

DO YOU PAY ENOUGH ATTENTION TO WATER?

Promar National Dairy Consultant Derek Gardner considers the importance of managing water effectively.

“Milk is around 87% water, so it is well worth investing time to make sure your cows get all the water they need, and this means understanding a bit about cow behaviour,” Mr Gardner explains.

Cows need considerable volumes of water every day. They require 35-45 litres per day for their own metabolism and on top of this need 2.5 litres of water for every litre of milk produced. So on average, modern dairy cows need 110 litres of water a day. In high yielding herds this can easily reach 160 litres per day.

Somewhere between 20-40 litres per day can be provided by the water in the winter diet, with rather more coming from fresh grazed grass. Most of the water, however, still has to come from the trough and this is where farmers need to work with cow behaviour.

“Cows are creatures of habit. Typically a cow will spend 30 minutes a day drinking and they can drink at a rate of 16 litres per minute if circumstances allow. They drink 75% of their water requirement during daylight hours and a staggering 60% of their daily needs will be consumed within an hour of milking.

“It is worth considering what this means in practice. An average 175 cow herd will have a peak consumption of 5000 litres immediately post milking and this has huge implications for water supply,” Mr Gardner observes.

The high demand means that a large reserve of water must be available, necessitating large troughs supplied by a high flow rate. Mr Gardner recommends providing 3” (8cm) linear access per cow in at least two locations within a building. A group of 80 cows would need 240” of water access.

“Having more troughs makes it easier for cows to drink and can reduce bullying. Location is also important. Consider placing troughs in cross overs between cubicles and it will be well worth looking at putting a trough between the parlour and the buildings.”

While it is important to ensure enough water is available, it is vital to ensure they drink as much as they need. Thirsty cows have lower dry matter intakes and consequently produce less milk. Another key to high water intakes is water quality.

“How often do you see water troughs with straw floating on the top and a brown scum of decomposing feed and saliva? If cows are seen lapping water, they are clearing the surface before they drink. Cows have a sense of smell 16 times more acute than a human’s. Try smelling the water in the trough. If you wouldn’t drink it, then cows definitely won’t. It will pay to regularly clean out troughs to ensure good water quality.

“Investing time to ensure cows have access to an adequate supply of clean fresh water can help promote higher yields. It is also worth bearing in mind that IF we have a hot summer then water demand will increase further, so check the flow rate to troughs in fields to make sure they are refilling quickly and that cows aren’t standing around waiting to drink.”