaks, and ideally to less generators running during the day and thus less emissions. Some electricity companies encourage this activity by selling night time electricity for a cheaper price than daytime electricity.

But more importantly, when you heat your oven, don't let the heat go to waste. This applies to ovens of all kinds.

PRE-HEATING THE OVEN takes time, as does cooling the oven after you have finished baking. To make the most of all this energy, you can organize your other cooking around the baking: cook food while the oven is heating and use the final heat for drying your muesli.

Also, when baking bread, there is no harm in turning the oven off already a little before you take the bread out. Your baking stone has heat stored in it for still some time.

The oven, especially a wood-fired one inside the house, also radiates heat into the room it is in. This way, baking during the winter can actually help you save in heating expenses. With this in mind, one

idea would be to focus on seasonal food and bake less bread during summer and more in the winter. This of course applies only to countries with such seasons.

SOLAR OVENS are an interesting idea with some promising experiments going on in countries abundant with sunlight.

A solar oven requires no fuel, so if you can bake a loaf of bread in one, the baking creates virtually no emissions (there are some emissions from building the box, but even those are very small).

A downside is that most solar ovens only reach temperatures of about 180°C, which is a little too low for baking bread. Some newer and bigger versions however are said to go up to 260°C (500°F), and still without energy costs or carbon emissions!

IN ADDITION TO the oven, there is another big consumer of electricity in the kitchen: the freezer. While the technology is getting better and more energy-efficient freezers are being developed, if you can do without a freezer, you will save a lot on your energy footprint.

On the other hand, having a freezer helps with another big issue, which is food going to waste (more on this below), so unless you find a way to share bread within your neighborhood, a freezer is still a handy tool to have around. Just make sure to defrost it often to keep it working in an optimal way.

Finally, if you want to go all the way in slashing your energy footprint, you can further cut emissions by kneading your dough by hand instead of using a mixer. For a home baker this is probably a good recommendation, but the impact is so small compared to that from ovens and freezers that for anyone mixing big amounts of dough, unless you are a fan of hand-kneading, it is not worth the effort.

INGREDIENTS

THE NEXT BIG thing a baker can affect is the choice of ingredients. Who you buy from and what you buy is a choice that has a big impact when multiplied by 7 billion customers. But how should you make this decision, and why?

The equations are not simple and there are still different ways to look at the question, but at the core, it boils down to three things to consider: transportation, growing method, and people.

BY NOW, everyone has probably heard about food miles, but the reality is that the number of miles the food travels is not as important as how the food travels those

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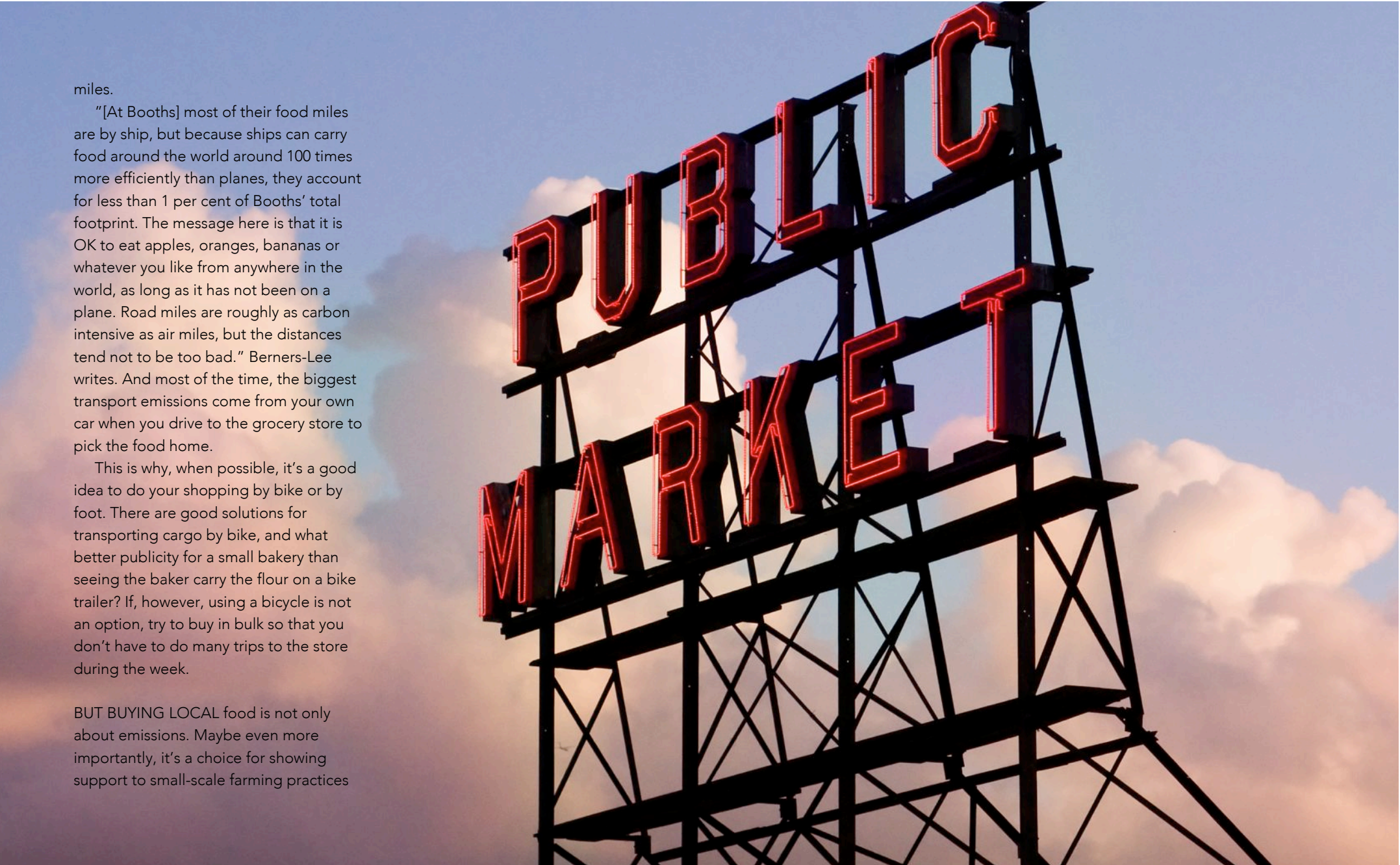
miles.

"[At Booths] most of their food miles are by ship, but because ships can carry food around the world around 100 times more efficiently than planes, they account for less than 1 per cent of Booths' total footprint. The message here is that it is OK to eat apples, oranges, bananas or whatever you like from anywhere in the world, as long as it has not been on a plane. Road miles are roughly as carbon intensive as air miles, but the distances tend not to be too bad." Berners-Lee writes. And most of the time, the biggest transport emissions come from your own car when you drive to the grocery store to pick the food home.

This is why, when possible, it's a good idea to do your shopping by bike or by foot. There are good solutions for transporting cargo by bike, and what better publicity for a small bakery than seeing the baker carry the flour on a bike trailer? If, however, using a bicycle is not an option, try to buy in bulk so that you don't have to do many trips to the store during the week.

BUT BUYING LOCAL food is not only about emissions. Maybe even more importantly, it's a choice for showing support to small-scale farming practices



that build a bond between the farmer and the community she works with, and knowing where food comes from. This can be a simple customer relationship, or it can go all the way to community supported agriculture (CSA) where customers are co-producers working together with the farmer to pick the grains to grow and the farming methods to use.

THE RISE of GMOs and patents on seeds is leading to a world where farmers become dependent on seed companies, big amounts of pesticides, and in the end, only large-scale farms will remain.

There are no genetically manipulated bread flours yet, but even the dominance of standard wheat and rye grains is leading to other, traditional, grains' disappearance. In 2006, Michael Pollan wrote: "Of the tens of thousands of food species nature offers humankind, we are relying on a twindling few: a mere eight crops now supply three-quarters of the world's food."

