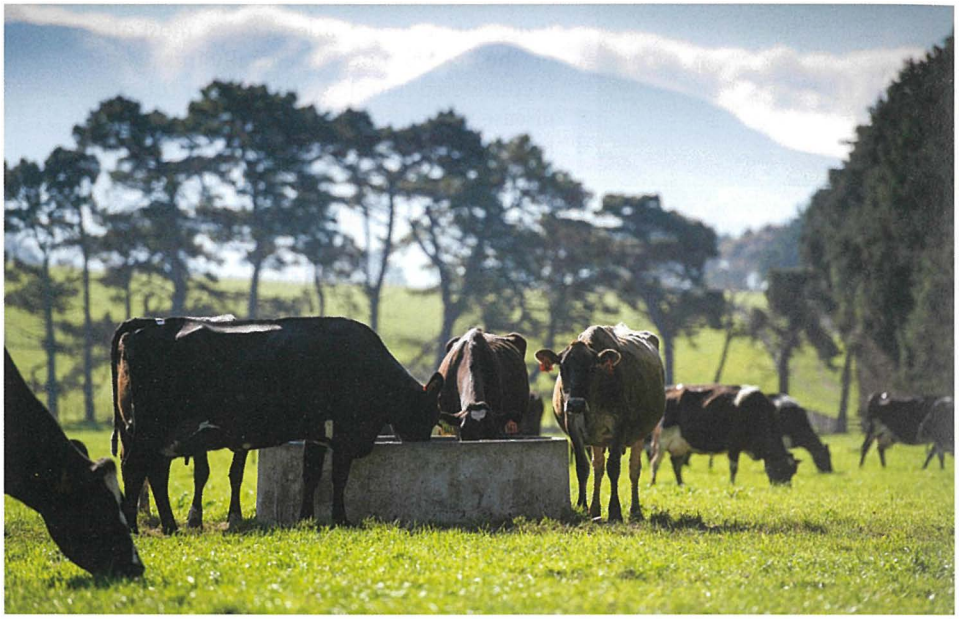
How heat impacts your cows

While producing milk, cows require more support to get through summer in comfort. By **Jacqueline McGowan.**



Aggression around the trough is an indicator of heat stress.

We have all heard people say some days are too hot for cows, but have you ever considered how much the heat is impacting them?

Historically, understanding heat stress has been based on noticeably reduced milk production, but now we understand that cows experience discomfort before production drops.

Cows' stoic behaviour means their discomfort is not as obvious to us. Things like increased standing, aggression around the trough and increased breathing rates are easy to miss when we do not spend our whole day in the paddock with them.

Increased milk production means cows have more metabolic heat to manage, and therefore require more support to get through summer in comfort.

To understand the effect of heat stress on your farm, do two easy things:

1. Count how many breaths your best cow for production takes in 10 seconds
2. Research how many hours of risk your cows might face.

Watch your best cow breathing

You might still feel sceptical about the impact of heat on your herd, and you might be right. The best way to find out is to get out and look at your cows, between 1pm and 3pm on a summer day.

Respiration is the earliest and easiest indicator we have on how a cow is coping, and it only costs a stroll through the paddock. High production increases susceptibility, so use your best cow rather than your smallest heifer.

Once you have selected a cow, count how many breaths she takes in 10 seconds. The normal rate of breathing is 26-40 breaths per minute, or four-to-seven breaths in 10 seconds. If she takes more than 10 breaths in 10 seconds, she is experiencing enough heat stress to reduce her feed intake and affect milk production.

How many hours of risk?

The hours of heat that will affect milk production differs regionally, ranging from two hours a day around Gore to 11 hours a day around Whangarei.

However, the hours that affect their comfort levels are an additional four to six hours a day, in every region.

If cows are exposed to all that heat, the estimated impact on milk production ranges from 1.5kg milksolids (MS) to 7kg MS per cow between December and February.

Many farms already have systems that reduce the risk for at least some of that time, but it is good to assess what you are already doing in each of those risk hours and whether you can apply some of the tips below.

For more information visit **www.dairynz.co.nz/heatstress**

- *Jacqueline McGowan is DairyNZ senior solutions and development specialist*