United States Department of Agriculture

Forage: Good for the Environment

Forages help hold soil in place

- Forages such as grass and alfalfa grow close together, or densely. This creates a 'canopy' that prevents raindrops from hitting and dislodging soil that could then wash away, or erode. Row crops such as corn or soybeans leave the soil more exposed.
- The dense network of forage roots also helps prevent soil erosion, especially important on steep hillsides.
- Many grass and legume forages are perennial; they provide year-round vegetative cover and don't expose soil to erosion as much as an annual crop that must to be planted each year, often with soil tilled.

Forages improve soil health

- Deep roots increase the amount of organic matter in the soil and help the soil soak up rain, making it better able to retain and supply water and nutrients to crops.
- Legume forages add nitrogen to the soil; tiny (2mm) root nodules are filled with specialized bacteria that capture, or fix, nitrogen from the air and give it to the plant. After the legume dies, this nitrogen is used by subsequent crops such as corn, thereby reducing the need for purchased fertilizers.

Forages help protect well water, lakes, and streams

- Because they cover the ground year-round, forage crops help prevent rainwater from washing soil (and the phosphorus attached to that soil) into our lakes and streams where it can cause excessive algae growth.
- Forages can absorb and utilize nitrogen that might otherwise seep down, or leach, into our well water.

May copy for educational purposes.

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