The choice of grain or flour you buy can have an effect on this development.

As bakers, we are the storytellers who take the abstract seed and put it into a time perspective in history: what kind of bread it was used to make. Stories like this create appreciation for the food appreciated and can help preserve a species.

I don't quite buy the idea that spelt is healthier than regular wheat, but I do believe it's important that we preserve old varieties of grains so that we are not dependent on only a few bread grains. Study old recipes, find the flours, bake something interesting.

"If we want to bring about sustainable development, we must reinforce the elements of the local economy and recognize how much creativity there is in making this local economy." Slow Food movement founder Carlo Petrini says.

ONE OFTEN HEARD piece of advice for a greener lifestyle is to cut on the consumption of meat and dairy products. In bread making, we don't use a lot of meat—good bread can actually even reduce the need to put meat on top—but dairy is something to think about.

Would it be possible to use plant based products instead of milk? Is it necessary?

Maybe, maybe not. It's a balance between taste and ecology and each of us has to decide which of the two wins. But there are things we can easily do right away: we can make sure the milk, eggs, and butter we use are produced in a

"If we want to bring about sustainable development, we must reinforce the elements of the local economy and recognize how much creativity there is in making this local economy."

sustainable way, which agains brings us back to the human aspect of food: local food is about much more than food miles. It's about knowing where the food comes from, what is done to it before it reaches your kitchen, and naturally: what you do to it and where it goes after that.

Local food has a story and you are a part of it.

WASTE

"BREAD IS a great low-carbon food provided we actually eat it. There's the catch. It gets thrown away because we are fussy eaters and because it doesn't keep well." Berners-Lee writes. Naturally, the same applies to all of the food we eat: as much as 25 % of all the edible food bought in the developed countries get thrown to waste, meaning that any emission, be it carbon or pesticide (or even worse, animals killed) were done in vain.

By cutting the amount of food we throw to waste, we can not only help reduce the need for garbage dumps but also bring the food production down to a more sustainable level.

"It is slightly better to compost waste food than to throw it into landfill, but it doesn't get you away from the main issue

that the carbon footprint of that food has been needlessly incurred." Berners-Lee writes.

REDUCING WASTE is one area where you can most easily have the biggest impact. When making bread, use left-overs from other cooking as ingredients: If you have left-over mashed potato, use it to make potato lefse. Olives and tomatoes go very well into a focaccia. A pizza can be topped with almost anything you can think of. If you have milk about to go sour in your refrigerator, use it as a liquid for your bread.

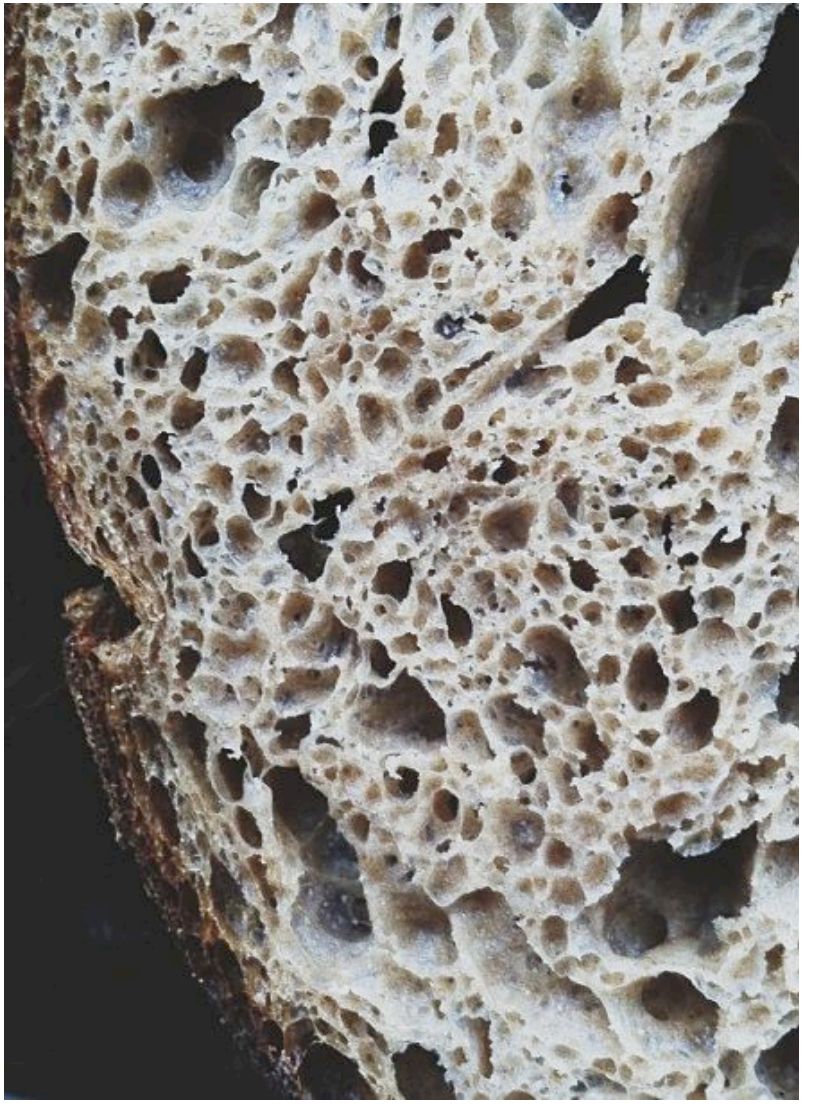
If you run a bakery, maybe you can make smaller loaves and thus help your customers make sure they can eat the bread they buy. And by focusing on sourdough, you can easily make breads that last longer—even without needing a freezer.

IN THE END, what matters most is that you do something. Don't let the size of the issues keep you from making changes —big or small—and experimenting with new ideas for a more sustainable future.

After all, what else is there for us to do?

And if we do it together, we can have a lot of fun while at it!

In the end, what matters most is that you do something. Don't let the size of the issues keep you from making changes—big or small—and experimenting with new ideas for a more sustainable future.



SMOKE SIGNALS

ALL GOOD BAKERIES SHARE a sort of timelessness—a feeling that comes from working on a tradition that has been kept alive throughout centuries.

Reading the blog of Tara Jensen who runs a small bakery called Smoke Signals, I felt this timelessness more strongly than before. I was immediately taken to a different time and place, which as a friend told me when I showed the blog to him, was like from a baking dream.

