



Kendal-based cattle vet Andrew Crutchley, from XL Vet's Westmorland Veterinary Group, shares some timely tips on disease prevention and tackling health problems in dairy herds. Here he takes a close look at a problem that has occurred on many units this summer and could continue into the autumn.

Depressed appetites and listless cows could be result of heat stress

Hot and bothered

It's important to keep a close eye on cows as temperatures soar, particularly when temperatures inside buildings can be 10°C higher than outside.

Heat stress can occur at relatively low temperatures as humidity plays such a huge role in its onset. Humidity in the UK is typically 70% all year round.

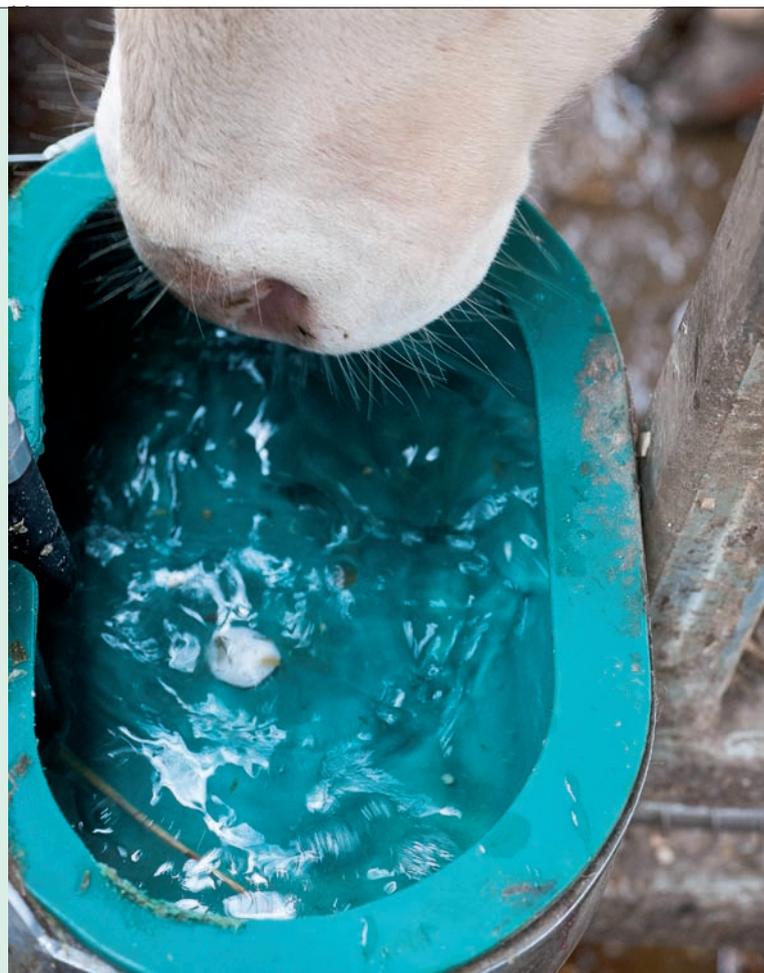
The heat stress threshold is generally believed to be between 20°C and 21°C at 45% humidity. So as temperatures rise above this, cows can be experiencing mild to moderate heat stress and severe stress at between 28°C and 30°C with the UK's typical humidity of 70%. Humidity in dairy sheds can easily approach between 80% and 90%. In these situations the cows' heat exchange, through sweating and panting, is less effective.

Lactating animals start showing signs of heat stress when temperatures hit around 20°C, but performance, in terms of milk yield and reproduction, can start to be affected at just 15°C. Cows are happiest between 5°C and 15°C.

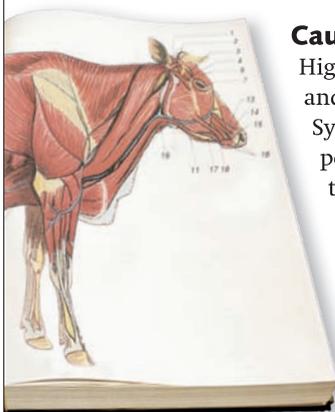
Typical symptoms to look out for included quickened breathing, depressed appetite and listlessness. Activity levels will also decrease and cows will also drink and salivate more and will look for shade.

A drop in yield is also common and can be as much as 20%, with cows losing as much as three litres a day on some units this summer. Milk quality can also be reduced as butterfat levels can also drop.

Heat stress will also impact fertility – with reduced bulling activity and decreased conception rates making it harder to get heat stressed cows in calf.



The encyclopaedia **Heat stress**



Causes

High temperatures in cow buildings and when out at grass with no shade. Symptoms appear and impact on performance at just 15°C, but more typically at around 20°C.

Symptoms

Fast breathing or panting, depressed appetite, a reduction in milk yield and reproductive performance. Cows also appear listless and miserable.

Prevention and treatment

Ensure that cow buildings are well ventilated with good air flow. Install fans where problems persist. Don't over stock collecting areas.

Provide access to plenty of water at all times, both indoors and out.

Consumption can increase by up to 50% – that can be between an extra 80 and 90 litres per cow per day – and ensure that cows have access to shade.

Using misters and foggers, in conjunction with fans, is another option for herds suffering from heat stress.

Aim to cool the air, not the cow. The cow is cooled by movement of cooled air over the skin.