

Clean Water -- Healthy Livestock

To many of us, grazing season means getting the animals out of the barn so they can harvest the lush green grass. The daily chores of grazing season: fixing fence, rotating paddocks, and clipping overgrown pastures, are done with the intent of maximizing the quality and quantity of our pastures. However, in order for animals to maximize forage intake and utilize the nutrients in the pasture, they need access to plentiful and high quality water. Water is required for all biological processes; providing clean water to your animals will result in a healthier and more productive herd.

Evaluate the System:

Livestock watering systems should be closely inspected each spring prior to turning animals out on pasture. For water quality purposes the source water or spring(s) should be inspected for possible contaminants. The collection tanks or cistern should be cleaned of any excessive accumulation of debris. To determine if the system is working properly, check for adequate inflowing water from the collection system and inspect the collection tank overflow system if present.

Next, inspect all electrical connections for signs of failure or corrosion. Moving down the system, make note of any signs of leaking or broken piping, especially if the water transfer pipe is above ground. Sink holes and unusual depressions in the ground directly over or adjacent to known buried water lines could indicate possible leaks or breaks in lines. Breaks or leaks should be repaired at this time by cutting the pipe and installing a brass coupler and securing it with stainless steel hose clamps.

Hydrants should be inspected for signs of worn or damaged parts. Once the hydrant is turned on, check for adequate water flow as well as leaks. All hydrants should run for several minutes, or until water runs clear, to flush accumulated debris or sediment. Water troughs should be checked for signs of cracking or damage from livestock. Minor cracks can be repaired by applying a quality, exterior-rated, 100% silicone caulk. The final step in certifying your watering system is to manually check any float-type valves for proper function. Adjust the float valve so the maximum depth of water in the trough is 2-3" below the top of the trough. Once the watering system is thoroughly inspected for leaks and cleaned of any possible contaminants, the system is ready for livestock use.

Livestock Tank Cleaning and Sanitizing:

To maintain water quality throughout the grazing season, check the odor and appearance of the water in the troughs regularly. Sunlight, stagnant water in the troughs, and debris from animals

create a perfect environment for the growth of harmful contaminants. To avoid a buildup of harmful algae and bacteria, empty troughs when not in use, then:

1. Clear trough of any debris.
2. With the drain hole open, run water into the trough until it runs clear.
3. Close drain hole and run clear water until it reaches a depth of ½ inch.
4. Scrub the sides and corners of the trough with mild detergent and water until visibly clean.
5. Drain and, using a spray hose, rinse out trough with clean water, maintaining an open drain hole.
6. Close the drain hole and apply disinfectant. For most microbiological control purposes, household chlorine bleach (5.25% solution of sodium hypochlorite, NaClO) can be used as a disinfectant. When applied to clean surfaces, a dilution of 1 part bleach to 10 parts water will kill nearly all common livestock bacteria and viruses, except Foot and Mouth virus and spore formers. Scrub the trough with disinfectant – don't forget those corners!
7. Drain and rinse thoroughly until you can no longer smell chlorine.
8. Trough is ready to be used according to operational instructions.

If you suspect that the water on your farm is contaminated, immediately eliminate livestock access from the potentially contaminated water source and move the livestock to a known clean water source. If you believe a water quality problem is causing a health issue in your livestock, contact your veterinarian immediately.

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