

MANAGING DIRTY COWS**1. PURPOSE**

- 1.1. To describe the proper care, management, and training of dirty cattle.

2. RESPONSIBILITY

- 2.1. Trained and qualified staff

3. MATERIALS

- 3.1. Brushes
- 3.2. Halter
- 3.3. Hose
- 3.4. Shampoo
- 3.5. Clippers (body and udder)
- 3.6. Trainers (stem, bracket, trainer)
- 3.7. Measuring tape or ruler

4. GENERAL CONSIDERATIONS

- 4.1. Cattle who score more than 2 for any area (ex. udder, leg, flank) are considered 'dirty', and require corrective action (See: SOP [DC-304: Cleanliness Assessment for Dairy Cows](#)).
- 4.2. Corrective actions can be reactive (ex. brushing, washing, use of electric trainers) or preventative (ex. clipping, increasing scraping down frequency, optimal stall size).
- 4.3. CONSIDERATIONS FOR ELECTRIC TRAINERS (NFACC, 2023)
 - 4.3.1. Trainers should not be considered the default solution for dirty cows as the use of trainers may increase the prevalence of dirty limbs foot and hock lesions (NFACC, 2023), and mastitis (CCAC, 2009).
 - 4.3.2. Electric trainers must only be used to train or retrain individual cattle who have been identified as dirty (cleanliness score >2).
 - 4.3.3. Trainers must be <2500 volts, safe, secure, adjustable, and positioned correctly to enable normal eating, standing, and lying behavior without risk of shock.
 - 4.3.4. Trainers should only be on for the minimal time needed (when people cannot scrape down).

5. PROCEDURE

5.1. BRUSHING COWS

- 5.1.1. Curry combs are used for removing dried manure. Use more gently on thinner skin (ex. udders) and over bony structures.
- 5.1.2. Bristled brushes are for dusting off backs and brushing unsoiled areas.
- 5.1.3. Brush cows in their stalls, being careful not to get stepped on.



Figure 1: Cow brushes. Bristle brush (left) and Curry comb (right)

5.2. WASHING COWS

- 5.2.1. Cows that are very dirty or have thick mats of dried manure can benefit from being washed.
- 5.2.2. Place a halter on the cow to be washed.
- 5.2.3. Lead her from her stall to the handling area and tie her to the metal rail in front of the right heifer barn gutter where the hose is.
- 5.2.4. Ensure she is tied at least a meter away from the end of the rail so there is no way she can step into the gutter.
- 5.2.5. Soak the soiled area with water and wait 5 mins.
- 5.2.6. Using a curry comb, try to work the manure out of her coat.
- 5.2.7. Repeat as needed.
- 5.2.8. Cattle shampoo can be found in the pharmacy, with the clipping supplies, or in the electrical room with the brushes.
- 5.2.9. Use shampoo as directed on bottle to remove stains from the coat.

5.3. CLIPPING COWS

- 5.3.1. Manure forms thick plaques when hair is longer. Clipping cows regularly to maintain a short coat allows manure to more easily slough off when dry.
- 5.3.2. Large, plug-in clippers are found in the pharmacy and are used for the body of the cow (Figure 3).
- 5.3.3. Body clippers are used on the udder when temperatures are below 0°C.
- 5.3.4. Smaller, cordless clippers are found in the pharmacy and are used for the udder of the cow (Figure 3).
- 5.3.5. Before clipping
 - 5.3.5.1.1. Ensure that the clipper blade is sharp. Replace the blade if dull or broken.
 - 5.3.5.1.2. Lubricate the blade with a few drops of oil.
 - 5.3.5.1.3. Restrain cows by haltering and tying the head over the tie-rail if cows are nervous or kicky when clipping.
- 5.3.6. While clipping
 - 5.3.6.1. Use a touch gradient, especially on heifers and nervous cows:

