

#### Reducing your carbon footprint

This comprehensive series aims to offer producers clear and practical information to help them increase efficiency and save money. It highlights affordable and effective methods to reduce greenhouse gas emissions on UK dairy units.

Topic 1: Cutting through the 'carbon jargon'

Topic 2: Fewer emissions from farm waste

Topic 3: Improving feed efficiency

Topic 4: Reducing emissions through breeding

Topic 5: Saving energy and fuel

Topic 6: Get water wise

**H**ow much water does your dairy unit use? Many producers don't know – a recent DairyCo survey revealed that only 31% of producers were aware of their annual dairy-related water use. This is surprising when mains water supply typically costs £31/cow each year, rising to more than £100/cow on some units.

"Producers are unaware of how much water they are using, let alone how much they may be wasting," says DairyCo research and development manager Karen Wannacott.

"And charges for water disposal, in the form of dirty water or slurry, are similarly expensive. So, with water prices running above inflation and climate change having an impact on rainfall, it is clear that more efficient water use can yield significant benefits – both for dairy businesses and the environment."

And the outlook for reaping these benefits is good. In 2008 the dairy industry committed itself to reducing water usage on dairy farms, as part of the Milk Roadmap, chaired by Tim Bennett. "This ambitious document set out wide-reaching targets to reduce the industry's environmental impact, and producers are doing extremely well in meeting the challenge."

An encouraging 79% of producers surveyed already checked their water points for leaks, and 73% had changed

Efficient water use is kind to your dairy 'pocket' – and the environment

# Making savings on a rainy day

Producers could save thousands of pounds a year through more efficient water use, while also reducing their impact on the environment. We offer some helpful tips and outline some ideas that could help you to cut your water bill and make your herd just a little bit 'greener'.

text **Rachael Porter**

their management of clean water in the preceding 24 months. A further 40% were intending to make more changes to improve water use efficiency this year.

#### Harvesting rainwater

"There are many simple things that producers can do to reduce water use, and therefore make significant cost savings," says Dr Wonnacott.

These include using recycled water from plate coolers, which account for a quarter of dairy units' water use, for washing down or drinking water. Harvesting rainwater is another valuable option, which 21% of producers are already employing, and a further 18% plan to do so in 2010.

"Rainwater harvesting can be costly to set up, requiring extensive guttering and pipework to store the collected water, but this water is 'free'," says Dr Wonnacott, adding that any water reused is a double saving. "An average dairy unit re-using all of its dairy and bulk tank washings could save £668/year."

Collecting and using rainwater for daily tasks such as washing down machinery and foot bathing is not a new idea. But it's very much in vogue due to its environmentally friendly – and money saving – nature.

#### Water lagoon

One Kent-based dairy unit has been collecting and using rain water run off

from its two largest buildings for the past 30 years, and producer John Downing was surprised to be quizzed about a system that's just 'always been there'. His father set up the system of gutters and pipes that run from the buildings, which house and milk the 350-cow herd at Wintersall Farm, to a water lagoon.

"Initially we wanted to save on our water bill by reducing the amount of water, but what we're doing is also good for the environment," says John.

He estimates that around a million litres are collected from the roofs each year and it's used for foot bathing the cows, as well as washing down AI pens and other equipment and facilities that don't need to be washed with mains water.

"We're fortunate that we have the lagoon already. It would be a big capital outlay to put in a system like this now. But it's certainly paid for itself over the years and my father says that he also has peace of mind knowing that if we ever had a farm fire there would be plenty of water here to tackle it."

#### Boreholes and springs

Boreholes and springs are other sources that producers can harness to reduce their water bill. So long as water is 'potable' it can be used as drinking water and to wash out milking parlours.

And on the subject of washing down, Dr Wonnacott says that changing hoses

can make a huge difference to water use levels. "Switch to a low-volume, high pressure hose. It has the same cleaning effect as a high volume hose but uses a lot less water."

