

# The greatness of Jersey milk

At the Jersey Island spring show of 1860 the then president of the RJA & HS offered a special prize for the best cow in-milk. This was not unusual, but some of the special conditions for that competition were. The conditions included the two following points.

The judges should examine and pronounce upon the merits of the cows presented for exhibition, not according to the scale of points (which was the society's standard of merit), but in a general way and consistently with their own judgment as to the bona fide superiority or inferiority of each, due preference being shown to those animals which should possess the more peculiarly distinctive marks of the true Jersey breed.

The milk of the best cows, when selected from the general lot, should be tested by means of lactometers and its quality, together with the form of the udder, should be considered points of great weight and importance. They mark, firstly, a departure from the rigid observance of a scale of points, the cattle to be judged rather in the same way as now and, secondly, an early effort to test the productive qualities of the animals in conjunction with their show type. (Source: Shepard, 1933)

## Tests of milk quality

Careful tests of the quality of milk were made at BelleVue, on Jersey Island from the 1860s. Colonel Le Couteur possessed a so-called lactometer, which he mentioned when the Marquis of Tweeddale asked him to buy two cows on his behalf.

According to his letter-book he replied: "As they are intended for the Marchioness' own dairy, I would not wish to be closely limited to price, because I shall insist on having them brought to BelleVue on trial by my lactometers before I purchase them. I should say if I am allowed to go as high as £15 to £20 a piece, I shall get what will be sure to please Her Ladyship...I think that for a lady's dairy, beauty, and very deep giving cream and yellow butter is required." (John Le Couteur, diaries and letter-books)

These qualities were, according to John Linsley, obtained by continual selection and through breeding, adhering strictly to butter-producing families and



*Springtime in the Island of Jersey* by Thomas Lloyd (1883) depicts a woman with a group of Jersey heifers and some goats. RJA&HS bought the painting in 2008 from Frank Falle.

close breeding to the best individuals in those families on the island.

As an instance of selection, the bull St. Helier 45 was bred to order on Jersey by Philip Quenault, of St. Martin, for O.S. Hubbell, of Stratford, Connecticut, USA, Hubbell having previously employed 'competent persons' upon the island to make private butter tests from milk purchased of the best breeders.

These tests carried on for five years, having continued from 1862 to 1867, when St. Helier was bred out of a family that had been started some 40 years before and inbred continuously, and constituting the best butter-bred herd on the island.

The dam of St. Helier tested over 3lbs of butter daily. For the bull calf born in 1868, the sum of \$1,500 was paid which, with the previous expenses of testing cows and cost of importation, brought the price up to \$2,500, then the highest price that had been paid for a Jersey.

The Jersey breed has been built up through centuries of selection and in certain families and strains, has become such a grand type that it could not be improved by any cross with any other breed of dairy cattle. (Source: Linsley, 1885)

## The use of the lactometers indicated milk quality

*Lactometers as described by Le Couteur: "Indicate the degrees of richness, or cream, which the milk of any cow affords, with great nicety. This varies with different food. The mode is to fill the lactometer up to zero with the first milk that is drawn from the cow in the morning, then when the udder is nearly emptied, to fill a second lactometer with the residue of the milk, throwing a little out of the lactometer to refill it to zero with the very last drops which can be drawn from the cow; these will nearly all cream. The lactometer filled with the first milking may only indicate four degrees of cream while that filled with the last milking may indicate 40*

**In February 1851, in the USA, Professor E. Emmons analysed milk from one of John A. Taintor's imported Jersey cows, and comparing the analysis with milk from other breeds showed the following:**

Breed	Water	Dry matter	Butter	Casein	Sugar	Ash
Common milk in America	90.48	2.88	3.88	2.78		
John A. Taintor's imported Jersey to the US in 1850	84.73	16.27	8.07	5.02	3.05	0.79
Ayrshire	87.19	12.81	3.70	4.16	4.35	0.59