- 5.3.6.1.1. Maintain continual contact with one hand throughout the entire procedure when possible.
- 5.3.6.1.2. Clip from low sensitivity (back, neck, tail, belly) to high sensitivity areas (legs, face).
- 5.3.6.1.3. Allow time for the cow to acclimate to an increased intensity of touch (increasing pressure while clipping matted areas) or sensitivity of area (legs or head).
- 5.3.6.2. Scratch, pet, and praise the cow for standing still and allowing the clipping.
- 5.3.6.3. Lubricate the blades if you feel them getting hot.
- 5.3.6.4. Always position your body/head to minimize the risk of getting kicked/stepped on while clipping.
- 5.3.7. After clipping
 - 5.3.7.1. Disinfect the blade with an alcohol pad between cows.
 - 5.3.7.2. Clean clippers by blowing away any hair using the compressed air in the feed room.
 - 5.3.7.3. Use a wet paper towel to remove any manure from the blade or clipper body.
 - 5.3.7.4. Lubricate the blade if you need to remove it and wash it more thoroughly.



Figure 2: Body (left) and udder (right) clippers and lubricant

5.4. USE OF ELECTRIC TRAINERS

5.4.1. Unplugging trainers

- 5.4.1.1. Electrical trainers are operated by plugging in the cord to the right of the Hydro room doors into the wall outlet (Figure 3).

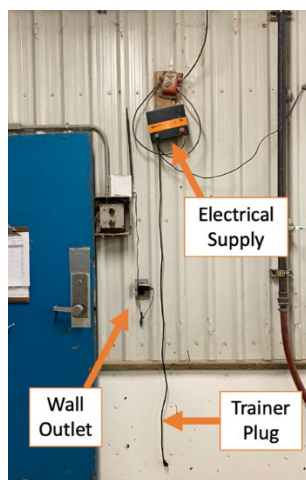


Figure 3: Location of power supply for electric trainers.

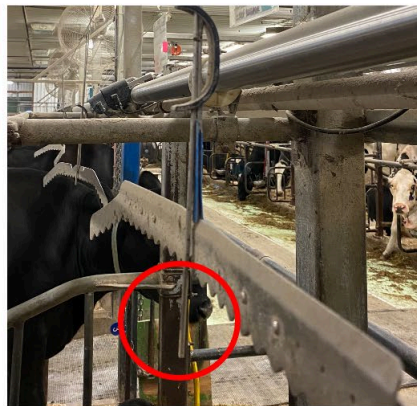
- 5.4.1.2. The morning milking staff that enters the barn first is responsible for unplugging the trainers while recording the environmental monitoring.
- 5.4.1.3. Before beginning to milk, milkers should confirm that the trainers have been unplugged.
- 5.4.1.4. Trainers must remain unplugged during daily activities with the main herd (ex. milking, treatments, research, exercise, vet visits, handling) to avoid employees getting accidentally shocked.

5.4.2. PLUGGING IN TRAINERS

- 5.4.2.1. Trainers are plugged in overnight when there is no personnel present to scrape down.
- 5.4.2.2. Before plugging trainers in, evening staff must check every trainer to ensure that they are correctly positioned over the cow (see Section 'Trainer Placement').
- 5.4.2.3. Trainers lowered to 'Training' position 24 hours before must now be raised to the 'Maintenance' position.

5.4.3. TRAINER PLACEMENT

- 5.4.3.1. The trainer stem should be hooked onto the hot wire in the center of the stall and closed with pliers so that it cannot fall off.
- 5.4.3.2. The trainer is fixed to the stem with a black plastic bracket (Figure 4), ensure that the fit is tight and that there is no chance that the trainer will slip downwards without manual adjustment. If the bracket slips, replace it with a new bracket.
- 5.4.3.3. Ensure that the trainer is straight and parallel to the stall floor (not tilted, Figure 4)



