

## **THE WINSTON CHURCHILL MEMORIAL TRUST OF AUSTRALIA**

Report on Study Tour of Artisan Cheese manufacturers in UK, France and Italy

By

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### **Introduction**

During March and April 2002 I undertook an investigation of the manufacturing techniques of small to medium scale cheesemakers' in the UK, France and Italy. The objective of the study was to work alongside some of Europe's best cheesemakers in order to observe the techniques they use to manufacture typical and artisan cheeses from each country. The intent of the fellowship being to transfer this information to current and prospective cheesemakers in Australia to improve both the quality and variety of cheeses manufactured.

Prior to my departure I identified the types of cheese that would be most suitable for study and set about identifying cheesemakers that would be willing to accept me into their organisations. This was a relatively easy process in the UK but a more difficult task in France and Italy. The difficulty in gaining access to cheesemaking factories in these two countries was a combination of locating a cheesemakers that had English language skills (due to my lack of French and Italian language skills), and secondly the difficulty the cheesemakers had in showing a complete stranger the internal workings of their factories.

### **Acknowledgements**

The Fellowship was undertaken with the assistance of the Winston Churchill Memorial Trust. I would like to sincerely thank the Trust for their initial consideration of my application, and for the generous support they afforded me in seeing the fellowship develop into eight weeks of thoroughly rewarding study. This fellowship is without a doubt the most rewarding experience of my career and I would encourage any individual seeking to improve their knowledge of a particularly field to obtain the necessary forms and make an application to the Churchill Trust.

### **About Graham Redhead**

I am a Dairy Technologist with the Queensland Department of Primary Industries. My role involves assisting all sections of the Milk Processing Industry. My most recent work has been to as part of a team at the Centre for Food Technology providing hands-on Farmhouse Cheesemaking courses for people from a variety of different backgrounds, such as people that just enjoy the consumption of cheese, to people who want to know how cheese is made, to current and prospective professional cheesemakers. The techniques and skills that I have developed during this fellowship will be used to expand the types of cheeses that are

manufactured at these courses and to assist commercial cheesemakers in improving the variety and quality of cheeses they manufacture.

### **Programme**

3 March 2002, Depart Brisbane,

5 March 2002 , arrive Manchester Airport,

6, 7, 8 March 2002, Llangefni Food Technology Centre, Wales,

11, 12 March Little Town Dairy, Preston, England

13, 14, 15 March, Singletons Dairy, Preston, England

16 March, Rob Kitching Cheese factory, Preston, England

18, 19 March, Ravens Oak Dairy, Cheshire, England

20, 21, 22 March, Wensleydale Dairy, North Yorkshire, England

25, 26, 27 March, Quicks Farm, Devon, England

1 April – 6 April, Route du Chabichou, Poitou, England

9 April – 16 April, Cooperative, Agricola S.Piox, Treviso, Italy  
Including visits to the following factories

- Caseificio Marion, Castlefranco, Italy
- Tre Comuni, Istrana, Italy
- Caseificio Di Roncade, Vicenza, Italy
- Casearia Monti Trentini Grigno Valsugana, Italy
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17 April, – CHR Hansen, Corsico, Italy

21 April Fromagerie Kergall, Pontscorff, France

22, 23 April SNE de la Laiterie, Pluay, France

24 April Fromagerie Kergall, Pontscorff, France

25 April La Fromagerie du Val d'ay Lessay, France

25 April Isigny Ste Mere, Isigny, France

26 April Fromagerie Neufchatel, Neufchatel en Bray, France

### **Defining what is 'artisan' manufacture**

My agenda was to find (in all three countries) the rustic, traditional, artisan cheesemakers. These are the ones that when you sit down and think are the ones that are still making cheese as they did 100 years ago. If you imagine what life was like at that time there are

many factors combined to change the way is being made today. There was little automation in years past, certainly compared to today's level of automation and the heating and cooling controls that modern society offers. Also labour 100 years ago was considerably cheaper as a percentage cost of manufacturing the final product, thus encouraging cheese to be made by hand. Also the modern building and hygiene standards required by the relevant authorities, whether they be controlled by the European Community based in Brussels or by the local government authorities, would not permit the old buildings, techniques and machinery to be used today. And the advances of science and the ease with which the cheesemaking process can be monitored have changed.