(Source: Transactions of the N.Y. State Agricultural Society. Vol. X, 1850, Albany 1851)





*The Herd Book's Challenge Cup was won for several years by the Cow "Deery", No 781, the property of Mr. Francis Le Brocq (Painting circa 1885 was owned by Francis Le Ruez, Homestead in St. Peters).*

*degrees of cream. Then, by dividing the sum total, 44, by two, we have degrees of cream, which a very good cow will produce; others as little as 10 or 15."*

Cream is often spoken of as if it were the fat in milk. It is really the part of the milk which contains most of the fat. In 1942, ice-cream made using Jersey milk still was considered a luxury.

### **Thankful nuns import a Jersey bull to the USA**

O.S. Hubbell, who was recorded as the importer of the bull St. Helier 45, owned a farm in Connecticut, but his business was in Philadelphia, where he supplied a Catholic convent although never charged for what he supplied. There is another story of how he came to own St. Helier 45.

The nuns wanted something that would express their appreciation. They learned of Hubbell's interest in Jersey cattle and wrote to a convent of their order in France to have a fine bull selected on the Island of Jersey and shipped to Hubbell. This result was the arrival of a bull in America on June 15, 1869, which was named St. Helier 45, and became one of foundation bulls of the breed in the US. (Source: Gow, 1938)

### **A rich and quite different milk**

The Jersey cow has some characteristics not common with other breeds. She yields not only a very rich milk, but it is

of a deep, yellow colour, so for many years it was the general opinion in the US that the Jersey cow was better than the 'Dutch' cow, Ayrshire and Shorthorn as the superb producer of butter, yet last for the purposes of the cheesemaker or milkman.

Wealthy Americans simply wanted a country place where they could have a residence, a place for rest and recreation away from absorbing and growing business interests, and where they could keep two or three family cows.

In 1889 W.A.M. Michigan had an inquiry as the editor of *The Cultivator & Country Gentleman*: "I wish to know if a Jersey cow 18 years old, price \$60 would do to buy for a family cow?"

With the arrival of Americans in California, dairying took a new turn in its evolution. The Americans brought with them their need for milk, cheese, and butter and they also brought the family cow to service these needs. The family cow was predominantly the Jersey breed which dominated by the 1870s. These cows produced more butterfat, which was a boon to butter and cheese production.

Within a radius of 20 miles from San Francisco there were numerous dairies that supplied the city with fresh milk and cream. They supplied the better class of trade which desired good, wholesome country milk, and was willing to pay higher prices than city-made milk was sold for.

The largest and the best of the appointed dairies, Jersey Farm Dairy, was established in 1875 and was situated near San Bruno Station, on the line of Southern Pacific railroad, some ten miles south of the city, in San Mateo county.

About 1,200 families were supplied by the milk from between 500 and 600 cows. The milk and cream was conveyed to the city by large teams and thorough-bred wagons that could carry 200 cans at a load twice daily, going at about five miles an hour. Most of it was delivered at a central depot to small delivery wagons belonging to the farm and the remainder was placed in cool tanks for public sale. The milk brought a higher price than that from any other dairy and was much sought after on account of its superior quality. (Source: *The Overland* monthly, 1888)

### **More solids and a longer lactation**

Ph.L.S. Mourant in 1907 stated that the Jersey does not claim to be a phenomenally heavy milker. Other breeds beat her in that respect; if larger breeds beat her, there is nothing to be wondered at – they eat more.

However, Mourant continues: "*But what milk she does give is always and ever richer in fats and solids other than fat, than that of any other breed, as has been proven times innumerable. And it is likewise proven that the Jersey's period of lactation, ie the length of time the flow of milk is sustained after calving, is longer than that of any other known breed of cow. Practically all cows on the Island continue yielding milk of uniform richness right up to within a month of calving; indeed, many are dried off with exceeding difficulty: and numerous cases obtain where cows continue milking right up to calving-day. They simply cannot dry off!*" (Mourant, 1907)

In reply to a question about the market price obtained for Jersey butter and milk, the authors of *Jersey Cattle: Their Feeding and Management*, published by the English Jersey Cattle Society (1898) had to admit that it was more or less a matter of conjecture. The purpose of most Jersey herds in England was kept mainly to provide milk and butter for the household and employees on large estates.

