

Milking Smarter not Harder

Conferences such as these give people the opportunity to stand back from day-to-day chores on the farm and look at the 'big picture', something we should all do occasionally. In this paper we ask you to question how tasks can be done easier, possibly faster – or whether they need to be done at all! We identify farmer solutions to common problems that may trigger off more ideas of your own - and the desire to fix them!

All too often we fail to see the dairy unit as a factory. It's often called a 'food factory' and the farm dairy certainly is designed to produce a quality product - but there is a big difference. If you were in a factory you would be doing one or perhaps two tasks carefully, thoroughly, repeating them hour after hour.

On the farm you have many tasks, each of which you need to do well and aim to do perfectly; many are complex, require high levels of understanding and skill. Calf rearing, weed spraying, tractor driving, using a chain saw, financial management and, yes, milking - itself a combination of many skills: cupping, mixing teat spray, machine cleaning, mastitis control and more. You learn them over time, although the rate of change is escalating and will continue to do so. You now need to use a computer, a cell phone and a palm pilot, again demanding more knowledge and skill.



Whether you have a small or large herd, much of your time is taken up with milking - **57%** from survey data. Most people want to do it easier, some faster. What do you personally want? If it is faster, then look first at the tasks that take the most time, yard washing for example or handling the sick mob? Then the things that impact directly on milking time. We need to think about those likely to make the biggest impact on time – or are currently the most annoying, or the most tiring.

We will all have ideas about how to fix problems ourselves but with over 20 000 people dairy farming around NZ, most of them trying to find easier ways to do the same tasks, there are bound to be other ways to solve them, some better than we can think of ourselves. Where do we go to get alternative solutions?

Perfect cow flow

Take milking as an example. What do we want to achieve? All tasks associated with milking to be easy? We are as fit after a milking as when we start? Dare I say it, we want to be capable of milking when in our 70s? First on our list of wants would be perfect cow flow – the cows walking in to be milked, never making us go out into the yard to get them.

Good cow flow happens when the cows can walk in without any risk of getting hurt or frightened, end up perfectly comfortable in their bails and know the machines will treat them gently; your attitude thought by them as the kindly shepherd not the dog. Improvements in modern design make this possible but even now people sometimes forget the cow. The cow must come first!

Tips

- **Find a way to prevent stones from the race reaching the yard to reduce the risk of lameness. Even out race corners, steep slopes and camber. Walk cows slowly so they can see where to put their feet.**
- **Lower the breast rails until they are under the shoulder blade of the bigger cows, 760 mm [top of pipe] for Friesians, 700 mm for Jerseys. Fit an anti-jumping rail if you are worried about any jumping out.**
- **Walk around wherever cows walk. Try to imagine what a cow is thinking. “Where will I get hurt?” Eliminate all tight turns, all pipes, gudgeons and sharp edges that jut out to cause injury.**



Use steps instead of ramps.

Tips

- **Replace ramps with steps. Cows will then walk confidently without fear of slipping. 800 mm across the top and a height of 120 mm works well but dimensions can be varied. A step to remove even relatively gentle slopes helps cow flow.**
- **Make the cows feel safe. Use a scabblor to roughen slippery concrete, put a nib alongside the pit wall so cows are not fearful of slipping in.**

Milking routine

Milking efficiency is important, even more so with increasing cow numbers and the number or rows/rounds each dairy is doing. Not uncommon is a row/round time far in excess of a normal 6-10 minutes (the range is affected by yield) because of an ineffective routine. Shift switches and cords to where you are going to need them. Allow extra time for cows to move in and out, especially with poorly-designed herringbones, by making cluster changing the main task – do it reasonably quickly but, more importantly, have everyone doing it when it is required. Naturally start each row at the exit gate and with a target of getting to the gate-opening point as quickly as possible.

Tips

- **Label the slow-milking cows and cup them as soon as possible.**
- **Shift controls to where they are needed so you can operate them quicker and with less walking.**



Tip

- **Have the milking procedure laminated and mounted on the dairy wall. Tag the plant so your relief milker or new staff member can set it up correctly. Number the steps in the order they need to be taken. Use tape to show the correct alignment of the handle for milking. Put each instruction where it is needed.**

People comfort

What is it that makes milking hard or easy work? Good boots and soft rubber mats on the pit floor are both “marvellous” say the users. Are you having to reach too far when cupping? Do you feel like you are running and/or milking wears you out?

