

OUTDOOR EXERCISE HABITUATION OF TIE-STALL CATTLE

1. PURPOSE

To train and habituate confined dairy cattle to daily outdoor exercise.

2. RESPONSIBILITY

- 2.1 Trained and qualified personnel
- 2.2 Veterinarian

3. MATERIALS

- 3.1 Halters
- 3.2 “No Outside” cards
- 3.3 “No Halter” cards
- 3.4 Scrapers
- 3.5 Grit
- 3.6 Barrier chains with flagging tape
- 3.7 Flags for slowing/directing cattle
- 3.8 Electronic record
- 3.9 Clipboard and paper halter record
- 3.10 Row position collar tags
- 3.11 Vet Wrap

4. GENERAL

- 4.1 Animals must be approved for exercise by the herd veterinarian and animal science technicians.
- 4.2 Animals may not be approved if:
 - fresh (pending veterinary approval)
 - sick
 - injured
 - temperamental reasons. (Dangerous or afraid of moving)
 - if the animal has a very deep udder which may be injured.

*** IMPORTANT**

Putting an animal outside who is not approved may result in serious injury to the cow or personnel (in the case of temperamental animals)

- 4.3 Animals not approved for exercise should have a “No Outside” card on the manger-facing side of their identification cards. This information can also be found on a list titled “Cows that DO NOT go out for exercise” Found posted on the bulletin board in the dairy office and in the online exercise record.

- 4.4 Cows must go through habituation training if they have never gone outside for exercise, or if it has been a significant amount time between exercise (>30 days) since they last were exercised.
- 4.5 Habituation is a gradual process. Cows that have been habituated can be utilized to facilitate the habituation of other cows. It is therefore beneficial to mix groups who are used to the routine of exercise (habituated) with those that are not.
- 4.6 The main barn (Figure 1) is divided into 8 sections: 4 rows, north and south wings. Typically, 2 sections, ¼ of the barn, are habituated at a time (ex. Row 1N & 2N).

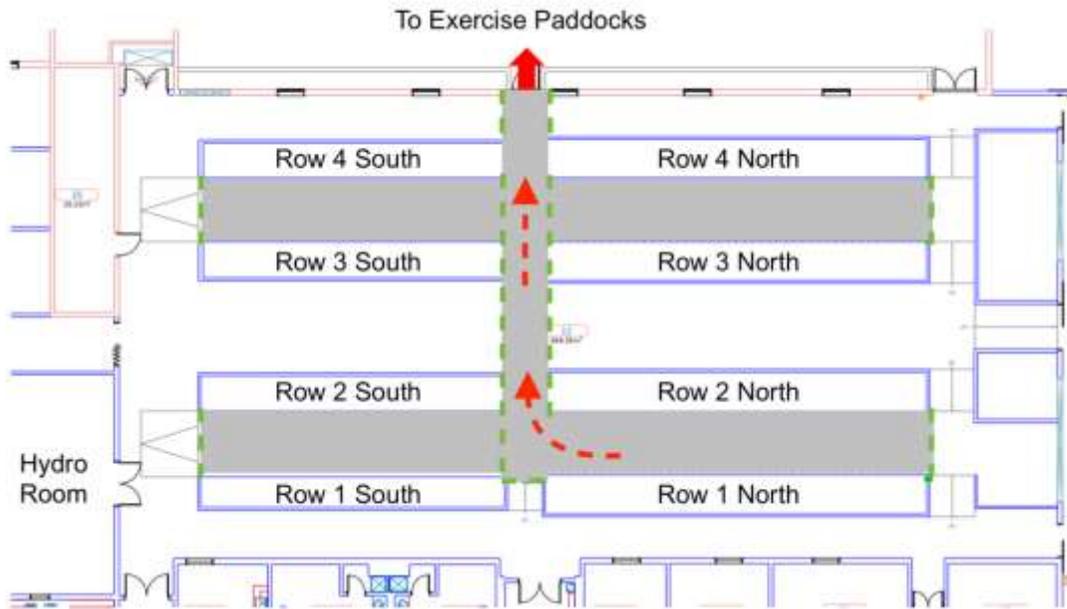


Figure 1: Barn Layout

- 4.7 Cows have tags on their collars identifying the section they are in as an aid (Figure 2).
 - Number corresponds to the row (1-4)
 - Color corresponds to the wing (**red** = north, **blue** = south)



Figure 2: Halter Tying and Section Tags

- 4.8 New groups can begin habituation when previous group is walking smoothly to and from the pasture and are calm while in the pasture (typically 2 consecutive days of habituation).

- 4.9 It is strongly recommended that handlers learn to recognize the animals (markings, faces, names, numbers) and where their stalls are in the barn to facilitate efficient reentry and minimize the risk of injuries (to cow and handler).
- 4.10 Fearful and excitable cows may require extra habituation steps (See Section 6: Managing Difficult Cows).
- 4.11 Halters are a handling tool and should eventually be phased-out (See Section 7: Halter Phase-Out).

