

Pasture Improvement Tools

Pasture Management & Water Quality



Water quality can be directly benefited by well-managed pastures.

Drinkable, swimmable and fishable water seem attributes we take for granted in the natural world. However, human activities like agriculture may have changed that assumption nowadays.

Pastures should be managed in a way that always keeps soil organic matter in mind.

A basic rule of thumb is that keeping farm soils well-covered with growing plants at all times is key for conserving water quality. Covered soils have a healthier structure which allows plants to better absorb nutrients and water. Excess water is then slowly released into waterways.

Water quality problems can happen when livestock are allowed excessive access to water streams because they usually defecate after drinking.

In addition, manure runoff from pastures or crops can reach streams in the course of heavy rainfall.

Animals also enjoy gathering in shady areas which, if unattended, can potentially degrade nearby stream banks with their hoofs over time. Then, in order to maintain water quality, riparian buffers must be fenced out.

Management intensive grazing (MIG) is a powerful pasture management tool to promote water quality because animals are rotated through fenced-in paddocks and water is brought to them in water tubs. MIG can also promote riparian management by deferring grazing, restricting their access to water ways and avoiding stream bank degradation.

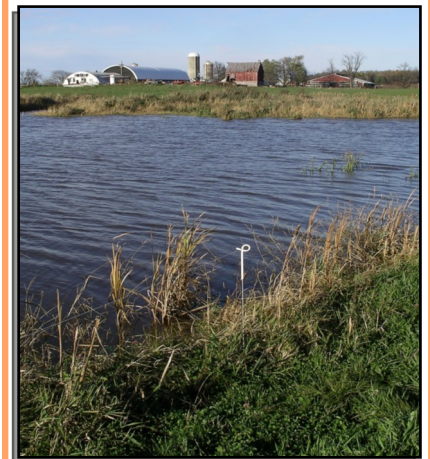
Also, because pastures under MIG must always be covered with at least two inches of ungrazed forage, soil erosion is minimal.

The key to water quality: soil organic matter (SOM)

- Organic matter can hold 90% of its weight in water
- Soil structure holding capacity
- 2% organic matter can hold 32,000 gallons of water
- 5% organic matter can hold 80,000 gallons of water

How do I increase and maintain SOM?

- Reduce or eliminate tillage
- Reduce erosion
- Rotationally graze and leave plenty of residual
- Allow pastures enough recovery time before grazing.



MORE INFORMATION

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