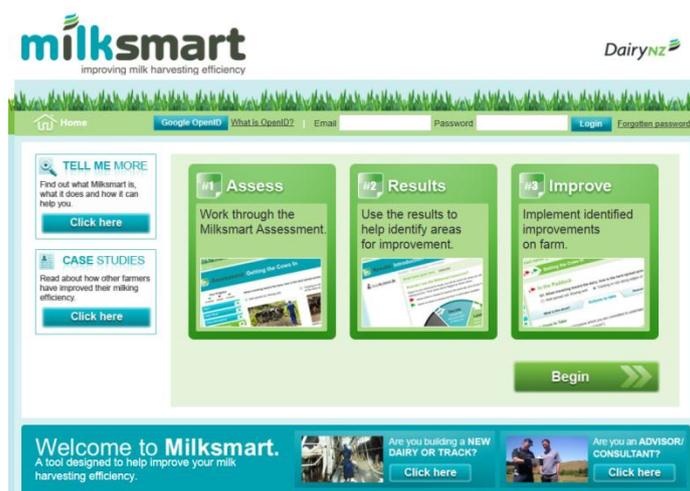
Tip

- ***For a list of possible fixes talk with your farming mates, they will come up with helpful ideas. Or go to the SMASH website after the conference (www.smallerherds.co.nz), more ideas from this talk will be loaded there.***

When you want a milking off you need well planned systems in place so that staff, or the relief milker, do not put a valve handle in the wrong place and let the milk go out to the storage pond. A farmer who started up the machine by opening and shutting several valves was asked how on earth he remembered what to do. He said, "I know", but what if someone else comes in? The sequence should have been written down and the valves labelled.

Milksmart

This programme puts NZ dairy farmers right at the forefront of modern farming methods. It shows many alternative low-cost ways to simplify, speed up and make milking easier, with good cow flow an essential aim.



To enter, navigate to the site www.milksmart.co.nz then click on **Begin** to start the registration process.

Look for answers to your problems under the chapter headings. Let's think of a common example, "My feet are sore, my back aches and my forearms feel like they are dropping off. I am continually getting kicked and milking takes 12 minutes a row. My ears ring from the noise of the clattering vacuum pump. Milking is not fun anymore!"

It might take a while to go through the alternatives but possible solutions - apart from getting someone else to milk - are there to be found. Ideas in Milksmart will also trigger off more ideas of your own – and your neighbours - that you can feed into the system. Using Milksmart, you can rank yourself against other farms and farmers should you choose to do so.

The future

Anyone can predict the future. There are two ways to get better results. Either look a very long way out, say 20 years, when people will have forgotten what you said, or alternatively look at

the very near future, tomorrow. Your predictions may be better than - but we know weather forecasts can be wrong.

Let's suggest we will:

1. See more automation, cluster removers and teat spraying are examples, and also drafting, an easy job making use of the electronic ear tags. Today drafting is often difficult because of the poorly-designed systems currently common on smaller farms.
2. Have rapid adoption of the MaxT (Maximum Milk Out Times), where slow cows have their clusters removed before milking is complete. The results show no loss in production and no more clinical mastitis so it is a no-brainer.
3. Perhaps see the development of portable milking systems where the machines are taken to the cows rather than walking them for long distances to a costly under-utilised capital-intensive showplace. Yes, they are there now awaiting your interest.
4. Find ever-increasing interest in developing simpler, easier, quicker ways of milking – thinking outside the square. The challenge of remaining efficient will continually inspire innovation. Quick and wide-spread adoption of new ideas will rely on better extension methods and wider use of technology, such as the internet.

Summary

Finding answers to milking issues has become easier by the start-up of Milksmart. If you are having trouble deciding on solutions to problems, whether it be design, cow flow, milking efficiency make it a first point of call.

Milking should be pleasant for the cows - and you. Yes it's a business but we all want to enjoy the business we are in. A farmer was asked recently, "Why are you milking cows?" He said, "First I want to make some money. Then I want to leave the land better than when I arrived. I want my workers to have an enjoyable life and my cows to be well fed, live in comfort and without fear." We may not say it out loud as he did but most of us think the same.