5. PROCEDURE

- 5.1 Consult SOP [DC-361: Outdoor Exercise of Tie-Stall Dairy Cattle](#) for general exercise procedure
- 5.1.1 Additional personnel may be required.
- 5.1.2 Allow more time to ensure challenging animals are managed properly and avoid regression (See Section 6: Managing Difficult Cows).
- 5.1.3 Handlers are responsible for noting the behavior and injuries of the cows they handle on the clipboard (located near the barn door) during exercise habituation and halter phase-out.
- 5.1.4 Records of exercise habituation, injuries, and halter phase-out should be maintained daily.
- 5.1.5 If cows are running, outside personnel (1-2 people) should slow cows using their voices (ex. Whoa!) and waving arms. Flags can be waved to slow animals but should not be used to hit cattle. They may have to close the gate to prevent the animals re-entering the transfer alley.
- 5.1.6 Splitting the cows into smaller groups of 10-15 may be done by the person opening the paddock gate during re-entry to prevent overcrowding in the transfer alley and in front of the barn door.
- 5.2 Cattle are considered “habituated” when they move calmly and require minimal handling while:
- 5.2.1 Getting halters put on and removed (Figure 2):
- The cows may have a strong negative associate with halters as they are most commonly used as a restraint tool while administering stressful and/or painful treatments.
 - Cows have good, but different vision from humans. Their sight is panoramic and extremely good at detecting movement. Approach cows slowly to minimize stress.
- 5.2.2 Stepping confidently on and off the tie stall curb over the gutter grate:
- Their vision is poor in judging depth and distance so be patient and give apprehensive cows time to lower their heads and investigate what is in front of them (Figure 3).
 - Changes in floor level, colour, and texture, may cause them to refuse to move (See Section 6: Managing Difficult Cows).
 - Use rubber mats and wood shavings to homogenize the environment in front of them.

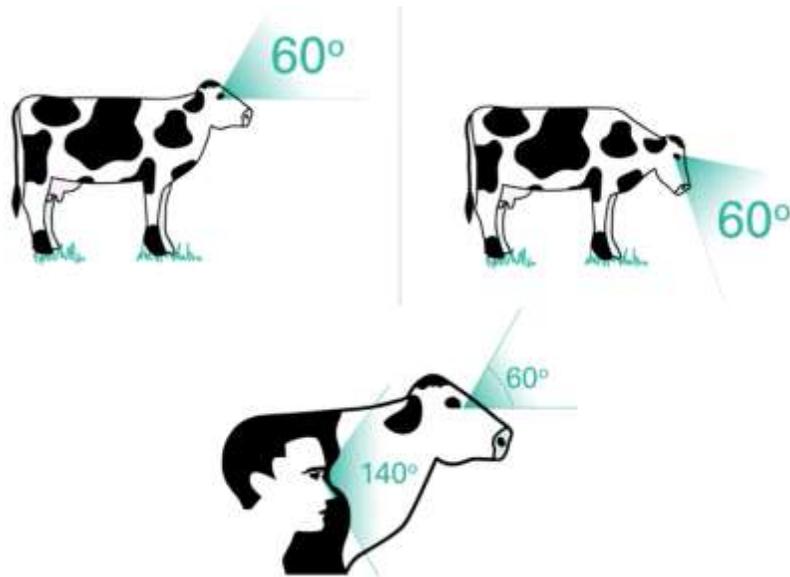


Figure 3: Cattle forward vision range

5.2.3 Walking along the barn alleyways:

- The alleyways are slippery, particularly to animals unaccustomed to walking on these surfaces.
- Allow the cow to lower their head to better see the ground in front of them (Figure 3).
- Animals without developed stabilizing musculature for walking are very prone to slipping and falling.
- It is the handler's responsibility to control the animals, especially while taking corners, slopes and leading in and out of stalls. This can be done by using their voice, body and halter pressure.

5.2.4 Exiting and entering the barn through a door.

5.2.5 Walking to and from the exercise paddocks along the dirt corridor (Figure 1).

5.2.6 Being unrestricted in a paddock.

5.2.7 Returning to their stall.

5.3 MANAGING CHALLENGING COWS

Difficult cows are cows that may be:

5.3.1 Resistant to leave the stall:

- These cows require the longest habituation times as they may have had negative experiences (injury, rough handling) associated with leaving the stall. or may have a generally fearful temperament.
- Getting them to repeatedly experience positive associations (exercise with herd mates, low-stress handling, positive reinforcement) while leaving stall gradually may lessen resistance in time.

5.3.2 Resistant to step off the stall and onto/over the gutter:

- Cattle have 60° of vertical vision (See Figure 3) and poor depth perception compared to humans.
- Homogenize the environment by placing a rubber mat over the gutter and kicking shavings down on the mat and into the alley.
- Allow the cow to lower her head and investigate the ground.

5.3.3 Jump over the gutter into stalls:

- These cows are at risk of long-term or fatal injury if they slip.

