Dairy Water Saving Tips

Joel Spry, Dairy Nutrients, DPI Swan Hill
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Water efficient dairy sheds can use as little as 20 per cent of the water used in the average dairy. A key reason for this efficiency is through the re-use of dairy water for yard washing. This also reduces overloading effluent ponds with extra water.

The following lists of water saving ideas may be useful in developing a water saving plan for your dairy. Every farm is different, so identify the ideas that fit your system and plan to make the best use of the water you have available.

Water saving ideas for cleaning dairy yards and sheds:

- Sweeping or scraping floors and yards before washing down as it greatly reduces the volume of water needed.
- Periodic automatic flushing of the yards during milking will make the clean–up quicker and easier. Dampening down the yard, as the cows move through it, will reduce the water needed to clean it afterwards.
- Overhead sprinklers, garden sprinklers or automatic sprays will ensure the yard remains damp enough for easy washing.
- Poly pipe with holes to let the water dribble out, placed at the top of the yard slope keeps the surface wet without wetting the cows.
- Minimising the time animals spend standing in the yard will reduce the amount of manure that needs to be cleaned up.
- In general, high-volume, low-pressure systems are better at moving manure.
- Use recycled water for yard washing.
- Divert plate cooler water into wash down tanks for yard cleaning.
- Installing a second effluent storage pond will enable water to be recycled for yard washing or irrigation.
- Install appropriate flood wash tanks to suit the yard washing requirement and positioned strategically to optimise performance

Milking

- Repair and replace broken nozzles or leaking hoses.
- Equip hoses with spring-loaded nozzles that have to be held open.
- Strategically wash dirty udders and teats.
- Rinse small equipment in a sink or bucket to save running water.
- In rotary sheds, turn off cup and platform sprays immediately after cows have left the platform and reduce unnecessary water volumes. These two components contribute nearly 40 per cent of total daily water use.
- Use high volumes of water at low pressure in the dairy as too much pressure splatters manure everywhere.

Machine cleaning

- Avoid overuse of hot and cold rinsing volumes.
- Recycling detergent wash water saves on detergent and energy costs for heating water. Some extra water and chemical can be added as needed.

- Catching the final hot water rinse and using as the first rinse of the next milking saves water and energy use.

Plate coolers

- Set up a system to recycle plate cooler water through a storage tank.
- Capture pre-cooler water for reuse for yard washing or irrigation.
- Ensure the plate cooler is not over-using water – you will need about three litres of water for every litre of milk.
- Consider collecting water from the roof of your dairy so that the plate cooler water can be supplied from rainwater tanks.
- Turn off water supply to the plate cooler immediately after cows have left the platform.

Water quality and recycled water

- Recycling water can increase concentrations of nutrients and farm chemicals. You should monitor recycled water quality to ensure that it is fit for its intended use.

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