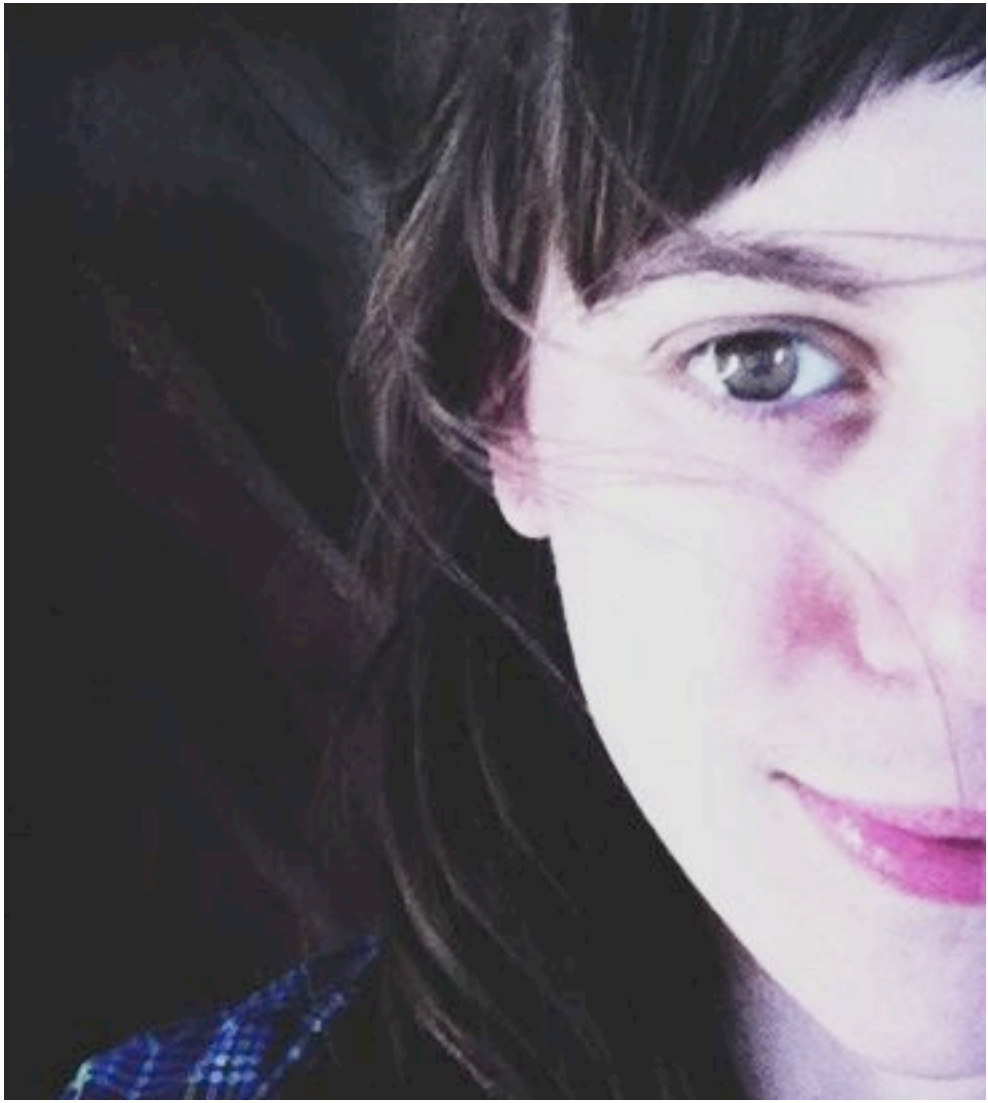
Everything about it was speaking of a deep passion for craft, people, and legacy.

"I love the practice of baking, but in the end what I do, what my work consists of, is other people and the relationships we have with each other. Bread is the vehicle through which these connections are forged and upheld." Jensen writes.

SMOKE SIGNALS is a small, handmade bakery just outside of Asheville, North Carolina—on a farm called Papercrane Farm that Jensen cares for with her sweetheart. After many years baking for other bakers, it's also Jensen's first journey into baking on her own.

The bread is naturally leavened, made with local, freshly milled flour. For pastries, Jensen uses seasonal, organic produce, many times from Papercrane Farm.

Jensen is a strong supporter for Carolina Ground, a mill dedicated to cooperation with local farmers and bakers. As she uses only flour from Carolina



Ground, Smoke Signals is named the showcase bakery for the flour. In addition to this, she also works a few days a week helping out at the mill.

I ASKED Jensen a few questions about her journey with bread, the bakery, and her thoughts on leaving a legacy.

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***Jarkko**: Before founding Smoke Signals, you have a strong history with bread, baking at different bakeries (Red Hen Baking Company, Farm & Sparrow…). Looking back on the journey, in terms of craft, ideals, or lessons, what have you taken with you from each of the bakeries you have worked at?*

Tara: I WALKED INTO a bakery while in college and immediately responded to the environment.

As a young student questioning everything, the bakery was comforting for its commitment to a timeless craft, and yet excitingly filled with the contemporary world. I began seeking out bakeries whenever I needed work and ended up baking for over six bakeries around the United States over the course of the past ten years, each leaving a mark on my baking passport.

MY TIME at Red Hen Baking reveled to me the orchestration of a large scale operation and what it means to bake as a team.

Over the course of a few years, I was able to witness what an important role a bakery can play in a community through providing stable employment and a sense of togetherness. As an employee, we were constantly reminded that our hard work was at the core of the bakery's success.

It sunk into me that the highest achievement of a bakery was not only outstanding bread, but a place where bakers felt encouraged, supported and excited.

Red Hen was also where I learned the staples of mixing, forming and baking.

I was in my early twenties and learning how to use a peel was a defining chapter in my baking life. I think each young person should learn how to use such a tool. Mastering the balance and swiftness of loading and unloading several hundred loaves left me with a sense of grace and strength. The motion of loading/unloading bread onto a hearth is still one of my body's favorite movements.

WHEN I ARRIVED at Farm & Sparrow, the volume of the baking was much lower,

"I was in my early twenties and learning how to use a peel was a defining chapter in my baking life. I think each young person should learn how to use such a tool."

enabling a deeper exploration of individual ingredients and an intense commitment to each loaf.

It was here that I began to understand the bakery as part of larger cultural/ agricultural network and was opened up to the worlds of farming and milling. Due to the intensity of work done by hand, the whole concept of craft came into focus for me and I was able to start imagining bread as an artistically expressive item.

If Red Hen was about gaining understanding through interacting socially, Farm & Sparrow was about learning through a test of the self.

Accountability and responsibility were huge lessons for me. Without having an entourage behind you, if there was a mistake, there was no hiding it. Although extremely challenging, this scenario taught me the necessity of focus and bringing an uncluttered mind to your baking.

***Jarkko**: What made you decide to take the next step and go "on your own"?*

Tara: I WAS AT A PIVOTAL moment in my life in general and when I thought about my career as baker, I instinctively knew that I had reached the limit of what I could learn stepping into another baker's

process.

I wanted to find out just how much I liked making bread. Strip away the bakery camaraderie, the formulas already printed out for you, the paycheck every week and just see: *do I really, really want to do this?*

Do I want to bake when I'm lonely? Do I want to bake when I'm tired? Do I want to bake when it's holiday?

So far, the answer has been: Yes.

Jarkko: At the same time, I feel that "on your own" are not the right words to use here… One of the things that inspire me about Smoke Signals is how you have people at the center of everything you do. As you say in your mission statement, "social relationships based on mutual aid promotes compassionate business practices."

One example of this was how you used the oven at a local pizzeria before you got your own oven very recently. Can you tell a bit more about that? How did the agreement to use the pizza oven come to happen, and how were you able to organize it in a way that was good for everyone involved?

Tara: ALTHOUGH I had made the choice to start baking solo, I wanted to give myself some time to investigate the kinds

of breads I offered and what it meant to run a business.

So, for my first year baking for Farmers' Markets, I sought out the help of my community. I had previously used the kitchen of another local restaurant to run a winter bread CSB (Community Supported Bread), but I wanted to be somewhere where I could utilize a hearth.

I approached the owner, Deborah Turner, and asked if she would be interested in allowing me to bake my bread in her oven once a week. She was immediately receptive and extremely generous.

In exchange for the use of the oven, I leave her fresh bread. During one of our initial conversations about using the space she made it clear that as small business in a rural area, it's imperative that we help each other out any way we can. This is a woman who really embodies selflessness and community service. Without her understanding of my situation I would have never gotten off the ground. If this were a fairy tale she would definitely be my fairy godmother.

I WOULD RECOMMEND this kind of arrangement for anyone who is thinking about striking out on their own or is dealing with financial restrictions. It's a

great way to get a feel for the experience and to learn just what equipment you need and what purchases can wait till next year. Test Kitchens, Certified Kitchens and shared spaces are becoming increasingly popular and some facilities even offer help with packaging, marketing, business plans and financial assistance.

***Jarkko**: Another example of mutual aid could be your relationship with Carolina Ground?*

Tara: I CONSIDER my relationship with the mill to be very symbiotic. Once I began working there, assisting the Miller one day a week, I was able to fully delve into the flours.