Slowly but surely, however, the interest in Jerseys shown by the ordinary farmer was increasing, as was the demand for Jersey milk, particularly in London. Because of this, the Jersey association became the first breed society in England to form its own co-operative dairy. As a result, the English Jersey Breeders Dairies Ltd was formed and opened its new premises in Park Street, Regents Park in London in 1922. It later opened branches in other parts of north London.

### **Founded a Jersey herd to supply cafes in Dublin**

The Danum Jersey Herd in Ireland was founded by Rodger Bewley's grandfather in 1903 to supply milk and cream to the family-run chain of cafes in Dublin.

Once Professor Bernhard Bøggild, of Denmark, visited London he noticed that the milk in shops was very good: both tasty and greasy, but sometimes it



could be pretty thin liquid and yet very yellow, in which case he was told that the largest proportion of customers preferred Jersey milk, which by its yellow colour gave security to be rich. (Source: Bøggild, 1897)

### Milk from Jerseys to the Danish capital

Probably the first suppliers of Jersey drinking milk to Copenhagen were Sauntegaard Manor and Borupgaard located north of the Danish capital. The owner of the latter was industrialist GA Hagemann, who in co-operation with C.F. Tietgen had developed the Danish beet industry.

Copenhagen also was supplied with children's milk from the Rosenfeldt Estate, which had established its own Jersey herd in 1906. As did Jørgen Larsen, who bottled his own Jersey milk for sale in the nearby city. In Sweden, Malmö was supplied with Jersey milk and even cheese from Swanberg's Jersey herd at Ängelstofta Manor. (Source: Nørgaard, 1996)

Danish Jersey made butter met no competition from the English Jersey breeders for according to the Danish Exporters of butter to England; there was no official market for Jersey butter in England. Members of the English Jersey association, according to the Danes, sold their products in the vicinity of their estates or farms. In 1888, William E. Bear records that a London dairyman, had settled down on Jersey producing 'the best farmhouse butter' which was delivered to two of the best hotels in St. Heliers.

There also was one dairy factory in Trinity Parish, on Jersey, belonging to Messrs. Griffin & Co, where they made the buttermilk or skimmed milk into cheese. "The only cheese that I heard of as being made in the Island," said Bear, 1888.

### Suitable for producing high class cheese

At the World's Columbian Exposition in Chicago 1893, the results showed that the high butterfat content of Jersey milk made it suitable for the production of high-class cheese. (Source: Fuller, 1894)

In the Dairyman's Year Book, 1895 we therefore learn about a British farmer



*In USA the Jersey cow was long the favorite as a family cow or town cow. From the exhibition at the Billings Farm & Museum in Vermont, USA.*

who now made 'cheese from his Jersey herd in the summer, called it Jersey Stilton, and sold it in wholesale at one shilling and four pence per pound'. (Mourant, 1907)

Perhaps the same information from the Columbian World Fair reached the Norwegian Jersey breeder, Ola Bjelland. He produced skimmed-milk fat cheese and sold it in small packages with printed label 'Appetit-Ost'. (Source: Stambok over jerseyfe i Rogaland, 1946)

### Competition on the English butter market

In 1903, the Danes were more concerned with the arrival of a shipload of Australian butter for the English market. The 1890s were a time of economic disaster in Australia, but by forming the new Commonwealth of Australia in 1901 a new and more successful development followed.

Refrigeration had made it possible to export butter to Britain and elsewhere. However by 1900 there was growing unease over the quality of the Australian butter. Reports of low quality were being received from overseas and the price received was generally lower than that realised by Danish butter, whereas they had earlier competed on more equal terms.

