CHILTERN
OPEN AIR
MUSEUM

Where buildings come alive through history

Butter making

Location:

- Borehamwood Cattle Byre.

Practical Notes:

- Adult helpers will need to help young children at some points. The amount of help will be dependant on the age and ability of your group members.
- There are photo opportunities throughout this activity.

Purpose and content of the activity session:

- During this session the importance of the dairy industry in the Chilterns will be discussed with the children.
- Your group members will have the opportunity to learn about changes within the dairy industry during the Victorian period, with respect to hygiene, production methods and transportation.
- After a brief demonstration of the basic technique by the Museum Interpreter, your group members will help to turn the cream to butter, shape and stamp the butter.

The Victorian Dairy – Historical Background

In Britain, wool production had been the most profitable farming practice from medieval times until the 17th Century. From then on wool, meat, butter and cheese fetched equally good prices.

Up until the mid-19th and early 20th Centuries, the farmer only kept cows to supply milk for his family's use. Each part of the country produced its own butter, cream and cheese, with surplus farm and dairy produce being sold at the local market.

By 1850 most villagers no longer kept their own milk cows and so the farmer's dairy was one of the busiest places on the farm, providing milk, butter, cream and cheese to the villages and towns.

In the 19th century milking was done either in the field (and carried back to the dairy using a yoke) or within a cattle byre. Two pieces of equipment were needed for milking, a three-legged stool (so that it would stand firmly on uneven ground) and a pail.

Milking was usually done twice a day, the first milking being in the early morning so that the fresh milk could be delivered locally or on the milk train to London. In 19th century Buckinghamshire almost all of the milking was done by men, whilst in the surrounding counties milk maids were employed.

The second milking in the evening was usually used for making butter, cream and cheese making. This milk was allowed to settle in large setting pans, which allowed the cream to float to the top. In the morning this cream was skimmed off using a skimmer or fleeter and would be used to make the butter.

The cream was then placed in a butter churn, which moves the cream around rapidly to combine the fat molecules to produce butter. The churn handle was turned slowly and mixing continued for 15 minutes to an hour, depending on the

surrounding temperature, until the colour changed to golden yellow and then wheat-sized granules of butter were formed. The cream passed through three stages:

1. Soft whipped cream.
2. Stiff whipped cream.
3. A sudden separation into the yellow butter granules.

These butter granules would then be squeezed in a muslin bag and then between butter pats to take out the majority of the buttermilk. To keep butter longer it needed to be washed thoroughly and so water was then added and mixed into the butter, then poured out removing even more buttermilk. The butter was then shaped into rounds or blocks using butter pats and then stamped with a patterned mould to show which farm it came from. The butter was then sprinkled with fine salt to preserve it.

Butter was produced in large quantities in the Home Counties and was taken to London throughout the 19th century by stage-coach. In 1809 ten tons of butter each week was sent to London from Bicester, Oxon, packed in 2lb lumps. To discourage the use of butter from other countries an import duty of 10s per hundredweight (112 lbs) was charged in 1847.

The 1895 Harrods catalogue quotes the cost of butter as 1s 4d per lb.

Hygiene

Nowadays we tend to take our ‘daily pintas’ for granted. We know that it will always be available in our supermarkets or will arrive fresh on our doorsteps. We have no concerns over its purity and high quality, or its plentiful supply.

This was not always the case. Prior to the 20th Century, milk was mostly produced, handled, kept and sold under filthy conditions. Many illnesses and

serious diseases could be contracted form drinking contaminated milk. One of the most serious of these diseases was tuberculosis.

Adulteration of milk was also common, mainly by using dirty water to dilute the milk, and customers in the Chilterns and London areas might even have found Thames' tiddlers in their milk. Cream was also adulterated, with some suppliers selling 'cream' made from milk and frothed-up snail's slime.

The cartoon magazine Punch stated in an article of 1852 that "a clean glass of milk, if you could get it, would be 'one of the seven wonders of London'."

However the work of Koch and Pasteur in the early 19th Century eventually led to mandatory tuberculin-testing of all cattle and the pasteurisation process applied to all milk. Thanks to the combination of more scientific thought on the subjects of hygiene and efficiency of farming techniques, the quality of milk improved during the late 19th and early 20th Centuries.

Droving

In areas around large cities, in particular London, some farms did keep cows to supply milk directly to consumers. These cows (and their milk produce) were taken to large markets within such cities, for example Smithfield Market in London.

The droving of cattle to these city markets had been a way of life for hundreds of years and the number of droves continued to increase into the 19th Century, so that in the early part of that century approximately 100000 cattle and 750,000 sheep were driven to Smithfield market over unMacAdamised roads, which were a perpetual slough of mud. Due to the deterioration of the roads, the Turnpike Trusts around London started to charge between eight pence and ten pence for 'every score of oxen and neat cattle'.

With the gradual enclosure of common land the ancient drover routes became more difficult to follow. This, combined with the increased toll charges from the Turnpike Trusts, meant that droving of cattle to the London markets ceased, with more farmers using the new railway system to transport their livestock.

The coming of the railways and Express Dairy

The Express Dairy was founded in 1864 and was a major factor in the use of the railways for milk distribution. At first the milk used by Express Dairy came from cows kept within London, but a virus in 1865 decimated the cattle population within the city limits. At this time the Dairy had to look at other suppliers for the milk demand, and much came from as far a field as Derbyshire and the Dales. The milk arrived in any container available (barrels, jugs etc) in vans hitched to the passenger and goods trains; however from this point the railways laid on special trains to bring the milk to London, arriving at around 4am each day.

Then in 1866, Express Dairy designed the first closed churn, called a can, that was made from a tinned steel sheet bound with wooden hoops and conical in shape allowing easier transportation on the railways. This design is still used in a slightly modified fashion today. With easy containers to transport, the railways realised that milk producers were good sources of revenue and bigger and better train wagons were introduced. The frequency of the milk trains also increased and by the 1920s large cities and towns were well served with milk, both to manufacturers of food products and to the populations' doorsteps.

Deliveries

From the middle of the 19th Century onwards, milk was delivered to people's homes using handcarts. The customers would come out into the street with their own container for the milk to go into and the seller would then ladle the milk out using different measures, mostly by the gill, half pint or pint.

However in the 1920s, bottled milk started to be distributed by some dairies, with cardboard disks being used to seal the tops. During World War II these cardboard disks carried messages to the home front to encourage recycling of both the tops and the bottles. The disks could also be used to create toys (pom-poms), a game of 'Flick-ums' or decorative items (shopping bags formed by binding the disks together with scrap raffia or wool).

Weights and measurements:

16oz (ounces) = 1 lb (pound)
14 lb = 1 stone
20 fl oz (fluid ounces) = 1 pt (pint)

1 oz = 28.35 g 1 lb = 453 g
1 fl oz = 28.4 ml 1 pt = 568 ml

Money:

12d (penny) = 1s (shilling)
20s (shilling) = 1 £ (pound)

1 s = 5p