

# Quick Fixes to Improve Cow Flow

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Needing a project for winter? Or more ideas on how to fix the annoying problems in your dairy? Check the list below for a few ideas. Add to them if you can to benefit other farmers - any suggestions can be emailed to SMASH at [smash.registrar@gmail.com](mailto:smash.registrar@gmail.com) and we will put them up on the website.

## Farm races

### **Adjust track camber, surface, steepness and eliminate bottle necks**

- Put wooden rails on sides of entry race near yard.
- Align entry races to yard and adjust width of races to be consistent all the way.
- Round off sharp corners.

### **Prevent stones getting on to yard**

- Alter entry so cows do not step down on to concrete risking foot injury.
- Replace electric fences with non-threatening fencing e.g. post and rail, within 200m from dairy.

## Yards

### **Scabble slippery concrete so cows feel safe**

- Make the backing gate hock rail height i.e. about 500 mm.
- Fill in any wedges on backing gate where cows may get trapped.
- Put a bell on electric-motor driven backing gate so cows can hear it moving.
- Putting a gate inside the backing gate will allow the second herd through easier and quicker.

### **Measure the yard wash hose flow and adjust system to get 250 litres/min through yard wash nozzle**

- Set up sprinkler system to cool cows as they arrive and to keep yard wet for easier washing.

### **Block off distracting views from cows as they are about to enter bail area**

- Eliminate any grid, channel, etc. especially in the entrance to the bail area where the change in surface impacts on cow flow.

## General

### **Learn to like cows, talk to them gently and politely**

- Adjust your behaviour towards cows to compensate for design faults, e.g., slow down.

### **Eliminate all parts of dairy that can hurt cows, e.g., cow-injuring protrusions, gudgeons and sharp edges**

- Cut out vertical posts or alter so they do not affect cows.

### **Eliminate ramps and replace with steps for cow security and safety**

- Put up fishing lines to reduce bird roosting/contamination of plant.
- Set up teat spray mixing procedure and other procedures, laminate them and hang where visible.
- Cut back sharp angles of corners so cows can turn easier.
- Fit rubber stoppers where metal hits metal e.g. gates, to reduce noise.
- Remove, fill in or redesign drains so cow flow is not affected by the change in surface.
- If unhappy with cow flow get a specialist and also check for stray voltage.

### **Inside bail area**

- Improve lead-in to breast rail (make it high).

### **Fit rotating back bar to replace chains and to avoid need to get up into yard**

#### **Adjust breast rail height to suit cow size/improve flow**

- Install neck- anti-jumping - rail to prevent jumpers in herringbones.
- Fit zig zag rump rail if bail spacing over 650 mm.
- Fit nib wall for cow security.
- Use high-lifting head gates; make operable from any position in pit.
- For a swing head gate, fit pull cords to open it – and to shut it.
- Adjust head gate angle so first cow is comfortable.
- Position meal feeders at a comfortable feeding height above floor.
- Set up even lighting inside bail area.

### **Exit**

- Add to area of concrete at exit if less than 1 sq metre/cluster.
- Use improved footbath design.
- Maintain exit race in good condition. Widen or double up if necessary.
- Make sure cows go out of sight of exiting cows as they walk away from dairy.
- Give the first cow near the head gate plenty of room.

### **Machines**

- Lower milkline if more than about 1600 mm above the cow platform.
- Fix any cluster alignment fault so cows milk evenly.
- Put air filtration to quieten and protect pulsation system.
- Check and adjust vacuum level. Target: zero teat damage!
- Adjust stainless droppers so clusters hang evenly without excessive sagging.
- Move noisy regulators out of the bail area.
- Quieten any noisy vacuum pump.

## Management

- Set up mirror above cupping position/pit exit to see cows in yard and be able to control the backing gate better.

### **Tie cord to backing gate/feed switch/controls to allow operation along pit length**

- Fit timer on the backing gate control to regulate/standardize backing gate travel.

### **Label the plant. Use Josh's green tape system for open/shut valves.**

- Set up standard operating procedures for milking.
- Use the 'Patoka' treatment/marking system for cows.
- Simplify drafting systems and make them operable from the pit.

### **Train heifers to milking**

- Teatspray before calving to ensure good teat condition.
- Improve inefficient teatspray systems. Replace hand-pumped sprayer with mechanical system.
- Locate head gate control rod alongside or inside kick rail.
- Do not tighten cows up in yard so they are unable to sort themselves into the preferred milking order.
- Find out if MaxT (Fixed-time milking) is right for you.
- If have any signs of teat damage, get specialist advice to remedy.

## People are important too

- Install a good sound system.
- Improve lighting in bail area.
- Install a coffee maker.

### **Fit rubber matting pit/cups-on to improve milker comfort/health**

- Alter jetter system to make it easy to use, e.g., wind-down or swing-down.
- Shift controls to minimise the effort needed to operate them.
- Set up handy containers and shelves to hold gear used frequently.
- Deepen the pit if too shallow.
- Fit a step-up rail to read ear tags.
- Wear gloves.
- Use simple efficient milking routines.
- Use easy cluster changing methods i.e. round the circle and/or two at a time.

Analyse your problems and find solutions to any technical/milking/management issues. Include the website '**Milksmart improving milk harvesting efficiency**' as a source of information: [www.milksmart.co.nz](http://www.milksmart.co.nz)