What this means for the 'artisan' cheesemaker is that many of the techniques and ways cheese was manufactured and handled in the past have been sacrificed in order to manufacture and handle cheese in the modern era. So the romantic notion of cheese being made in a copper urn under the oak tree in the paddock is long gone.

But there are specialist cheese manufacturers who are still using techniques that have changed very little over the years. These are the cheesemakers that I sought to visit. They are the producers of the artisan cheeses. They are the ones who are continuing to manufacture and sell sufficient product to keep themselves in business. Probably the one factor that is continual is the quality of the product in most cases remains extremely high.

## **Cheesemaking the UK.**

One of the most interesting cheeses in the UK was the manufacture of 30kg 'traditional' English Farmhouse Cheddar cheese. It was wrapped in a double layer of cheese bandage and rinded with warm lard two days after manufacture. They manufactured both raw and pasteurised cheeses plus other varieties such as Double Gloucester and Red Leicester, farmhouse butter and scalded cream for their Devonshire teas from that region. These cheeses were stored in large maturation rooms for up to two years, which allows the cheese to ripen and mould to grow on the surface before they are cleaned and sold. They sell their cheeses around the world including in Australia. The milk was supplied by their own dairy farm and this milk also supplemented by milk purchased from neighbouring farms. There was a mix of automation and traditional manufacturing techniques used to manufacture these cheeses. The technology was concentrated in two key cheesemakers who closely controlled the manufacturing process.

I also visited a 6<sup>th</sup> generation dairy farm that also included a fully functional organic cheesemaking factory that manufactured 4 types of organic Camembert cheeses (Cow, Goat, Sheep, Buffalo), plus a few other varieties of soft cheeses and organic milk hand filled into glass milk bottles. From Monday to Thursday, they devoted 1 day to each variety of cheese. Friday was the clean-up day and also a short day, and they were closed on the weekends. All milk except the cows' milk was outsourced externally. The technology of the manufacturing was very simple and carried out by three staff that were all relatively inexperienced in cheesemaking. This is a small family concern but the family is not heavily involved in the day-to-day manufacture, but they are heavily involved in marketing of these cheeses. The success of the company was in a large way due to the proactive promotion of the business by the owners via the different media, winning prizes at shows and selling other organic produce from the region from the shop on the farm. This company also manufactures an 'organic' range of cheeses for other factories in the UK.

## **Cheesemaking in France and Italy**

In developing an itinerary for France and Italy it was difficult finding manufacturers that were willing to receive me as a visitor and who also spoke some English. Once I arrived in those countries I was warmly received by the local factories but the language problems remained. As a result I could only observe the manufacture process instead of being able to ask detailed questions about the manufacture. This was disappointing as there were some questions that I would have liked to ask but still remained unanswered.

There appears to be an abundance of small family owned cheese factories in France and Italy compared to the UK. What impressed me most was the speed and the finesse the staff had of the different stages of the manufacture process. This was particularly so with the manufacture of fresh and soft cheeses that required delicate handling of the fragile curds. The cheese was manufactured by using monitoring instruments such as pH meters and acidity tests but the 'feel' of the cheese also guided them. This level of skill came from many years of working alongside other members of the family or cheesemakers that also had many years of experience in cheesemaking.

Also interesting was the way they sell their cheeses in France and Italy. Most of these factories have small shop windows to sell cheese from the door. Consumers seem to turn up to the local factory at all hours the way consumers in Australia turn up to the local bakery. The factories also have a network of local restaurants and food businesses are very supportive of these small factories. As a result the manufacturer seems to sell all of the cheese they manufacture. These markets in France and Italy are very mature and have developed over many years, and I think this is an area that has yet to develop in Australia. At one factory a goat cheese manufacturer drove weekly on a four hour trip to Paris to sell a carload of cheese, they were stacked in the boot, back and front seats. It is something for hygiene reasons that would not be tolerated in Australia, but it is an example of the extent that the manufacturer and the customer work together.