Freshly milled, local flour gave my bread a unique voice and the difference in the quality of my bread was noticeable. I was achieving higher hydrations and an open crumb with a substantial earthly flavor. The dough had a life to it. Using the bread as an example of what could be done with the flour was certainly a great honor.

There are, of course, many awesome bakers in the area making the switch to Carolina Ground flour and doing some amazing work.

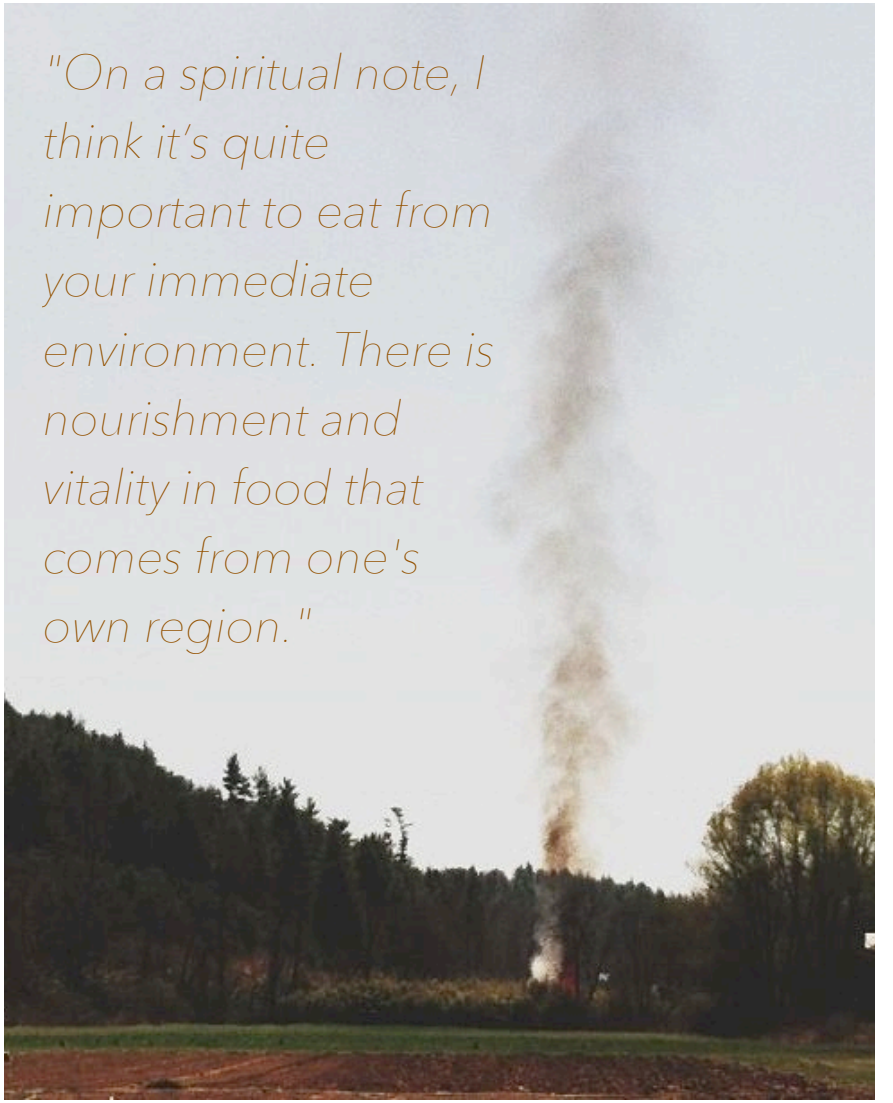
***Jarkko**: At the mill, as well as at Paper Crane Farm you seem to be very committed to local ingredients. What is the thinking behind this? What would you say a bakery, or in the end, the customer gains from using grains and other food grown nearby?*

Tara: USING LOCAL INGREDIENTS was born out of a trade and barter mentality. Selling at Farmers' Markets, I often go home with all I needed just through exchanging bread or pastries.

I prefer these pathways in which goods, foods and favors are part of each of us making a living. Local is my way of defining a set of ingredients to work with and helping to cultivate a sense of "we're all in it together."

For example, it's been a cold and wet spring and much of the produce that was available to me for pastries last year simply isn't ready yet. So I'm using roasted radishes instead of turnips. Getting creative with what is at hand is important to me.

ON A SPIRITUAL NOTE, I think it's quite important to eat from your immediate environment. There is nourishment and vitality in food that comes from one's own region. We get to taste the life around us,



"I think we miss out on a real story when we just purchase whatever we want whenever we want it. I'm waiting on some strawberries right now and when they ripen that will be a memorable day."

the weather that year, the composure of the soil, the string of sunny days in late August.

I'm not a purist by any means, but I think we miss out on a real story when we just purchase whatever we want whenever we want it. I'm waiting on some strawberries right now and when they ripen that will be a memorable day.

In the end that is what eating local is about to me: using food to help us find our moment in time.

***Jarkko**: To ask a more practical question, you seem to be doing a lot: baking and selling bread, working at the farm, working at the mill, photographing, writing. How do you make time for all of it? And is there a rough "normal" day or week schedule that you could share with us?*

Tara: FUNNY YOU SHOULD ASK how I make time for it, since my experience of my life is that it has really slowed down over the past few years.

I chose to start the bakery when I turned 30, a definite reaction to getting older and feeling that if I wanted something it to happen there couldn't be any more waiting around. Since making that choice I've let a lot of things go.

I don't make it to all the dance parties or art openings I used to.

I save reading books for the winter.

I spend less time in fancy clothes.

The reality is I hardly do anything else!

I CERTAINLY struggled with this initially, but once I accepted that at least for the next few years that work was going to be my entire life, I found some peace.

On a typical week, I bake on Monday and go to market on Tuesday, work on the Farm on Wednesday, (and throughout the week—dating a farmer there's always something to be done), mill at the mill on Thursdays, bake on Fridays and go to market again on Saturdays.

The season is just getting going so I'm sure some days will change and adjust.

I can say that no matter what, I start each morning by drinking coffee and reading my horoscope. (Laughing)

***Jarkko**: When writing about sustainability on your blog, you brought up the concept of legacy: "The words I long to hear are legacy and adaption. What story are you leaving behind that will inspire a child? How flexible are you in the face of change?"*

I like that a lot, as legacy is a question I often think about back in my own work

and life as well.

How do you approach the question? What kind of legacy or story are you hoping to create with Smoke Signals?

Tara: THIS IS A DIFFICULT question.

I am still getting the wheels turning so to think of what I'd like to leave behind is a place in the future I can't see yet.

Prior to Smoke Signals I had a great career as an artist. I stopped creating "works" once having a business took over. But there are moments now where I feel the most creative I ever have.

I want Smoke Signals to be remembered as the documentation of a life through the craft of baking. I hope my legacy involves butter on hot bread and a decent song on the radio.

***Jarkko**: In that same context you spoke about adaptation. What does that mean for you and your work?*

Tara: THIS IS WHERE the spirit of your beliefs keeps you open and flexible.

I may love using local grain, and I may be fully committed to that, but if there were a shortage I wouldn't take issue with figuring out the next best and ethical option.

That to me is adaptation. I want the bakery to be able to respond to the world as its happening: to be in conversation with our ideals, not dictated by them.

***Jarkko**: Is there something more you'd like to add and say to those reading this article?*

Tara: WELL FIRST, thank you for reading this!

And, be kind to yourselves when you're baking. Our heads are filled with so many ideas of what we want our breads or pastries to look like, to smell like, to taste like. Don't beat yourself up if it doesn't come out exactly as you planned.

Personally, I enjoy baking because I get to work with a food that is alive, and because of this there is always an element that's out of my control. Embrace your mistakes as learning opportunities and allow your success to warm your heart, not your head.

