

Exploring the World through Food

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Trevor Warmedahl worked for a variety of commercial cheese factories in the US for the best part of ten years, and he slowly became more and more disenchanted with the use of industrial products like uniform starter cultures and what he calls the one size fits all mentality that governed large and small producers.

So he took himself off to Mongolia. "It was a bad move and the best decision I ever made." The start of a six year journey that is the foundation of his new book, Cheese Trekking.

Trevor Warmedahl: So I was interested in learning about kind of other, older ways to go about the fermentation of milk and the care of dairy, livestock, and the making of cheese. The first place that I started doing this was in Mongolia.

I went there because I got a job to manage a cheese plant, and after spending some time working for the company, I decided to move on and to visit the countryside to see the herders that were actually making cheese, like in yurts, in small camps. That was really what appealed to me about Mongolia, the fact that there are thousands of years of cheese-making tradition there, and that it's done in a way that's antithetical to the model that I was kind of fleeing in leaving the US.

Jeremy: But in Mongolia, was that the ... I mean, the cheese plant you went to manage, was that like a US cheese plant, industrial and uniform and everything?

Trevor: Yeah, yeah, it was. I mean, it was small scale, but we were we were following this exact same model that I was hoping to move away from. So we were receiving milk from herders in the area. Uh, this was close to Ulaanbaatar, the capital. We would pasteurise the milk and use these commercial starter cultures. So we were, you know,

making cheeses like Camembert and cheddar and these very European styles that I also have seen, the kind of this model is kind of like imposed everywhere, like everyone in the world thinks they need to follow the standards of Europe. But what I was interested in was, were these cheeses that were outside of those systems and that had roots and bonds to the climate, the culture and the kind of food ways of other places. So in this case, Mongolia.

Jeremy: Was it always your idea to get a job, get in there, and then quit? I mean, it seems like a kind of a long-term plan.

Trevor: I mean, no. Like, I moved to Mongolia and took that job because I did believe in the aims of the company which was set up to try to provide a livelihood for the herders, to buy their milk and make them into cheeses to export. But in the end, what I was really interested in were these cheeses that had been made in place in Mongolia for such a long time, and this was just kind of like a doorway into that world.

Jeremy: Yeah. But then how did you ... What was your ... How did you get into ... I mean, I can understand how you get a job managing a Western style cheese plant, but how did you get into working with Mongolian herders in their yurts, making cheese the traditional way?

Trevor: So I basically started talking to people, to Mongolians, and telling them what I was interested in seeing, and found that people were pretty open to sharing with me. And the way I got this opportunity to spend ten days in the part of Zavkhan province that makes up the first two chapters of my book in Western Mongolia, was that I met a woman who spoke Chinese, English and was Mongolian, and she invited me to come stay with her and her family in this valley where her family goes every year with their yak herd. So it was kind of just like a serendipitous invitation. But what I found was that you could travel across Mongolia and very easily see this stuff, because it's so common for people to be making cheese in yurts, like in the countryside in the summer months, and that there was this incredible sense of hospitality.

Jeremy: And what was your impression the first time you sort of went into a yurt and started making cheese with them?

Trevor: Well, I mean, my impression was that, first of all, the whole yurt smelled like milk and cheese and kind of fermentation. It was like

a familiar aroma of like a creamery. But this was the whole yurt, which was obviously a single room where a family lives and they're cooking their food over a fire and also making cheese over that fire. So I was shocked by how little of the products I had been taught were necessary to make cheese were present there. It was like, a large wok type cook pot and none of the like triple sinks full of sanitiser and acid and none of the none of the rennet or the cultures that are usually purchased from large corporations. It was just like very DIY, the kind of essence of what cheese making can be.

Jeremy: And just stepping back for a minute, because for people who are not familiar with cheese making, you mentioned cultures already and you mentioned rennet. So at base, what is the procedure for turning milk into cheese?

Trevor: So it's based on kind of two processes. The first would be the fermentation of lactose. It gets split and then fermented into lactic acid. So that's the the crucial fermentation stage that you see not just in cheeses, but in yogurt and kefir as well. And then the second part of the process is coagulation. And coagulation can happen through, if you build up enough acid, milk coagulates. You see that with yogurt quite clearly. Once it gets to a sour enough state, it thickens. But with most cheeses, the coagulation is due to enzymes that are introduced while the milk is still pretty high pH, still sweet. It hasn't fermented very much. You add rennet, which is this collection of enzymes that will shift the milk from a liquid to a solid state.

Jeremy: And then you drain it or ...

Trevor: Yeah, yeah. You coagulate the milk into this like jello-like state, and then you cut it into curds, which release their whey and you cook it, cook and stir to different degrees in order to get different levels of moisture content in the final cheese.

Jeremy: And so this trip, I said at the beginning it was a six year trip. Was it all one trip or did it ... Did you break it up?

