SOUTH DAKOTA - Ultra High Stocking Density or "Mob-Grazing"

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In 2012, researchers from South Dakota State University established a mob grazing study at eight locations across South Dakota. These sites ranged from mixed grass prairie in the far west (New Underwood and Quinn) and central (Selby, Eureka, Reliance, and Chamberlain) to tallgrass prairie in the east (Hayti and Gary) (Figure 1, pg. 22). Producers were especially interested in understanding how mob grazing improves soil health and forage productivity. Baseline soil samples were collected to assess carbon and nitrogen in 0-4" and 4-8" depths in the spring and fall. During the grazing season, forage production, vegetation cover, litter cover, average plant height, and dung density were measured before and after grazing periods. There was a general trend of increased newly trampled litter from west to east with the exception of the site at Gary (Figure 1). Also, mob grazing averaged two times more newly trampled litter than traditional rotational grazing (Figure 1). These results will give insight into the role trampled litter plays in nutrient cycling, soil health, and site productivity using a highly intensive grazing technique.

Figure 1. Newly trampled litter as a result of mob or traditional rotational grazing at eight locations in South Dakota in 2012.