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### **Livestock Water Requirements**

Nothing can be quite as refreshing as a cool drink of fresh water on a hot summer day. While this true for us, it is equally true for our livestock. Water quantity and quality are critical to the health and performance of livestock. Hot weather and drought conditions can impact both water quality and quantity. As the weather warms up and much of the state continues to deal with long-term drought conditions, keep these points in mind. Let's call this article part number one of two and focus on water quantity this week.

The importance of water is often overlooked, and performance can be affected by water intake. So how much water do livestock need? There is no one answer for how much water our livestock consume, because needs are influenced by environmental temperature/humidity, class of livestock, weight, and stage of production, to name a few. The warmer the weather and more active the animal, the more water needed. Feeds with higher water content (lush grass, silage, etc..) will contribute to overall animal water intake, so water isn't just in the tank or waterer. These many factors make water needs difficult to measure at times.

Some general NRC guidelines for livestock water needs are as follows:

**Beef Cattle:** Lactating cows need 2 gallons of water per 100 pounds of bodyweight per day. Bulls, dry cows and growing calves need 1 to 1 ½ gallons of water per 100 pounds per day. Milk is 87% water, so lactating animals require more and nursing animals get some water from milk.

**Dairy Cattle:** Calves and developing heifers require 1 to 1 ½ to as much as 10 gallons per head per day. Dry cows range from 9 to 13 gallons per day. Lower production cows can consume 18 to 22 gallons, but high production cows will consume 35 or 40 gallons of water per day.

**Horses:** Level of activity can have a major impact on horses and the more they exercise and work, the more water needed. Yearlings will consume about 5 gallons per day, ranging up to mature, active horses needing 20 or more gallons on a hot day.

**Small Ruminants:** Lambs and kids will consume anywhere from ¼ to 1 ½ gallons per day. Mature animals will be in the range of 1 to 2 gallons per day. Ewes or does raising twins or more require double the amount of water to support fetal growth and lactation.

**Swine:** Growing pigs have an incremental increase in needs, ranging from nursery pigs needing about ¼ gallon to finishing pigs requiring up to 3 gallons per day. Non-pregnant females and boars will need 3 to 6 gallons per day, with lactating sows consuming 5 to 8 gallons per day.

**Poultry:** Work at the University of Georgia provides the general rule of thumb that for each pound of feed consumed, poultry will need 1.55 to 1.75 pounds of water (8.34 #/gallon).

Water is considered the most-important nutrient, because of the vast number of biological functions that rely on water. Growth, development and reproduction may be inhibited by not providing enough water. The best way to ensure that livestock have access to the complete recommended amount of good-quality water, is to have reliable water sources. It's particularly important that young animals are able to reach the water to drink. Watering systems need to be able to provide adequate drinking space, volume and recharge capacity for the animal demand, especially in hot weather.

Regardless of water type, ensuring that fresh, clean water is freely available is the easiest way to encourage feed intake to promote animal growth and production. During periods of high-water consumption, like lactation or heat stress, it will be beneficial to provide additional water, maybe even water sources. Next week we'll take a look at some of quality related issues to consider with livestock water, in part number two.