KNEADING CONFERENCE

ON JULY 25th, 2013, amateur and professional bakers, millers, farmers, wood-fired oven builders, researchers, and other people interested in the state of bread and grain will gather in Skowhegan, Maine for an annual two-day conference built around bread. The conference, which began in 2007 as a grassroots project organized by a group of bread enthusiasts, is in its seventh year and keeps growing.

Kneading Conference was built around the idea of bringing back a largely lost local grain economy in the Maine region—only about 1% of the wheat used in Maine was being grown in the region. In 2011, the conference organizers incorporated as a non-profit organization called Maine Grain Alliance. The same year, Kneading Conference also got a sibling when Kneading Conference West was organized for the first time in Mount Vernon, WA.

The conference is a place to meet likeminded people and build relationships that can lead to good cooperation. It is also an opportunity to improve your craft through lectures and hands-on workshops on topics such as building wood-fired ovens and baking sourdough bread.

WHILE THERE ARE many fairs and Farmers' Markets where bread is sold and presented to a buying public, I found the idea of a conference for people who make bread so unique that I decided to contact Wendy Hebb, program director at Kneading Conference and ask a few questions about the conference, its goals, and the work involved in organizing a conference of this scale.

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***Jarkko**: A key goal for Kneading Conference and Maine Grain Alliance is restoring local, or regional, grain economies. What does this mean and why is it important?*

Wendy: RESTORING LOCAL and regional grain economies accomplishes a number of goals: it preserves rural landscapes, provides access to an affordable and wholesome staple, creates income for small to mid-sized farms, supports rural economies, provides purposeful jobs (people feel pride when they are involved in feeding their families and communities healthy foods), keeps grain seeds in the public domain, maintains organic (non-GMO) seeds (there are no GMO wheats yet, but that isn't guaranteed into the future), and strengthens any community's efforts to create food security.

People who are aware of the full chain of events, from seed to loaf to table, become better stewards of the land.

***Jarkko**: To further your goal, you bring together farmers, millers, and bakers, as well as other people who work with grains. What do people from each profession gain from the cooperation?*

Wendy: A GRAIN ECONOMY is a cooperative mission: it requires that everyone along the supply chain, from farmer to miller to distributor to end user, contribute effort and recognize and support each other's need to make a profit.

It requires that they invent new solutions to obstacles, such as rebuilding infrastructure and rebuilding how-to knowledge.

In addition to controlling the chain of interconnected activities, they build relationships, which is to say, the economic efforts build social connections.

***Jarkko**: On your web site, you mention that there are new startups in the grain field being started as a result of your work. Can you share some details on the results of your work?*

Wendy: AMONG THE NEW enterprises that have been influenced by our work in Skowhegan are The Somerset Grist Mill, The Pickup Cafe, Pasta Fresca. Beyond Skowhegan, a number of bread and pizza business startups have been created by Kneading Conference alumni, and a long list of bakeries and a granola company are now incorporating Maine wheat and oats into their formulas.

We are also advising a young man who is developing a business plan to build a malting business in Maine.

AS A RESULT of the demand for Maine wheat that our efforts have created, Aroostook farmers and other Maine farmers are planting acres of organic wheat to supply the new customers.

The Maine Grain Alliance is working with the Northern Bread Wheat Project at the University of Maine to continue to make expertise available to farmers, millers, bakers and chefs, and partnering with Dr. Ellen Mallory of the Bread Wheat Project, we are launching the Maine Grain & Bread Lab at the Somerset Grist Mill this fall. The purpose is to offer educational workshops year-round that bring together farmers, bakers, millers, and chefs to continue to explore the flavors and functionalities of local wheat and other grains.

***Jarkko**: Looking at your conference schedule, your offering is an interesting mix of baking, grain economies, but also wood-fired ovens and artisan, traditional techniques. How do you plan the content of the conference?*

Wendy: WE LISTEN carefully to our constituency.

What are their interests and concerns?

What are the fundamental workshops that should be included each year?

Who are the new presenters that we should invite, who are the thought leaders that can add to the ongoing conversation?

What developments, conversations, challenges, exciting frontiers is the Maine Grain Alliance involved in that would be of interest to the participants?

***Jarkko**: What have been the most popular themes throughout the years?*

Wendy: MOST PEOPLE arrive at the Kneading Conference keen on learning new skills, either as a home baker, or a professional who would like to add variety to his or her production.

Most leave saying that the takeaway memory is the camaraderie that easily and

"Most leave saying that the takeaway memory is the camaraderie that easily and quickly develops during the two days of the workshops. People stay in touch after they leave, continuing to swap information and stories."

quickly develops during the two days of the workshops. People stay in touch after they leave, continuing to swap information and stories.

For some it is simply the refreshing experience of being among a group of interesting people, all of whom are passionate about real bread and about strengthening the communities where they live and work—by sharing one good loaf at a time or on occasion, by starting a new enterprise.

***Jarkko**: As an overall feeling I get that you appreciate handmade bread, traditions, and artisan craft. Is this a natural part of your focus on reviving the local grain economy? Can a local economy thrive without craft, as factory work, so to speak?*

Wendy: THIS IS AN IMPORTANT question and one that we ask, too.

Certainly small regional grain economies can thrive if they are supported by the local population. We have made it part of our mission to engage in conversation with people who work in "factory" bakeries.

Our belief is that by building bridges between the two approaches to food—the global and the local—we can better address some of the challenges that peak

oil, climate change, job insecurity, etc. are handing us.

Craft bakers can learn from the efficiencies of large-scale systems, and MGA can help build commitments to diversify grain sources and varieties so that we do not repeat the Irish potato famine where in the one variety of potato that the farmers planted, the Lumper, failed and a million people died. We also bring to the large scale bakers the fact that there are thousands of varieties of wheat, and each has a distinct flavor depending on the variety and the season and the soil in which it was grown. This can add depth to the array of products available, without relying on chemical additives for flavor enhancement.

***Jarkko**: I'm assuming you gather people from all over the country (I know I would be coming if I was closer). What is it about the conference that makes people want to participate and travel to be there?*

Wendy: YES, THIS YEAR so far we have people registered from the West Coast, Canada, London, Texas, Florida, many states.

We have been fortunate in that articles about the conference that speak to the value of the experience have appeared in

the New York Times, the Smithsonian Magazine, Saveur, Gourmet, and other publications. In recent years, knowledge of the conference and the Kneading Conference West has gone viral—blogs talk about it, bakers talk about it—with the result that we often hear from people who have heard about the conference through word of mouth, or from a blog that is new to us.

Plus, Maine is beautiful in the summer!

***Jarkko**: But everyone can't make it to Maine, or the USA to participate in the conference. If someone was to start a conference of this type, what would you recommend? Where to start?*

Wendy: EACH YEAR, at least one person contacts me about starting a Kneading Conference in their town or state.

My advice is to first ascertain if there is significant interest—the kind that translates into lots of volunteer hours to put on the conference (I work full time year-round on the Kneading Conference and the Kneading Conference West).

The second hurdle to overcome is the expense. We seek sponsorships and grants to maintain a registration fee that is approximately half the actual cost of someone participating in the conference,

"What amazes me is how much a small group of dedicated people can accomplish if they don't give up, despite difficult odds."

and also to develop the programs that develop from the conference.

So far, these two prerequisites have discouraged others from building a Kneading Conference.

BECAUSE OF THE INTEREST, we suggest to people that we can put together a group of experts to address the particular goals of a particular community, thereby reducing their expense and helping the core of volunteers to determine next steps.

***Jarkko**: Finally, I'm sure I left many interesting things unasked... So, do you have something you would like to add yourself?*

Wendy: I DO NOT live in Skowhegan, nor am I one of the founders of the Kneading Conference, so I feel that I can be objective about the accomplishments of the conference.

What amazes me is how much a small group of dedicated people can accomplish if they don't give up, despite difficult odds.

