

Pipelines Enhance Grazing Management and Animal Performance

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Water sources influence the distribution of grazing in a pasture. Livestock that travel long distances for water don't graze as efficiently as stock that walk short or moderate distances. Getting water to the stock can be challenging.

Springs, ponds, rivers, seeps and other natural water sources still are the most common watering spots for livestock. Often their distribution throughout the pasture does not lend itself to the best grazing distribution and excessive use of natural watering facilities may lead to water quality problems and some herd health issues.

One of the main advantages of piped water is that if the well or other water source is good quality, the stock will have the best water available which positively affects their health and growth. Many producers, especially in a cooler climate such as northern Minnesota, find that placing the pipe, which is typically high density polyethylene, on the ground surface underneath a fence, works well. Using a pipeline, watering facilities can be placed to enhance pasture management goals.



Provisions need to be made for draining the pipe before winter, such as putting a drain plug at the lowest point in the pipeline, or purging the pipe with compressed air.



Laying large rolls of pipe can be a daunting task. Here a spinning jenny is used to make the job easier.



Compression fittings speed up the process of joining or disassembling pipe sections and come in a number of configurations. A quick coupler set up for portable water tanks is shown in the photo. This acts much like a hydraulic hose coupler. Flap is raised and hose fitting inserted into the flap.

Air release valves may be installed in the high points of waterlines.

Pressure reducing valves are needed when the pipeline elevation drops considerably from the source.



Recycled mining tire and float combination placed under a paddock subdivision fence. One tank serves two paddocks.

Tank and shut off float combinations range from very small portable tanks to large recycled tires from the mining industry. Floats differ widely in their output, which can affect system performance. Water delivery depends on having a float that can deliver the right amount of water.



In some situations it is desirable to bury pipeline. This is set up for shallow burial of pipeline.

With some minimal maintenance, pipelines can furnish good quality water for many years and assist in obtaining better use of forage from pastures. Equipment exists that helps to install the system and deliver the water effectively once installed.