Livestock Water Requirements for Hot Weather

Since it has gotten very hot over the past weeks, and it will only get hotter in the coming months, I thought this would be a good time to discuss livestock water needs in extreme weather. We all know that water consumption will go up during hot weather. Of course, how much will depend on what animal species we are discussing but you can count on at least double the winter water consumption for most livestock. So how much water is this?

A 1200 pound lactating cow will drink 15 to 25 gallons per day and in extreme cases as much as 35 gallons. Bred cows and bulls will drink in the range of 12 to 20 gallons. Growing calves and yearling cattle will need 5 to 12 gallons per day depending on their size. Sheep and goats will drink 2 or 3 gallons per day and growing lambs and kids one half to one and one half gallons. Hogs consume one half to 6 gallons and horses 5 to 15 gallons per day.

These amounts should be kept in mind when choosing a tank or watering system. At a minimum, it should be large enough to supply 40 to 50 percent of your expected daily needs at one time. Ideally, your tank or trough will supply enough water for 2 or 3 days in one filling. This will provide a cushion in the event of a disaster or breakdown of some sort. Also be sure your flow or supply to the tank is sufficient to fill the tank in a timely manner.

As a rule, unless the water supply is very close to the herd, all cattle will go to water at the same time. Most cattle will only drink for a short time and then move off to rest or graze. If the lower ranked animals in the pecking order show up to an empty tank, they will leave without consuming enough, or possibly any, water.

Finally, be sure that the tank stays clean. Clean water makes a huge difference in consumption and performance. A small amount of Clorox can safely be added to the tank to keep down algae growth if needed. Also, the tank or trough should be the only source of water for the animals. Cattle especially, will drink from the nearest water source. If that happens to be a mud hole, swamp, or pond, that is where they will drink.

The Great Shade Debate

I’m often asked the question, “Do cows have to have shade?” This usually solicits the typical extension answer, it depends. “Depends on what?” you ask. Well, lets back up a bit before we get to that.

Very little research has been done on brood cows and shade. What little information you will find, probably two or three trials, is probably from Australia about 50 years ago. Most of the more recent research has been done with feedyard cattle. You can find tons of papers that deal with feedyards and shade. The majority of them indicate that there is a performance advantage to offering shade, in most cases a very slight advantage. Research that has been done with dairy cows indicates a performance advantage in offering them shade as well. On the other hand, many of the papers show little or no advantage to shade citing that the cost of shade is more than provided by the production advantage.

If you ask the specialists on campus, only one I know of will give you a definite answer. He insists they do not. In fact, he points out the fact that the research herd located at the Plymouth facility has no shade. He further points out that if you offer shade, the cattle just bunch up together in the shade, limiting the cooling affect of the wind. I argue they do the same thing if they are in the sun!
So, getting back to the initial question. Do they have to have shade? Gun to my head, yes or no, probably not. Now I know you are thinking what is with the, “it depends” then?

If you have heat tolerant cattle, Brahman or Senepol influenced, you are not as concerned with shade. These cattle are adapted to hot climates and can handle the heat and humidity. Light colored and red cattle are a little more tolerant of the heat than black cattle as well. The other it depends is personal belief. Can you, or your wife, ride by the cows when it is 99 degrees and 90 percent humidity and see them standing in the blazing sun, with their mouths open, tongues hanging out, panting and drooling from the heat and be okay with it. I’m not trying to be a jerk here. I’m simply making a point. If it doesn’t bother you, then you don’t need to give them shade.

Really, the question here shouldn’t be do they have to have shade. We should be asking, “How does it look if they don’t have shade?”. With the growing animal rights/welfare movement, we can’t afford to give those groups any more ammunition. In the eyes of the school child or soccer mom or anyone not educated in animal agriculture, the sight of those cows in the previous paragraph is totally unacceptable and someone will complain.

Management Reminders

July
- Continue a four to six-week schedule of nitrogen applications on summer grasses. Do not delay application because of dry weather unless it has not rained at all since the previous application.
- Maintain harvesting frequency for quality hay.
- Hot, dry weather can result in nitrate and/or prussic acid poisoning of animals grazing stunted, highly fertilized summer annuals.
- Sample soils and apply lime on fields to be planted in autumn.

August
- Apply lime to pastures with pH below 5.8 that will be overseeded next spring.
- Start harvesting corn silage in the hard dent stage and when the dry matter is between 35% and 40%.
- Fertilize warm-season grasses.
- Keep cattle off of the pastures to be stockpiled.
- Decide which fescue pastures to stockpile and graze or clip to 4 inches by September 1.
- Fertilize fescue pastures to be stockpiled. Apply nitrogen (60 to 80 pounds/acre) between September 1 and September 15.

General
- Keep check on backrubs, oiler, or dust bags if used for fly control.
- Monitor mineral feeders weekly.
- Watch cattle for signs of foot rot or pinkeye

Upcoming Events

June 14 -- Animal Waste Sample Collection Day. Sampson County Livestock Arena, Clinton. 8:30 a.m. - 12:00 and 1:00 – 5:00.
June 20 -- FAMACHA Training. Johnston County Livestock Arena. 6-9 pm. Certification cost is $15. Call 919-989-5380 to register.
June 29 -- Hay Day. More information to follow. Contact the office with any questions.
July 6-8 -- Cattle Artificial Insemination Workshop. Sampson County Livestock Arena. Registration fee: adult $150, student $125. Space is limited to 20 people. To register call 910-592-7161
August 4 -- 4-H Agriculture A-Z. Sampson County Livestock Arena. For more information and to register contact Charmae Kendall, 910-592-7161.

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