And secondly, I am impressed by how pride happens. Skowhegan people are proud of the accomplishments of the Maine Grain Alliance and they participate in the food hub that is developing in Skowhegan because they are excited that something for the common good is happening in their community, something that the nation is watching!

PICKS FROM THE CONFERENCE SCHEDULE

Artisan Bread 101

Building a Brick Oven

Building an Earth Oven

Fired Up for Bagels!

Growing Rice in Vermont

Wood-Fired Production Baking

Mobile Oven Businesses

Masons on a Mission

Artisan Nooks and Crannies: Sourdough English Muffins

Loaves and Fishes: Telling Maine's Story with Food

Pizza in the Home Oven

The Small Farm / Big Combine Dilemma

Malting in New England

The Farmer, The Miller & The Baker

The Sweeter Side of Wood-Fired Oven Baking

Yeasted Crackers!

Acorn Flour & Rocket Ovens

Flatbreads from the Tandoor Oven

Preferments and Sourdoughs for the Home Baker

Heirloom Corn

Madmen & The Artisan Baker

Operating a Wholesale Business

Other Good Things from the Wood-Fired Oven

The Baker's Life

The French Approach to Sourdough Loaves

Grist Mill Tour @ Somerset Grist MilL


MACADAMS
BAKING SYSTEMS

BUILDING GOOD BAKERIES

AT TIMES, books really change lives.

Dan Leader—best known for his acclaimed Bread Alone bakery in Woodstock, New York—was visiting South Africa as a consultant for a large super market chain, Pick n Pay, when he was given a copy of the book, We Are All the Same.

The book tells the real life story of Gail Johnson, a white Afrikaans woman who ends up taking care for a black township boy born with HIV. Johnson raises the boy, Nkosi, as her own, fighting for his right to go to school and to live a normal life until he dies in 2001, at the age of 12. Before his death, Nkosi asked her mother, "What is going to happen to the other HIV moms and kids like me?" Inspired by this question, shortly after Nkosi's death, Johnson opened Nkosi's Haven, a home for HIV mothers and their children.

The story touched Leader deeply, so through connections at Pick n Pay, he arranged a visit to meet with Gail Johnson at Nkosi's Haven. There, he baked with the women and became even more convinced that he had to do something.

AND SO WE MEET Neil Ratner, a retired physician with a long background in doing charity work in Africa.

Ratner's fascination with Africa started on a guided safari in Kenya that turned into five years of running a semi-sustainable clinic in a Kenyan village, followed by work in the aftermath of the 1998 bombings in Kenya and Tanzania, as well as some work in South Africa through the Nelson Mandela Children's Fund.

Ratner had retired and moved to Woodstock (a great place for a "geriatric hippie", he says) when he read a newspaper article about Leader's experiences in South Africa and his willingness to do something to help.

"I read the article in the paper and I

thought: this is a good time for me to get back to charity work in Africa. So through people I knew, I met Dan and we created what would later become International Community Bakeries." Ratner told me when I talked with him on the phone one evening this May.

THE FIRST IDEA the two men came up with for their new charity was giving full-grain bread to HIV orphans. However, as they soon realized, in the NGO world these days, it's important to think about the end-game: "Can you create something that is a real business but still a social enterprise?"

They looked at the BiD Challenge, a project backed by the Dutch government for inspiration, and its catchphrase, "Make poverty your business", became the guiding principle for the new charity.

There was nothing sustainable about just giving bread to these children, so Ratner and Leader kept exploring their options. Following the old saying about giving a man a fish, which they rewrote to "Give a man a loaf of bread and you feed him for a day. Teach a man to bake a loaf of bread and you feed him for a lifetime." Leader and Ratner followed the idea to its logical conclusion. Every village, anywhere in the world has someone baking bread—or a product similar to bread—so bread clearly had a world-wide appeal.

A bakery created a chance to do much more than just give out bread.

"We thought, if we could teach people to bake bread, bread being such a basic commodity all over the world, if we could create the factory to produce that, we would have done a lot more than just feeding HIV orphans a healthy product. And we could still feed the HIV orphans a healthy bread product as a secondary gain for giving them a bakery." Ratner says.

Ratner continues to tell that in a bakery, they can employ some people, give others a profession, feed people a better product, and also create a model sustainable business for the poorest of the poor.

"It's a lot easier to go to a normal middle-class community and create a bakery and then franchise that concept. But that's not what we're about. We want to go where the poorest of the poor are, to communities where others don't go." he says.

WHEN THE TIME CAME time to choose the location for the first bakery, Nkosi's Haven Village was a natural choice. The bakery opened on December 1, 2009 and is now sustainable and providing a healthy

"If we could create the factory to produce that, we would have done a lot more than just feeding HIV orphans a healthy product. And we could still feed the HIV orphans a healthy bread product as a secondary gain for giving them a bakery."

whole grain bread to the community.

Creating a healthier bread that is still appealing to the future customers was a challenge that Dan Leader took on to tackle.

"We went to South Africa and our whole idea was a healthier bread than the no calorie nothing white bread they were eating. So we tried to introduce a brown wholegrain bread and nobody wanted to eat it, and we couldn't understand why. That was because we didn't understand the cultural prejudice of everything white being better than everything brown." Ratner recounts the story from the early days of the project, "It was something we had to overcome and Dan, being the master baker he is, was able to mess with the ingredients enough to give them a taste that was so appealing that they said: The heck with the white bread, this is really good!"

Lesson learned: you can't just walk in and say "This is good for you and this is terrific bread and go eat it!"

TODAY, the bakery in Nkosi's Haven Village, as well as a second bakery that was opened on February 2, 2011 in Capetown—both built inside shipping containers—are both self-sustaining and International Community Bakeries has shifted its focus to Haiti, where together with an Irish NGO called Soul of Haiti, they run a project that can lead to opening a total of as much as twenty bakeries.

THE SAINT MARTIN area in Port-au-Prince, Haiti, is one of the worst slums in the western hemisphere. It is a roughly one square kilometer area that is home to about a hundred thousand people with no running water, sanitation, or electricity. Here, Soul of Haiti found a former gang member who after the earthquake had decided to change his life and become a baker in his father's footsteps.

"When they found him, he was in a little 2-by-4 nothing place with a dirt floor and a tiny little bullshit kitchen oven, making 2000 little dinner rolls a day that he was selling in the community." Ratner tells me excitedly. "They decided to take this guy and bring him up to the level of small commercial baker."

Soul of Haiti found International Community Bakeries online and asked them to help make the project happen.

THE ENTIRE COMMUNITY is gang-controlled, so if they were to make the project a success, the team needed to involve the gang from the beginning.


VOLETTE BOUTIQUE

"To give you an example, when we went down there, we had to go meet the gang and walk the neighborhood with them so that we could be seen with the gang." Ratner says. It can be scary, but as he says: "Anybody could go to a nice neighborhood and set up a bakery. The challenge is to go into a place like this and make it real to see if you can change."

IN HAITI, Ratner and Leader decided to give up the idea of building the bakery in a shipping container and instead build the bakery in an existing concrete structure. "We will use any kind of structure that works within the context we are doing the project in." Ratner says. But there are other Issues with missing infrastructure that have forced the team to think creatively:

"Since there is no reliable water, we put a roof water tank. We get water delivered once a week. And since there is no reliable electricity, we are using propane-fired ovens as opposed to electric and putting in a little bit of solar array for the little electricity we need to turn the mixers on and that sort." Ratner says.

The difficulties are not only limited to infrastructure. Because of issues with the availability of local ingredients, Ratner an Leader have been forced to tweak the bread recipe as well.

"We can make a wholegrain product fairly reasonably in South Africa. In Haiti, you are lucky to get the flour." Ratner says. As part of the mission is to make nutritionally better bread, they have been looking into various nutritious additives that can be added to the bread to make up for the shortcomings of the daily diet.

