How Cwmglyn Farmhouse Cheese is made

This article describes the techniques I use to make Cwmglyn Farmhouse Cheese. This is a style of cheese I have been making that has gradually evolved over the last ten years or so and is based on traditional techniques that have been used for several hundred years, but with modern standards of hygiene!

Sadly the regulations for making raw cheese for sale in New Zealand are such that unless you live next door to a suitably recognised MPI approved Dairy laboratory, making such cheese economically is next to impossible. Under the terms of the Ministry of Primary Industries Risk Management Plan registered under my name, I am permitted to thermise my milk. This is a process whereby the milk is heated to 65℃ and held at that temperature for 19 seconds just before cheese making commences. With pasteurisation, the milk is heated to the same temperature but has to be held at that temperature for 30 minutes. Alternatively for pasteurisation, the milk can be heated to 72° C and held there for 15 seconds before rapid cooling.
In many countries, cheese made from thermised milk is technically classed as raw cheese and the process is certainly a far gentler one than pasteurisation, but unfortunately it still destroys the heat sensitive natural compounds present in raw milk such as lactoferrin, lysozyme and lactotoperoxidase which naturally inhibit the growth of some pathogens. I find it deeply distressing that the milk I have harvested from a clean and healthy udder only 15 minutes prior, has to be subjected to such heat treatment, but MPI are adamant that it has to be done if I want to be able to sell my cheese legally.....

After heat treating, the milk has to be cooled to a temperature of 32℃ which I do by plunging the pan of hot milk into a sink full of iced water until the temperature falls sufficiently to add the starter culture. I use Direct Vat Starter culture and the requisite amount for the particular volume of milk is sprinkled on the top of the milk and left to thaw out for a minute of two before being gently stirred into the milk. It is necessary to keep the milk at 32℃ while the culture ripens the milk. I usually leave the milk for at least an hour. The pH of the milk is taken and recorded and then rennet is added to the milk and gently mixed in, using an up and down motion for a couple of minutes to disperse the rennet throughout the milk. Then the milk is slowly ‘top-stirred’ to stop the cream rising to the top until the milk thickens slightly. As soon as that point is reached, usually about 10 minutes after adding the rennet, all stirring must stop and the vat is covered and left to set. How long it is left before cutting the curd depends to some extent on the volume of milk and the room temperature but it should be at cutting set within 30 to 45 minutes.

The curd is cut using a horizontal cutting tool I had made and then the vertical one is used so that the curd is cut into nice cubes about 2 cm across -about the width of my thumbnail- at this stage I usually check the pH again. I leave the cut curd for about 5 or 10 minutes and then commence the ‘cooking’ process. This involves filling up the water bath surrounding the vat with hot water and then gently stirring the cut curd in

the vat until the required temperature is reached. This should take about 30 minutes or so. To test whether the cooking process is complete, I take a few pieces of curd held in my left hand (with my fingers together) and then squash them with the fingers of my other hand. If the curd remains stuck to my hand when I rotate my hand with the curd upside down, then the curd is cooked!
At this point the curds swimming in the whey at the final temperature are continually stirred until the pH has fallen to 6.1 or 6.2 and this takes time. I usually listen to nine to noon on the radio with Katherine Ryan as I gently swirl my paddle in the vat. Traditionally this is done using bare arms, but I prefer to use a paddle. I wear nitrile gloves as well, as the acidity of the curds dissolves your finger nails which I cannot think improves the flavour of the cheese! When the correct pH level is reached - there is another PDF document on this site you can download to give optimum times and pH levels- the whey is drained from the curd. I have a large commercial stainless steel colander that is placed over a bucket and I ladle the curds and whey into this, emptying the bucket as necessary. When all the whey is emptied out, I put some very hot water at the bottom of another bucket and then put the colander full of curds over it and cover with a lid so the curds are kept at a temperature of around 38℃. The curd consolidates as it drains, so it is cut into large slabs (cheddering) and turned at regular intervals until the correct texture and pH level of 5.3 is reached. This process can take around 2 hours.

Then the curd is milled. I have a beautiful hand operated curd mill made for me by Terry Morratti of New Plymouth, which makes this job very easy and quick. As the curd is milled, usually in 3 or 4 batches, I transfer it to another colander, again, kept warm over a bucket of hot water and salt is sprinkled over the milled curd and mixed in after the salt has mellowed awhile. When all the curd has been milled and salted, it is packed into a stainless steel pasta cooker (which makes an excellent mould) that is lined with a sterilised cheese cloth. The follower is put on the top and the cheese is then pressed. The cheese is turned after about 15 minutes and put back into the press with sufficient pressure to give a good seal to the outer coat. At Cwmglyn, the cheese remains in the press for 2 or 3 days, turning each day. After the cheese is removed from the press, it is air dried in my cheese room for a couple of days and is then sealed with our own clarified butter. A label giving the number of the cheese, the name of the cow whose milk was used to make it, the date it was made, the cultures used and any seeds used for flavouring noted. The label is fixed to the cheese using clarified butter.
Next the cheese is put in the maturing store which is kept at around 10 ℃ at 85% humidity. The cheese is wiped with a paper disposable towel and turned over daily for the first couple of weeks, thereafter it is wiped and turned weekly until fully mature. This is usually around 6 months, but if a milder cheese is wanted, it can be removed from the store after 90 days. Thus Cwmglyn cheese has a wholly natural rind that keeps the cheese inside perfectly. The rind can either be eaten or used to make a magnificent cheese sauce.