Stem Requires Cutting



Tilted



Too Low/Slipping



Not Centered in Stall

Figure 4: Mispositioned trainers must be corrected before plugging in

5.4.3.4. Trainer height (Maintenance)

- 5.4.3.4.1. Adjust the trainer height over the cows' withers to the Maintenance position (Figure 5).
- 5.4.3.4.2. Maintenance Position: 10 cm over the highest point of the cows' withers (Figure 5)

MANAGING DIRTY COWS

- 5.4.3.4.3. You must cut the stem of the trainer if it is below the trainer when the trainer is in the Maintenance position (Figure 4). Trainer stems are most easily cut with bolt cutters found on the wall of the Agitator room.
- 5.4.3.5. Trainer height (Training)
- 5.4.3.5.1. Cows that have a cleanliness score of 2 and above, that have not been trained the previous evening, should have their trainers lowered to 'Training' position (See SOP DC-304: Cleanliness Assessment for Dairy Cows).
- 5.4.3.5.2. Training Position: 5 cm over the highest point of the cows' withers (Figure 5).
- 5.4.3.5.3. Trainers can be in the 'Training' position for a maximum of 24 hours.
- 5.4.3.5.4. Any trainer lowered to the 'Training' position should be recorded before the end of your shift in SOP DC-A-3C: Trainer Use Record with the Cow #, date and if AM or PM.

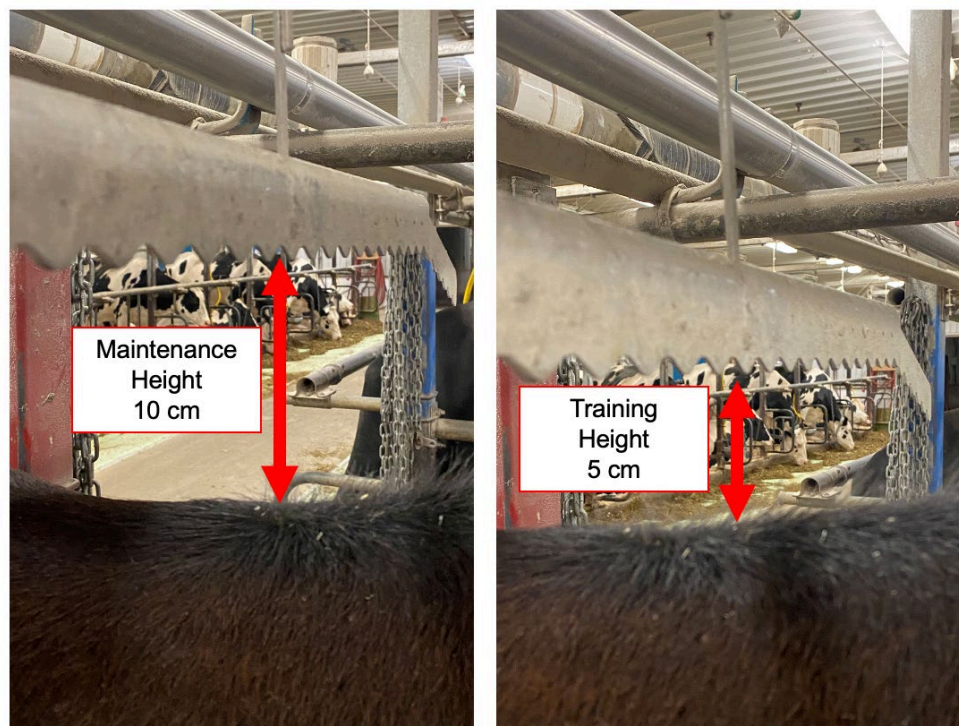


Figure 5: Trainer Height

6. REFERENCES

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- 6.4. Baillargeon J, Adam S, Lequin D. 2014. The barn; a source of comfort. Practical Guide to Evaluating and Improving Comfort in the Barn. Valacta. <https://lactanet.ca/en/practical-guide-to-evaluating-and-improving-comfort-in-the-barn/>

Document Status

DATE	NEW VERSION
16-Sept-2024	Version: approved by Macdonald Campus Animal Care Committee