"I have been to extreme poverty, but I had never been to extreme poverty complicated by extreme natural disasters. It's brutal, man. It's eye-opening. If we can do it there, we can do it anywhere!" Ratner says with a hearty laugh.

WITH A BAKERY up and running, International Community Bakeries doesn't walk away but instead gets to work to make sure the bakers know what they are doing.

"Where people have failed is they go into these areas and they set things up and they don't stay with the local community long enough. Because the people in these areas have a habit of nodding yes, and making you think they understand and then the minute you walk away they didn't understand at all." Ratner says, and continues: "If you don't stay with people to make sure they know how to

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run that bakery, and you're not with them to show them how to run that bakery—and it may take you six months or a year to do that—you're probably not going to be successful."

"What we found is that in a lot of these projects, especially in the third world countries, it's that it's the women, strong community women, that take the lead in creating these enterprises. So you train the women and the women become the bakers. They become employees, but then you create training programs for the disadvantaged youth." Ratner says.

This way, the bakery can turn around the entire neighborhood, or as Ratner says, "Change the neighborhood a little bit." Without a trade, the young have nothing to do and are at risk of getting grabbed by local gangs. But equipped with the knowledge and skills, they can go on to start their own businesses or be employed by bigger bakeries.

INTERNATIONAL COMMUNITY BAKERIES has been lucky to be in a position where other charitable organizations come to them with projects, looking for their expertise and paying for the expenses. But they do accept donations on their web site. Everything is welcome and goes directly towards the

"When they, over time, have learned to do something for themselves–boy, you look at them and you see them beaming, you see that pride. They have something they can pass forward and give."

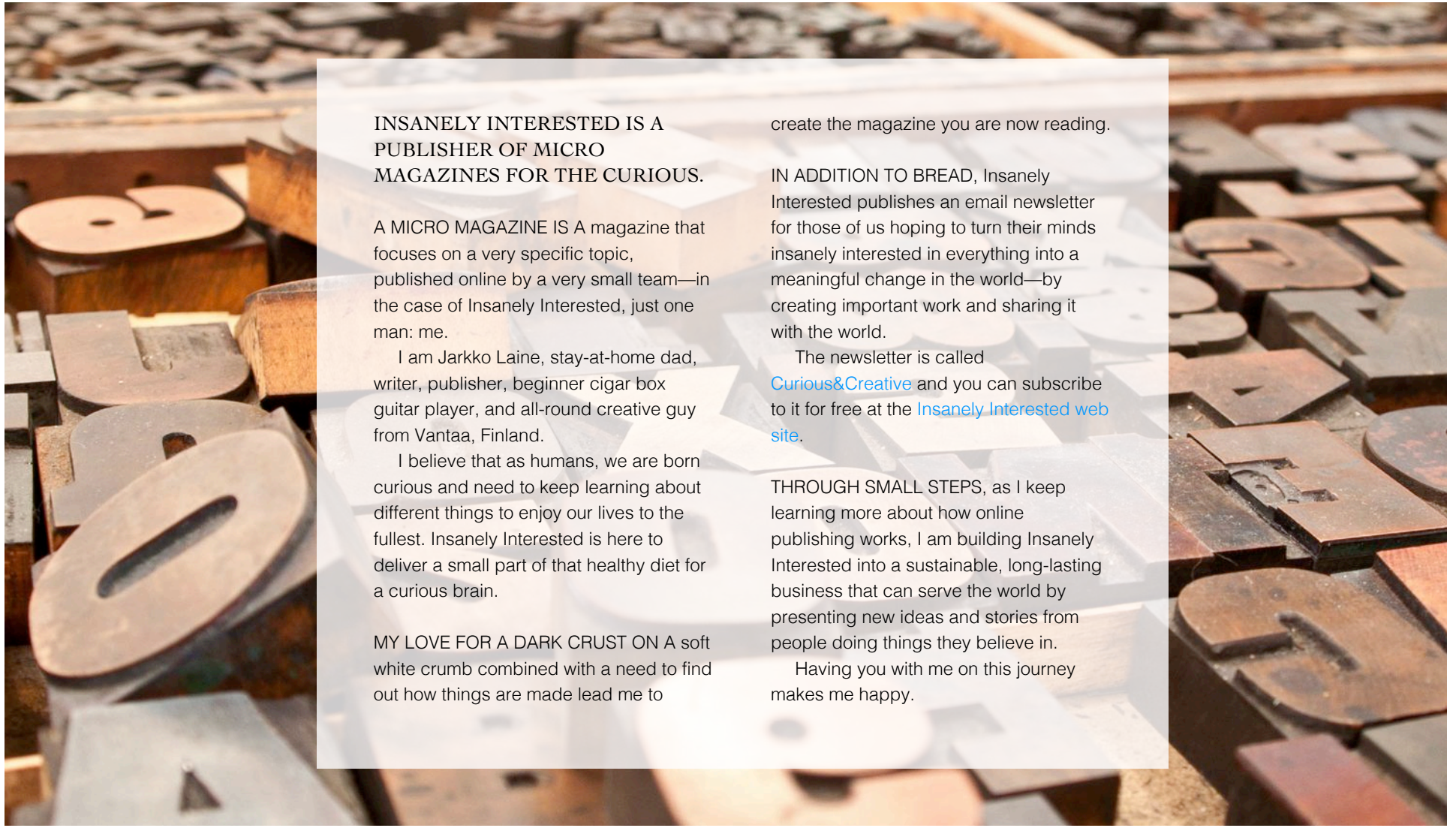
bakeries being built. "Dan and I have not taken one penny towards any kind of administrative anything." Ratner says.

Also, Ratner says he welcomes any legitimate proposal for a bakery project—anywhere in the world: "There's a contact page on the web site, and they should just send an email. I answer every email, and I welcome any kind of legitimate question, project, whatever interaction. People in Haiti would like us very much to set up a baking school there, so who knows: maybe some compassionate baker will say, hey that sounds like a great project for me!"

IN THE END, the big question that International Community Bakeries has to answer is whether this is a sustainable model for building the communities through business, or in other words: "Can we help people help themselves through bread?"

After two successful projects in South Africa and one soon-to-be finished bakery in Haiti, Ratner is convinced: "I think the answer is: absolutely," he says—and I am ready to agree.

"When they are always getting the handouts and you just keep giving them things, you're taking their pride away. But when they, over time, have learned to do something for themselves—boy, you look at them and you see them beaming, you see that pride. They have something they can pass forward and give." Ratner says.



INSANELY INTERESTED IS A PUBLISHER OF MICRO MAGAZINES FOR THE CURIOUS.

A MICRO MAGAZINE IS A magazine that focuses on a very specific topic, published online by a very small team—in the case of Insanely Interested, just one man: me.

I am Jarkko Laine, stay-at-home dad, writer, publisher, beginner cigar box guitar player, and all-round creative guy from Vantaa, Finland.

I believe that as humans, we are born curious and need to keep learning about different things to enjoy our lives to the fullest. Insanely Interested is here to deliver a small part of that healthy diet for a curious brain.

MY LOVE FOR A DARK CRUST ON A soft white crumb combined with a need to find out how things are made lead me to create the magazine you are now reading.

IN ADDITION TO BREAD, Insanely Interested publishes an email newsletter for those of us hoping to turn their minds insanely interested in everything into a meaningful change in the world—by creating important work and sharing it with the world.

The newsletter is called Curious&Creative and you can subscribe to it for free at the Insanely Interested web site.

THROUGH SMALL STEPS, as I keep learning more about how online publishing works, I am building Insanely Interested into a sustainable, long-lasting business that can serve the world by presenting new ideas and stories from people doing things they believe in.

Having you with me on this journey makes me happy.