The most impressive cheese I observed manufactured was the hard grating cheese Grana Padano, the poor relation of Parmigiano Reggiano. It was manufactured under the special licence conditions of DOP, which precludes other regions of Italy or other countries calling their cheeses, by that name. The factory was quite large compared to the other factories I visited. They used 30 copper vats as opposed to stainless steel that allows the cheese to be cooked very quickly. Each vat produced 2 x 35kg cheese. The speed of manufacture for the process of setting, cutting and cooking were very unique compared to most other cheeses I have seen manufactured.

The French consume a large volume of goat cheese. There were several goat milk cheese manufacturers that I visited some that milked their own goats and had herds greater than 400 goats. The dairies for these larger manufacturers used rotary milking parlours. But with such a large volume of milk they still manufactured the cheese by traditional hand methods. In all cases except for one manufacturer, the cheese was made from raw milk. The manufacture rooms are a mass of hundreds of small cheese hoops. The cold rooms are also full with thousands of different cheeses.

In France one manufacturer produced two types of Camembert cheese, the finished cheese identical in all aspects except for the flavour. This also was a large factory employing approximately 30 manufacture staff. There were very minor adjustments made at different stages of the process to achieve the different flavours, but when I tasted the two products together there was a marked difference in flavour. The majority of the milder flavoured

cheeses were for the American export market, and the stronger flavoured cheese were for the local market. I wondered which of those cheeses would be considered suitable for the Australian market? This company has been manufacturing cheese for a very long time, and they were skilled at controlling the different process to consistently achieve their desired flavours.

## **Dissemination of information**

This report is a very broad approach to some of the variations of cheesemaking techniques that I have seen during my Fellowship. There are a variety of ways that the information and skills that I have become familiar with can be disseminated to benefit both new, existing and potential cheesemakers.

Firstly, I plan to contact current manufacturers of different cheeses to discuss the different processing techniques that I have observed and look at the relevance of introducing those techniques practices into their existing operations.

I plan to give a series of public seminars to persons involved in the dairy industry that may be interested in diversifying their dairy business.

Thirdly I will be formally discussing the information and skills that I have learnt with my colleagues in the dairy industry. This way the information can be dispersed to different organisations.

Finally I will be developing a series of hands-on training programs aimed at providing individuals with the necessary skills to manufacture a range of the different cheese that I have studied during the Fellowship.

## **Conclusions**

I was pleasantly surprised by the little difference there was in the cheesemaking techniques that are practiced in Australia compared to the ones that are practiced in Europe. Australia produces a large variety of cheeses, not as many as France or Italy, as France has something like 300 associations representing their cheesemakers over there. While I saw some interesting ideas and concepts applied to their manufacturing that could be applied to manufacturing in Australia, there was nothing that really stood out as a major difference between the manufacturing techniques of the two regions. Which asks the question what is the difference between cheeses manufactured Australia and Europe?

I think the main difference is the culture of cheese consumption in Australia as compared to Europe. Europeans have been consuming large varieties of cheeses for centuries and they have a passion for cheese consumption. It is a very mature market in this way. While some Australians are also very passionate about the quality and variety of cheeses they consume, many Australians are just starting to demand better quality and more variety of cheeses. Secondly the volume of cheeses we consume is a smaller than our overseas counterparts. But the culinary habits of Australians are becoming more cosmopolitan, and as a result we are becoming more adventurous in the varieties and volumes of cheeses we consume. Included in this is the manufacture of cheese from animals such as goat, sheep and buffalo. As a result there is a slowly increasing opportunity for cheese manufacturers to manufacture different varieties of cheeses to meet this demand. This has been gradually occurring in Australia for the last 30 years.

Australian cheesemakers have the infrastructure and the necessary skills to manufacture cheeses that are equal to any from around the world. They can manufacture cheeses with different flavour intensities and different characteristics to meet the demands of the consumers in Australia. In many cases the Australian made cheeses that I have tasted are equal to many that I tasted overseas. While in Europe there were processes that I observed as interesting and relevant to Australian cheese manufacturers. I can not speak for all Australian cheesemakers, as I have not seen them all but I think some manufacturers are probably practicing techniques that I observed.