

## STOKESLEY PROBUS CLUB

### **Speaker Notes – Jack Brunton Room at Stokesley Town Hall Tuesday 18<sup>th</sup> February 2025 at 10.00am**

The Chairman was very pleased to introduce Michael Kirke to present his talk, “Ewes, Moos and Yaks”.

Michael had a “services” upbringing and moved with his family numerous times including spells overseas. During his national service he served as a radio operator. His career has been most varied having taught both rural services and history followed by time in tourism providing guide material for many of the National Trust's properties. He has been involved with the Sea Scouts as well as disabled groups and spent time with the TA in the Royal Green Jackets as a chef.

Michael's current interests include re-enactment societies and leading courses with U3A.

Michael enlightened Members about the numerous virtues and uses of milk before embarking on a graphic analysis of the extraction of this liquid wonder food from a surprising range of mammals. Members of a sensitive disposition may have been relieved that this journey around the underparts of a multitude of creatures was not illustrated.

When humans became less hunter gatherers and more herders or settlers they started to domesticate animals as a source of food. This offered advantages to both – constant food supply for the settlers, and protection for the animals. Cattle, horses, sheep and goats became staples, and their milk began to be consumed by humans. Milking of these creatures is widespread today, less so the horse, the milk of which, incidentally, is particularly rich. Nomadic herders have for centuries used horse milk to make an alcoholic drink, “kumis”.

Michael has had experience in milking all these domesticated animals, and gave some details of the technique – essentially, the downward massaging motion, a developed skill. Cows are fairly straight forward as long as they are tethered or penned. Should you find yourself wanting to milk a horse, always make sure the foal is present and close to you to convince the mare that the foal is feeding. Failure to do this will invite a good kicking. The lesser beasts, sheep and goats, traditionally, are grabbed and held between your legs for milking. Their milk is premium and mostly used for cheese but is sometimes also used in the manufacture of delicate soap.

Pigs are a plentiful source of milk having 16 or more teats. However, it is seldom used for human consumption presumably as raising numerous piglets presents a far better financial outcome.

Worldwide, the bulk of milk for human consumption is sourced from cows. Traditionally, around a dozen breeds were used in UK, but now almost all commercially produced domestic milk is from Friesians.

The first milk of lactation is yellow and thick and particularly rich for a few days, and contains colostrum, which provides anti-bodies for the newborn. This milk can be baked into a fine egg custard. This early milk, beestings, is highly prized. After a few days milk becomes white and the milk we know.

The milking of cows is now highly mechanised, and some advanced machines operate entirely automatically with the cow walking into the milking shed, into a stall, and the robotic machine hooks up.

In the 1950's, scientists in the USA experimented with an udder from a cow rigged to an artificial stomach. Grass and water were fed to the stomach. After breakdown the resultant juices passed to the udder and milk was produced. This did not work without a real udder.

Wet nurses: very useful and used widely until the development of infant formula milk.

Milk is found pasteurised, sterilised or in long life form giving varying shelf life. It can be churned into butter and made into cheese.

The cossacks fermented it into kefir to produce an alcoholic substance. The Vikings also used milk as a basis for an alcoholic drink.

Many styles of cheese are produced, some with a specific local purpose. Caerphilly, for instance, high in salt to restore salt levels of the local coal miners. Gloucester was used mostly on Fridays or other non-meat days.

Cheeses are treated in numerous ways, wrapped in nettle leaves, washed in perry, wrapped in muslin, etc. Cow, sheep, goat and buffalo are the most common sources of cheese making milk.

Of course, France is the epicentre of cheesemaking boasting over 300 recognised appellation varieties.

Michael enlightened us with these random milk related facts:

- a. India is the largest producer of butter, where it is boiled to remove the water to form ghee. This is quite surprising in a country where cows are considered sacred. A place where they can roam freely and are protected even to the extent of helping themselves to market produce with impunity.
- b. European style cheeses were introduced to China and Japan, in many cases along with the burger. This appears to have had a detrimental effect on waistlines.
- c. Maasai warriors in Africa mixed milk and blood, which was drunk prior to embarking on a test of manhood; going into the bush with two spears and returning with a dead lion.

Among the other mammals associated with milk consumption buffalo is probably the most familiar, and these beasts provide around 5% of world milk output, which is known mostly for its use in Mozzarella cheese.

Moving on to camels, Michael explained what you will need to know if you are ever confronted with such a task – kneel down with a bucket firmly gripped between knees, and massage in the usual manner. The next step is to hope and pray that the animal is in a good frame of mind, otherwise you may endure a vicious bite, or spend hours washing vile vomit out of your hair and clothes. Should you survive the ordeal, you will have two and a half gallons of very rich nutritious milk.

In South America the milking of alpacas is widespread and is a relatively hazard free task.

In Arctic regions reindeer milk is an important source of nutrition for the indigenous population.

If not herded, wild reindeer are lassoed, restrained and milked. It is unknown what the reindeer calves feel about this. Hungry, presumably.

In the Northern reaches of Canada, caribou and moose provide the local milk, some having been domesticated for indoor milking.

Tibetans have the honour of being the highest altitude milkers in the world. Doubtless, a similar boast attaches to many of their activities. The yak, of course, is the source of their milk, and a very healthy cheese is made therefrom.

Michael kept the most bizarre milk source to the end of his presentation, the whale. Once a quadruped, qualifying it as a mammal, these huge creatures produce a very rich milk. Being very high in fat, it is not thought to be suitable for human consumption, Extraction, understandably, would be very problematic. However, samples have been taken by divers for scientific purposes.

Following several questions and thanks from the Chairman for a fascinating and very unique presentation, Members expressed their thanks and appreciation to Michael in the customary manner with a hearty round of applause.

JE 18.2.25