- Move these cows into stalls closer to the door and that require no turning (in Row 1 and 3 near the main alley; See Figure 1).
- Re-apply grit to the floor in front of her stall before re-entry in increase traction.
- Place a rubber mat large enough to cover the gutter and kick down shavings to homogenize environment.
- When the cow is no longer jumping into her stall, try without the mat.

5.3.4 Resistant to walk along the alley:

- These cows are at risk for slipping and reinforcing fear.
- Ensure adequate grit is on the alley and kick down shavings in front of the cow to improve traction and create a familiar tactile sensation.
- Allow the cow to lower her head to investigate the ground and while walking.
- If cow remains resistant, encourage her to move by asking another handler to encourage her from behind.
- If cow still is resistant, grab the top of her collar between her ears and pull her forward (this will allow her to move while seeing the ground in front of her).

5.3.5 Are resistant to walk to the paddock (blocking other cows and re-entering the barn):

- Accompany these cows all the way to the exercise paddocks from behind or if needed, leading them by halter.
- Note these cows and untether them last so they do not block the alley preventing other cows from exiting or re-enter the barn.

5.3.6 Are aggressive towards other cows:

- Cattle have a hierarchical herd structure which is re-established when new individuals are introduced or groups are mixed together.
- Dominant cows may be aggressive towards other cows in order to establish their place within the herd.
- If cows are seen fighting, note the individuals involved.
- If fighting continues for several days without changing the herd composition (no new cows introduced or removed) that animal may be exercised in the small exercise paddock (See Figure 4) with a subordinate cow or considered for culling.

5.3.7 Have deep udders or that are recovering from injuries or other conditions that require a 2-step process:

- Exercise the cow in the small exercise paddock (See Figure 4) with a companion cow. When she is calm transferring to and within the paddock she may be put out in the larger paddocks.



Figure 4: Exercise Paddock Map

5.4 HALTER PHASE-OUT

5.4.1 “Halter Phase-Out” is a three-stage process (Figure 5).

5.4.2 Moving to the next stage requires completion of the previous stage.

5.4.3 If a cow is moved to a new stall (ex. for ration regrouping) or there has been significant time between exercise (>7 days), cows will automatically revert to stage 1 but may progress through the stages more quickly:

- Stage 1: Halter on. Cow is calm (walking, not running/bolting) and controllable (able to be directed) with hand on halter for 3 sequential days.
- Stage 2: Halter on. Cow is calm and controllable with hand on collar for 3 sequential days.
- Stage 3: No halter. Cow is calm and controllable by collar.

5.4.4 Individual handlers are responsible for recording how the cow walked on a clipboard hung beside the barn door before receiving another cow.

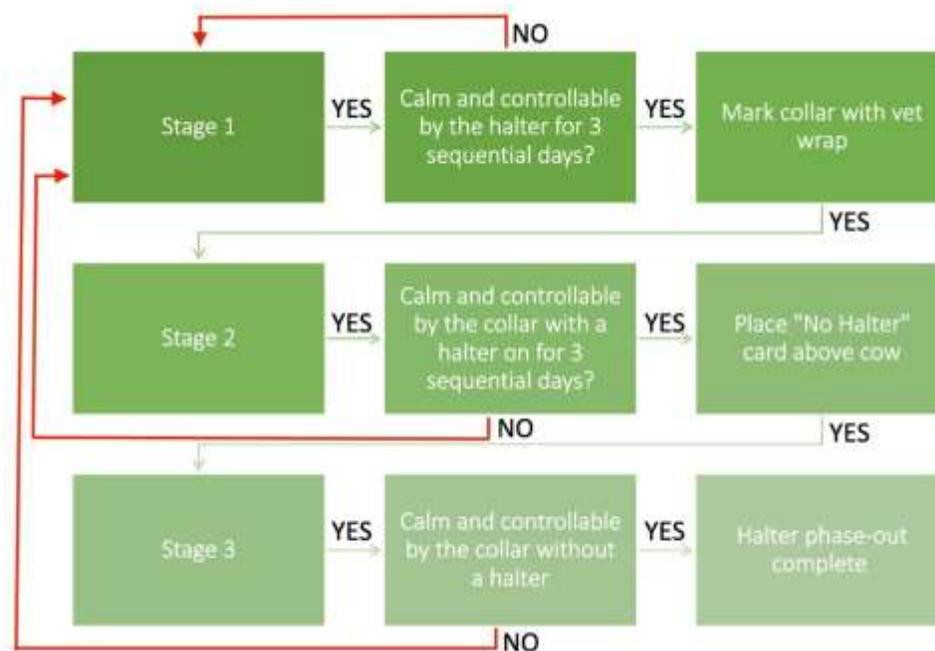


Figure 5: Halter Phase-Out Decision Map

6. REFERENCES

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Document Status and Revision History

DATE	STATUS
3-Aug-2023	Version 01: MAC FACC approved