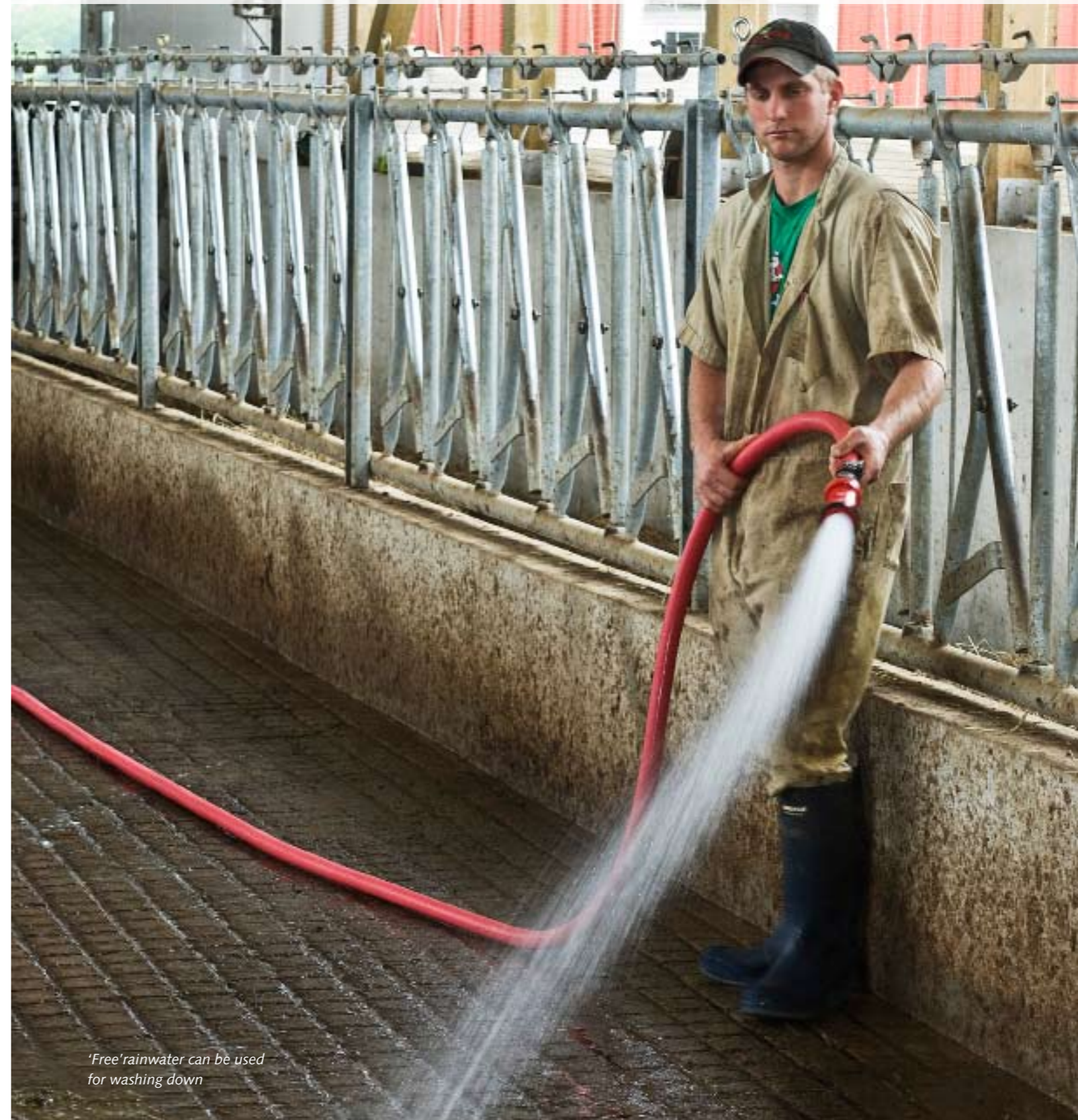
And now – in summer and early autumn – is the time to be making these often small changes that make a big difference to water usage. "For example, check

your guttering and down pipes and link them to some large water butts. Saving water doesn't have to time consuming or expensive. But the financial rewards can be substantial."

DairyCo will be issuing a second water use survey later this year, to benchmark producers' progress. "We already know that the industry is moving well towards

its Milk Roadmap targets on water use efficiency, but the more businesses can do to reduce water usage, the more it benefits them and the environment on which their business relies."

For more information on the Water Survey, or to order your free booklet on Effective Use of Water on Dairy Farms, contact DairyCo on 02476 692051. |



'Free' rainwater can be used for washing down