THE ONE MILE BAKERY

EVERYONE loves a little surprise. So do Elisabeth Mahoney and her customers in Pontcanna, Llandaff, and Canton; all districts of the Welsh city of Cardiff, situated within a one-mile radius around Mahoney's home.

The home also serves as the home for a micro bakery called The One Mile Bakery. The bakery sells bread, soup, and preserves by subscription: on the bakery web site, you can choose from a handful of options, all of them one or three month subscriptions, and each of them containing an element of surprise.

When new customers buy a subscription, Mahoney asks them to tell about their preferences as well as tastes they can't stand, but on each delivery, the final contents of the package is always a surprise.

"I love subscription-based businesses for food, whether it's a veg box or a monthly delivery of interesting teas or coffee: you don't know what you're going to get, but you know it will be good quality and a gourmet journey." Mahoney says.

BY ONLY SELLING subscriptions, Mahoney is able to minimize waste and plan production to be the most effective possible.

This seems to work well: there is a waiting list for new subscribers and word is spreading fast. But the goal for One Mile Bakery is not big growth, at least not in terms of geography. As the name suggests, The One Mile Bakery is all about

being local. It only delivers bread to customers who live or work within the one mile radius.

"One Mile Bakery will always retain those core aspects: it will only ever be hyper-local (it will never be the ten mile bakery or go to a commercial/wholesale scale, delivering fantastic handmade food to the community it is part of.", Mahoney says.

In addition to this, Mahoney also does cooking and bread making courses.

"The business model was a response to the reality of running a food business revolving around bread from a domestic kitchen using a normal domestic oven, fridge, and other equipent." Mahoney says.

"I knew I could only bake a limited number of loaves in a day, so for a long time I discounted the idea of selling bread. I couldn't see a way round the issue of baking capacity and scale. But then the idea of a very limited delivery area came to me and I paired that with a subscription-based business model. […] As soon as I put those two together, the name came to me and the concept was something I knew I could deliver without having to work from a commercial or professional kitchen."

THE SELECTION OF products was based on a model from Mahoney's mother, and the bread:

"I included bread, soup and jam on different subscriptions with the idea of selling handmade bread and the best partners for great loaves: bread and soup, and bread and jam are such simple, brilliant combinations — and things I've eaten all my life. My mother was a fantastic home cook who made all three and taught me the basics when I was very young. The handmade versions of them — made with organic stoneground flour and seasonal, local produce — are a world away from shop-bought versions and some of my favourite things to eat."

This is another way being local is also a big part of the bakery: in addition to only selling locally and delivering by foot or by bike, The One Mile Bakery is also big on supporting other local producers when buying ingredients and helping them out.

FOR THE FIRST six months, Mahoney delivered every package herself, on a bike or by foot. She has since then hired an assistant, Harry, to do this part of the work for her, but she is still in good terms with her customers, and knows their likes and tastes and can thus guarantee a good, hearty experience. Being able to bump

"I couldn't see a way round the issue of baking capacity and scale. But then the idea of a very limited delivery area came to me and I paired that with a subscription-based business model."

into your customers as you walk around your hometime is a good additional plus.

"It was hard to make the leap financially when the business was still very young and also having someone else represent the business but it's the best investment I've made. Harry delivers for up to five hours on my baking day and runs the delivery schedule using a mind-bogglingly clever spreadsheet he created — that takes maybe another hour to update over the week. I used to have hand-written customer accounts and orders: it took me ages to updates those every week!"

PEOPLE HAVE TAKEN the business as their own. The One Mile Bakery celebrated its first birthday on May 14 and it has become Mahoney's full time work:

"The way the business has taken off has been amazing: I never expected to give up my day job as a journalist after seven months or to be employing someone after six months." Mahoney says.

She attributes some of the success to a larger trend in food: "the huge interest in real bread, seasonality and local produce" but continues to say that the key has been being hyper local: "you meet the person who made your food (I did deliveries for

the first six months, now Harry who works for me bakes some of the bread and does deliveries); the business model is novel and the opposite of soulless supermarket shopping, and I've used social media to create a buzz about the brand. The latter has led directly to fantastic press coverage (local and national) which has driven the business forward."

EVERY NEW BUSINESS has its learning moments, and The One Mile Bakery is no exception:

"Three things have been very steep learning curves: running every aspect of the business alone (you end up doing paperwork, admin, invoices, emails etc in the middle of the night); the hours of physical slog involved in food production (do not confuse enjoying home cooking and running a food business: they are very different!) and the times when life throws a serious challenge—my mother passed away very suddenly earlier this year and it was so hard to keep the business going, especially as she was the inspiration for it.

I had a couple of very bumpy months after that, but my customers were so lovely and I'm back on track now. Oh, and however well you organise your baking schedule, sleep deprivation comes with the job!"

"Oh, and however well you organise your baking schedule, sleep deprivation comes with the job!"

But the speed is not slowing down. Mahoney is actively looking for new ways to improve the business:

"I've reduced from two days of deliveries to one, and am scaling my classes back so I can develop the business. It's very easy to get to the point where you only work in the business and not on the business, especially when you have a new venture and say 'yes' to every request or order. I've got much better at limiting what I take on, and pay for a business mentor (as I have since before the business launched) to keep me focused on developing the concept and taking it forward." She says.

"I've also got plans for a couple of books, and am launching a supper club—four times a year and only ten places on each night, celebrating the best of the season's produce. When I first thought about the food business, I had in my mind the idea of a club of like-minded consumers who live in the same area and everything I'll do in the future will keep that notion at the heart of the business."

WITH A FOCUS on local suppliers and delivery, an emphasis on seasonal produce, as well as making no waste—thanks to the subscription model—The One Mile Bakery is very green. At the same time, it's clear that being green is only one part of the story. There seems to be an equally big, if not bigger, emphasis on connecting people to the food they eat as well as with each other. When I asked about this, Mahoney told me that

"The two parts are key and, as you say, related, and that was always the idea. We deliver by bike, have no waste (because everything is pre-ordered), use 100% compostable packaging and source everything locally, but it's just as important that the local focus of the business in my community is really meaningful. I support and promote other local businesses I admire—as suppliers and/or on social media—and bump into customers in local shops and cafes. In my first year I also organised a couple of celebratory events (a Christmas carol concert in my street, and a brass band concert to mark the first anniversary of the launch in the park at the end of the road), inviting all my neighbours as well as customers and friends of One Mile Bakery. Those were really special occasions, bringing local people together with music, food and drink to celebrate, and tied in with the core values of the business—small-scale, unique, fun, local."

"Being green is only one part of the story. There seems to be an equally big, if not bigger, emphasis on connecting people to the food they eat as well as with each other."

DO IT YOURSELF?

HERE ARE A FEW TIPS from Elisabeth Mahoney for anyone who wants to create a hyper-local bakery and follow in her footsteps.

1. Start by baking for neighbors and friends (but do charge them!) and see how you find the step up from baking for yourself to baking on a bigger scale. I used to think 2 loaves on a Sunday morning was a great achievement, and then suddenly I was baking 38 loaves in a day!

2. If you and a friend or relative are both into baking or food, try a part-time venture together—maybe get a market stall to see what the local demand is.

3. If you decide to go into a business, get some mentoring (and work some shifts in an artisan bakery).

4. Invest in a good website with professional pictures (that's the best thing I ever did) and use social media, especially Twitter, to connect with others doing the same. There's a huge network of home bakers and people running food businesses from home out there and they can be a tremendous support. I've made some brilliant friends that way, and they've helped me so much through the hard times, plus they understand the daily challenges of what you're doing.

NEXT ISSUE

WHEN THE NEXT ISSUE comes out in August, summer will be almost over. But bread ovens keep us warm as we churn out more bread for ourselves and our families. We will meet interesting bakers, explore fermentation, and take a peek at bread from Japan.

The issue comes out on August 21st.

IF YOU ENJOYED THE MAGAZINE,
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