Trevor: So yeah, over the last six years that I've been traveling, it's been in large blocks. Like, the first trip was nine months, the second trip, from which the majority of the book comes, was 16 months. So I've done four separate trips now, and then come back to the US in between the trips to teach sour milk school workshops where I'm sharing this knowledge and the kind of approaches that I've cobbled

together for myself with people who want to make cheese in their own homes and do so with their own starter cultures coming from raw milk itself.

Jeremy: Can you even guess how many different groups of people, how many different kinds of cheese you experienced?

Trevor: It's really hard to say. I mean, I've probably visited a hundred cheese makers and experienced, you know, hundreds and hundreds of cheeses. And what I've started to realise is that just in any one cheese, like we think of something like parmigiano-reggiano as being one cheese, but it's actually very multifaceted, where you can taste that one cheese from a dozen different producers and maybe they have slightly different practices or different breeds of cow and there's huge diversity within just one style. So the more I've looked into it, the more I've seen that the actual diversity is infinite in the flavours and textures that can emerge in cheese. And that that's what I want to celebrate is, that huge range of outcomes that's hard to predict and control. And it's probably ... I think cheese ends up better when we don't attempt to control it as much.

Jeremy: I'm intrigued. You said you came back and taught some school, as it were, to share the knowledge. But how did you support yourself? Did you have to pay people to stay with them? Did they pay you to work with them? How did that work out?

Trevor: So the original like approach of the project was to volunteer with the cheese makers and to do the work side by side with them. So I would either propose a work trade, where I would do a certain amount of, you know, 20 hours a week in exchange for a place to stay and food. And I also found that model through volunteering on websites like WWOOF Italia and other Wwoofing websites and Workaway on farms around the world. And there's really good cheese making or cheese makers who are hosts, especially in Italy, where I have found a lot of these opportunities. But then I kind of just took that model and started setting them up myself by just approaching cheese makers, and so that's how I managed to travel so long without spending a lot of money, was by staying in one place, you know, for an extended period of time and really doing this exchange so that I could keep my costs down.

Jeremy: And how about language? I mean ... a hundred different places, you know?

Trevor: Yeah, yeah, I know. The language barrier was real, and still is. I only speak English and can comprehend a small amount of Spanish and Italian, but I guess I became comfortable with the awkwardness of that language barrier and have just kind of learned to stumble through it, really relying on the kindness and the patience of these people I'm staying with and their ability to want to, like, try to find a way to communicate with me. I had to, I had to adapt to that and learn to pay attention to different forms of communication and just try to figure out what was going on.

Jeremy: Yeah. But I wonder, maybe it was an advantage that these people were not doing a sort of precise technical, this is the pH, this is how long, this is the temperature, then you do ... Maybe the experiential part of it didn't need that much language.

Trevor: I think there's definitely something to that. And the ... Like, when I started doing this traveling, I thought I was going to be like collecting recipes and then I was like, you know, like going to learn how these cheeses were made with like their ... exactly, their temperature, their pH. But it turns out that most cheeses aren't really like that, that there's not so much of a straightforward written recipe that it is being taught experientially and that it was engaging the senses and kind of using your whole body to make cheese.

And that's what I saw when I observed people making cheese in these remote places, that they weren't following a recipe, they were using their hands and going by feel and smell and taste and that you could actually get pretty precise results with that. Also, learning that like what made these cheeses, what they were, was less about precise scientific measurement and more about the quality of the milk and the ability of the milk itself to transfer something that gave the cheese unique characteristics.

Jeremy: One of the things that intrigued me in the book, I can't remember which chapter it was in, but somebody said to you, haymaking is cheese making. And that struck me as really interesting, talking about, you know, the flavour of the place.

Trevor: Yeah, definitely. And this is an aspect of dairying that I've become very interested in, is not only what are the animals eating, but what are the steps to feeding the animals when you're outside of the growing season. So there's ... In regions in the far north or the far south and mountainous regions all over the world, you have to kind

of store food for that winter or dry season. So seeing that cheese making could be this — like could be based on this wider agricultural practice of growing crops, cutting them and drying them and preserving them for the winter, and that oftentimes those crops were being fertilised by the manure from the animals themselves — made me realise how much of a circle there was, and that somebody could consider themselves a cheese maker who wasn't actually in the room making cheese.

The man Attilio, who I got that quote from, he was a farmer. He was out there cutting the hay, drying it, like, moving it around with tractors. But he said, this is a part of cheese making, which really impacted me because what will become the cheese is based on that food and that whole system of maintaining fertility and growing those plants.

Jeremy: And one of the things you say in the book also is that you were looking for, you were seeking out, difficult cheeses. And most people have a real problem with any cheese that is even slightly difficult. So what were ... Why were you looking for difficult cheeses and what do you mean by difficult cheese?

Trevor: What I mean by difficult or challenging cheeses are ones that are so outside of our normal frame of reference and that maybe have flavours like bold, strong flavours that are potentially foreign to us, or like there's something about them that can be offensive to our palates, I suppose. And so there are cheeses out there that are strange and provocative and would be off putting to most people. But in the cultures in which they are rooted, they are delicacies.