In New South Wales M.A. O'Callaghan drew the dairy farmers' attention to develop their cheese manufacturing. Some cheese was sent to London, as an experiment to test the English market, and this 'demonstrated quite clearly that New South Wales could turn out Cheddar cheese second to none other'. (O'Callaghan, 1912)

The Kameruka Company and A.L. Manning, Warragaburra and several others of Bega sent cheese to London that quite held its own for quality and price with best from New Zealand or Canada.



*Jersey heifer at Billings Farm, Vermont*





*Cheesemaking. From the exhibition at The Billings Farm & Museum in Vermont, USA*

When the steamer the Bega sunk suddenly off Bermagui on April 4, 1904, Kameruka unfortunately lost 560 cheddar and 100 Edam cheeses to the bottom of the ocean. The direct loss was of £450. After World War 1, Kameruka expanded its cheese production and 250 tons of handmade cheese was produced annually from the estate cheese factories. However, the need to modernise the cheese factories saw the last once close in 1971. The name Kameruka was sold to the Bega Valley Co-operative Society.

The advent of refrigeration also opened the way for the export from New Zealand of meat, butter and cheese. But while Australia had an enormous home market, which was able to overtake a great part of the production, New Zealand was forced to 'meet world competition'. (Tubbs, 1947)

In 'Successful Dairy Farming in Australia and New Zealand', Wellington, 1928, the author states in the foreword, that: "In many respects New Zealand

leads the world in dairying. She has but one serious rival – Denmark. When New Zealand farmers have brought their methods up to the high level of efficiency maintained by the Danish farmers, there will be a greater output from New Zealand herds, and there will be more profits for New Zealand dairymen."

By the mid-1930s, New Zealand had become Great Britain's largest supplier of dairy products. In this development towards better prosperity in New Zealand, the Hon J.G. Cobbe once claimed that the Jersey cow was one of the greatest contributors. 'She has done more than all the politicians put together.' (Tubbs, 1947)

**Kiwis increase their butter export**

In 1918, Jerseys represented only 15% of the dairy cattle population of New Zealand, while just ten years later, they represented no less than 63% of all the dairy cows in the Dominion. In the same period, the export of butter increased dramatically. From 1920 to 1938 the export of butter ten doubled, while the export of cheese stagnated by the 1930s.

A very ambitious project in 1932 'making grass into cheese' turned out to be less satisfactory than expected. The New Zealand cheese was produced using pasteurised milk whereas Canadian cheddar, was made from unpasteurised milk, so this was one problem.

Another problem seems to have been

that the New Zealand cheese was produced predominantly from Jersey milk, while the Canadian cheese was made from milk out of Shorthorn and Friesian cows. The result was that Canadian cheese was perfectly white, whereas cheese produced in New Zealand was of a creamy colour, owing to the presence of such a large percentage of Jersey milk. This, and a price ratio that was in favour of butter production, may explain the decline of New Zealand cheese exported in the 1930s. (Sources: The Jersey in New Zealand, 1932)

**Argentina had few Jerseys**

In 1908, when 1,000 Jersey cows were auctioneered in the province of Santa Fe, Argentina, census figures counted 29,116,625 cattle of which 2,076 were Jerseys. At the end of 1908, there were 29 butter factories in Argentina, working with about 50 creameries scattered through the country.

From 1905 to 1909, there had been a decline in the export of butter, but in both Argentina and its neighbouring country Uruguay, there was immense potential to develop a dairy industry.

*The principal markets for butter exported from Argentina were found in England and South Africa, 90% going to England, while cheese was not made in sufficient quantities to be an exportable surplus.*

*(Source: O'Callaghan, 1912)*



*The cows give the milk and the bull carts it to the station – a photo used in National Geographic, December 1925, and taken in Scotland.*