## **Pasture Management: Things that Matter**

A good many farmers are using soil conservation practices like no-till farming, cover crops and extended crop rotations to improve soil health on cropland. Our livestock producers can adopt these same practices that are traditionally meant for forage improvement to feed microorganisms and add organic matter to the soil. Practices like rotational grazing; over seeding and forage harvest management help improve both forages and soil health. Pasture health depends on the function of the soil and plant communities, and the way producers manage pastures will affect the soil's ability to help produce desired pasture plants. Properly managed pasture with rotational grazing and adequate rest periods will lessen soil compaction compared to continuously grazed pasture. Reduced compaction will help increase water infiltration rates and the respiration of plant roots and soil organisms. Managing pastures with soil health in mind will improve infiltration, and increasing organic matter will improve the soil's ability to store and hold water.

Good pasture management leads to healthy soils, and the following are ways improvements in soil health occur from our efforts: increased soil organic matter increases water available for plant growth, improved water infiltration, more nutrients available for plant growth, better soil conditions for germination, healthy roots, increased plant production and reproduction and reduced soil erosion from water runoff. We all tend to leave our cattle on pastures too long for various reasons or excuses, but really there is no excuse for overgrazing unless the pasture is a sacrifice pasture, where you keep your cattle to hay, calve or to keep from ruining all of your other pastures. From my experience overgrazing only lead to significant loss of forage production and overall reduction in pasture conditions. It's a fact that overgrazing hurts the soil and allows undesirable grasses and especially weeds to gain a foothold. I too have been guilty of allowing livestock to overgraze pastures because of drought or short on hay and sometimes it just can't be helped. However most of the time we can prevent overgrazing if we manage our pastures and grazing correctly and pay attention. Smart ranchers manage their pastures or livestock so that they can avoid overgrazing pastures to the point of harming the soil and forage base. They do this by not overstocking to begin with and leaving some grass and putting up some extra hay in case of an emergency like a drought where no grass and hay is available. When they get to the point of no grass and no hay they sell the cattle long before the pasture is damaged to the point of taking years to recover. The pasture is your feed mill and when it breaks down it takes time to fix it so keep it welloiled and maintained. Nothing will set your pastures back more than overgrazing.

There are some things you can do to avoid overgrazing like "take half, leave half," if your rotating pastures and you should be if possible. Grazing more than 50 percent stops all above and below ground plant growth which inhibits recovery. If you are not rotating it would be a great investment to at least put some cross fences and do a semi-intensive rotation in order to utilize the take half, leave half theory and rest your pastures. But the most important way to avoid overgrazing is by balancing the stocking rate with forage availability. Determining initial stocking rate requires collecting information on overall pasture production and balancing the animal numbers with available forage in order to allow proper plant recovery time by resting pastures. Your bottom line is affected in a big way as to how you manage your pastures and soil health. Take Charge- You're the boss!