Planning Dairy Animal Well-Being: Managing the Down Cow

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Management of the down cow is a crucial role on the farm. As employers and managers, we need to set our employees up for success when responding to a down cow. Employees need to have clear expectations of their job as well as written protocols and standard operating procedures.

A farm’s animal well-being plan must include how to care for these animals and, in the rare situations when the animal is compromised, individuals on the farm must know how to respond appropriately, with the animal’s best interest in mind. Plans should include how to handle the down animal and implement the treatment plan. Plans should be written down and accessible to all individuals. Primary caretakers should be trained in proper animal handling.

In this factsheet, we will be addressing:
- Assessing the down cow
- Encouraging standing
- Caring for the down cow

When encountering a down cow, it is everyone’s responsibility to immediately assess the cow and area, while taking appropriate action and not exceeding training abilities. Worker safety is a priority so remember the safe down-cow working zones. Re-route healthy cattle around the down cow. This will create a safer working environment for you, the down cow and the curious healthy cows that will be disturbed by the enfolding rescue process.

Assessing the Down Cow
First and foremost, a compromised animal should be assessed prior to assisting her to stand. Answer these questions during your assessment:

Question 1 - Are there obvious injuries or illnesses preventing her from standing? If the answer is ‘Yes’, then who and how are those who provide treatment to be contacted? For example, everyone should know the clinical symptoms of milk fever; she needs to be treated first before asking her to stand.

Question 2 - Is the floor slippery or wet? Fix either by spreading sand, lime, or bedding which provides traction. Make sure there is adequate front lunge room (four feet) before asking her to stand and be sure the area you ask her to lunge into is better than the area she is currently positioned in.

Question 3 - How is the cow lying?
- If she is lying normally and the area provides safety and traction, then proceed to ask her to stand.
- If her back legs are split out, then protect yourself while getting her legs back together. This will require getting help. Halter her and using a rope or set of hobbles, tuck one back leg under her while rolling her onto the same side as the tucked leg. Place a bale or prop against the shoulder you will be rolling her on and turn her head in the opposite direction so she won’t end up lying flat.
Is the cow lying flat out? Is she cast? 'Casting' happens on an uneven surface that is slightly higher at the point of the downside shoulder. The cow becomes over-centered and her core muscles are not strong enough to allow her to pull herself to her sternum. A cow in this position will often thrash and beat her head on the ground/floor and will bloat when left in this position for an extended time. Get help to halter her and to place a rope low on the down rear leg. Tuck the down rear leg forward, then while pulling the rope under her to keep the leg tucked, roll the cow onto her sternum. She will need to be propped if she immediately tires to lie flat again.

Question 4 - Is she caught or trapped by anything? If the answer is 'yes' and it's a simple fix, then remove the obstruction. Use your situational awareness for more complicated situations: determine who is needed to help assist and how to contact them. For example, you may first need permission, and then expertise to cut pipes apart.

**Encourage Standing**

Ask her to stand after using situational awareness; don't ask her to move into a worse situation. Acceptable guidelines for encouraging cattle to stand include speaking to her, approaching at an angle from her rear toward her shoulder (not from the front), yelling and clapping hands, pushing on cows' butt or ribs, using a pen or pencil to 'poke', and shaking a cow paddle or noisemaker. Electric prods may only be used after workers are trained in their responsible use.

Unacceptable methods include poking with sharp objects, hitting with any objects, hitting the face or head, jumping on cows, punching or kicking cows, and excessive electric prod use.

The halter should be removed before asking her to stand. It is helpful to know the cow's current and prior temperament before you remove her halter. Is she normally a temperamental, flighty cow? Does she appear calm or is she breathing fast, ears forward, and eyes excited? In either case, she may rush too fast and make her situation worse. It may be better to leave the halter on, with the rope loose, so you can turn her head, guiding her speed and direction if needed. Perhaps you should first set up a temporary pen around her.

Always remember that cows, in their pain and fear, may turn on you, so stand back and know your rapid exit path. Don't try to be a hero, she outweighs you.

If you are successful and the cow stands, consider moving her to a dedicated recovery area. Watch for shaking or wobbling to first determine if she is strong enough to walk; and then move her slowly and carefully. Avoid high-risk entrapment areas.

Do not ask her to walk if she is not weight bearing. Have plans in place for what is to be done if she is only able to stand on three legs. Such plans may include creating a temporary well-bedded pen around her, slinging her in this temporary pen, or moving her with the aid of the sling. Seek veterinary diagnosis of the non-weight bearing limb. For example, with injuries to the rear legs, cattle are highly unlikely to recover from a torn gastrocnemius muscle but with care and time they may recover from peroneal nerve damage.

**Activate Your Down Cow Team**

If she still cannot stand, she is not in a safe place in which to stand or asking her to stand will make everything worse, then you will need to first move her to a more secure location. Call the down cow team to take over.

