

Growing up in North Dakota's rich agriculture industry, water has served as one of the greatest and fastest resources that can enhance profitability in a livestock entity. As simple as it sounds, water is the most crucial nutrient in livestock production. Water serves as a cornerstone to animal health, productivity and sustainability amongst the agriculture industry. As a natural resource, water is essential for maintaining body functions in all wildlife and livestock species, inducing reproduction, digestion, temperature regulation and nutrient transportation. Without access to clean and abundant water the profitability and more importantly welfare of a livestock enterprise will quickly decline.

Water represents roughly 50 - 80% of a mature animal's body weight. It plays a crucial role in breaking down feedstuffs in any stage of life. This means that there is a direct correlation between water intake and dry matter intake. You and I both know that in the livestock industry in any sector, pounds pay. A shortage of water immediately limits feed consumption, leading to a lower ADG (average daily gain) in beef cattle, reduced milk production in dairy herds, and in general lower performance.

The quality of water provided is just as vital as the quantity supplied. Poor quality water, which may be contaminated with toxins, excessive bacteria, algae or high mineral levels can result in several health complications, reproductive failures and in severe cases death. Livestock just like humans prefer clean, fresh water and tend to avoid stale or fouled water at all costs. Therefore, frequent cleaning of buckets, automatic waterers and monitoring and managing natural water sources is a necessary step in raising livestock. Several local, state and national

organizations put out articles, workshops and testing resources so that you can learn more about how to manage your livestock's water sources.

Beyond animal health, proper water management greatly impacts the environment and land efficiency. Providing water in accessible locations prevents overgrazing in one area and reduces soil compaction, which occurs when herd animals travel together. As you know we can't always control where natural watering holes like springs occur. However when cattle are penned for show purposes, calving and other management practices, placement of automatic waterers are crucial. Providing adequate distance between feed, minerals and water encourages cattle to move around their pen. In the same breath when cattle are sick or have a physical injury like swollen joints or a broken leg having water close by so they don't have to move is crucial.

In conclusion, water is the base and foundation for raising productive livestock and being a steward of the land. It is a critical nutrient that directly influences feed conversion, animal welfare and economic returns. Proper management of land, cattle and most importantly water secures our lifestyle for generations to come. Without securing and protecting this vital natural resource, basic levels of livestock performance can not be achieved.