Trevor: So that's a really interesting contrast to me, that one food can be considered both disgusting or delicacy, depending on your cultural framework. And I wanted to use cheese and these challenging cheeses to push myself out of my ... to push my cultural boundaries and to try to learn to appreciate flavours that I was kind of scared of.

Jeremy: And which cheese pushed you the furthest?

Trevor: There's been quite a few. The one that always comes to mind in this conversation and that people like to discuss, is these cheeses that have maggots in them. There's a famous one on Sardinia called casu martzu. This seems to be a phenomenon that was probably quite common before refrigeration, where cheeses would be

shipped and flies would just get in there and do what they do. But it's been kind of enshrined as this cheese casu martzu, that is ... it's like the cultural identifier for Sardinia, as far as their cheeses go. It is hard to eat because it psychologically just throws you off to see that. Every instinct in your body says, you shouldn't be eating this thing because there's live maggots in it. But once you get past that and you do eat it, it's not disgusting. I need to try this cheese more. I haven't had it like in its peak. And that's the other point of this idea is that you don't just try something once and then say you don't like it. I'm like, I'm going to try this cheese over and over again from different producers and try to learn why it is so celebrated.

Jeremy: The thing about the Sardinian cheese ... I mean, everybody who knows anything about food and cheese has heard of Sardinian maggot cheese. And it's easy for Western folks to say, oh, maggots, horrible. But there must have been other cheeses that were on the surface, that just had challenging flavours without them necessarily presenting as, quote, disgusting unquote.

Trevor: Right. No, totally. And that one kind of has like a, it has a lot of shock value right up front. But the other cheeses that I would use as examples are the pecorino cheese that they make in Sardinia and Sicily that are amazing. And they ... But they tend to have this kind of spicy or picante flavour, as it's called in Italy. It oftentimes comes from there being more rustic rennets, these like rennet pastes that can have these strong kind of stomachy aromas.

So that little flavour profile that you see in a small dose in pecorino or a small dose in parmigiano-reggiano and a larger dose in like Pecorino Romano or Pecorino Siciliano, that can be challenging at first because for some people it reminds them of stomach acids, of vomit. So how can that be delicious? But in the right dosage, it can kind of meld with the other flavours in a cheese and actually accentuate them. It can boost the umami character of a cheese. But when you first experience it, it can be a bit off putting. It requires, I think, enough familiarity to develop a taste for cheeses that have that kind of spicy lipase character to them.

Jeremy: Talking of pecorino and Italian cheeses, ricotta has become the kind of global bland white cheese. Tell me about real ricotta.

Trevor: I don't think I actually knew what ricotta could be until I went to Italy and experienced how amazing it is. In America, ricotta is

usually made with whole milk, which it's arguable if that actually is ricotta or not. But in Italy, it's made with either all or predominantly whey that's slightly enriched with milk. And it's a cheese that seems so simple on the surface. It's like, you heat up way to 185 Fahrenheit and you add acid and this cheese appears. But within that simplicity is a lot of nuance and a lot of room for obsession to the point of perfection. I think you see that in Italy where you get this really kind of high moisture, fluffy ... It's like as much texture as it is flavour, with like the perfect amount of salt. And when it's well executed, it can be just a divine cheese. I think it takes the level of obsession and respect for the craft that you see in Italy to bring that level of perfection to the table consistently. In most of the world, there's some analogue of ricotta, but it's ... I've never had it as good as it is most of the time, especially like the sheep milk stuff is just amazing.

Jeremy: And it's all part of not wasting. I mean, in industrial countries, the whey goes to feed pigs often, but less industrialised places, the whey goes to carry on feeding people.

Trevor: Yeah, exactly. And this is like an aspect that comes out time and time again in the book, is that you use every part of milk and you do different things with it to create foods with different shelf lives. And that whey is still milk. It's just milk with the cheese taken out, but there's still so much protein in there and sugar that something else should be made with it. And so to see that that's been turned from this source of amazing ricotta into something that's considered a waste product is an example of the, what I would argue the inefficiency of the modern approach to cheese making.

Jeremy: At the end of the book, you talk about the future of cheese. It's hard to see a future that isn't industrial cheese. Many of the cheeses that you describe are threatened, if not extinct. I mean, they're really very vulnerable. But I was wondering, do you think — let's just be super, super pessimistic and imagine there'll be some some kind of climate disaster — How long do you think it would take people to recover the ability to make the cheeses that they need, without having contact with the kind of people you had contact with?

Trevor: I think we'd figure it out again pretty quickly. I think if you have milk, you will find ways to preserve that milk. It might not be delicious for a few generations, but I think that the, like the human ingenuity and resilience are something we can rely upon and I think

that we will figure out ways to relocalise our food systems in the midst of collapsing economies.

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