Remember bovine anatomy as you attempt to move a down cow. Don't use the head, tail, or limbs as handles. Forces on limbs exponentially increase with friction, so do not drag cattle across the floor. Skin is the primary immune barrier; damaging its integrity adds further insult to her ability to recover. The cow may be in a state where they are unable to “guard” themselves, and you may “rescue” or “move” the body but lose the animal.

Many times proper technique, not muscle, will result in a successful, safe procedure. Always choose the lowest risk, least technical means of movement. Be deliberate in your preparations and then once she is secured, quickly and smoothly move her. There are many choices of equipment available at various price points.

Use straps or wide ropes in vertical, forward, rear, or side assists to maneuver down animals, including cattle, onto mats, rescue glides made from plywood, stone boats, gates, tarps, or other suitable surfaces.
With the aid of a halter, tie her head to rear leg (bundling her), so she can be rolled onto a suitable surface. Apply traction by pulling the surface underneath, gliding her to a more secure location. While bundled, roll her into a skid steer bucket; tip the bucket back and lift just high enough for ground clearance and drive her to a suitable area. Modified skid steer attachments (buckets) designed for moving down cows are available.

Large slings or belly bands are available to lift cattle and help them remain standing. Flotation tanks are another option. They use water to gently lift down cows to a standing position without the pressure/muscle damage that can occur with other devices.

Hip lifters or hip clamps may be used as long as the cow is able to stand on her front legs. They are to be used as an aid to help her raise and support her rear. Do not hang cattle by hip clamps for longer than a few minutes and their back feet must always touch the floor.

Determine your farm’s protocol, assemble the equipment needed and keep it maintained. Train and re-train your down cow team in how to use all equipment before and in-between situations. Role play, watch training videos, attend educational seminars, re-evaluate previous situations and practice on fresh deadstock, while maintaining respect for these fatalities.

**Managing the Down Cow**

Goals for down cattle care include preventing further injuries, maximizing their chance of recovery, ensuring welfare, and keeping both the cow and her human caretakers safe.

A bedded pack or pasture may be the best location in which to recover, but down cows must NOT be left outside. According to Wisconsin State Law ‘Crimes Against Animals’ – Statute 951.14, cattle are to be provided suitable outdoor shelter which provides protection from direct sunlight and inclement weather. Violators may be subject to one or a combination of: Class C forfeiture - $500, repeat Class A - $10,000 fine, Knowingly – Class A Misdemeanor, 1 year jail or $10,000. Feed and water must be within her reach at all times.

Down cows must be turned from side to side every four to six hours. Cattle are too heavy to lie for any extended period of time without getting up and down to restore normal blood flow in the muscles. Down cows should be kept sitting up and not lying on their side, which speeds up muscle damage. If necessary, keep them propped up.
When the cow is not standing in 12 hours after being moved to a suitable surface, the veterinarian must be consulted to determine a diagnosis of the underlying condition. Prognosis and treatment or retreatment plans will need to be decided upon, including the judicious use of pain medications.

If she is unable to stand within the first 24 hours or so, her chances of ever standing again are slim. Examine her daily for any ability to stand. Although cattle have gotten up after being down for a week or more, this is very uncommon. Euthanasia is recommended when the cow becomes depressed, quits eating and/or starts to lose body condition, or develops skin ulcers or erosions.

Your veterinarian is the trained professional who can best determine the long-term outcome of compromised cattle. Options include:
- home slaughter for personal use
- slaughter at a facility for those who are not in severe pain, freely able to stand and walk, capable of being transported and without disease or treatment (drug residue)
- euthanasia

The slaughter of down cows has been a major animal welfare concern in the last 20 years, and a federal rule enacted in 2003 prevents this practice. FDA-inspected slaughter facilities cannot accept a cow that cannot stand and walk into the plant for slaughter. Only attempt to market cattle when they are able to rise and walk under their own power, and you are sure they will survive the marketing and transport process and continue to rise and walk under their own power at the packing plant. This will not guarantee they will pass inspection, but it will allow them to be presented.

Euthanasia is indicated when disease or injury diminishes quality of life or creates pain and suffering that cannot be effectively relieved by medical means. Cattle should be euthanized when they are a public health threat, have not cleared all withdrawal times, are non-ambulatory or may be non-ambulatory upon arrival at final destination, severely emaciated have terminal conditions or advanced stages of cancer eye, blind or have lumpy jaw.

Euthanasia is a Greek term for “good death” which occurs from the immediate loss of consciousness followed by cardiac and respiratory arrest. The choice of method depends on concerns for human safety, animal welfare, ability to restrain the animal, skill of the person using the equipment, cost, rendering and carcass disposal, and potential need for brain tissue. Euthanasia techniques are NOT to be attempted by untrained or inexperienced persons. Training resources are available.

**In Summary:**
Work with your veterinarian, county UW-Extension agent, other farm consultants and the most patient cow-people on your farm to develop the down cow plan specific for your farm. Doing so demonstrates your commitment to quality animal care.