Stream bank erosion along different land-use practices with an emphasis on different grazing practices. (S11-zaimes230308-Poster)

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Abstract:

Stream bank erosion can be the largest source of stream sediment and can be influenced by adjacent land-use practices. The influence of continuous, rotational and intensive rotational beef cattle grazing on bank erosion is compared to riparian forests, grass filters, and row-crops reaches in central, northeast and southeast Iowa. In rotational grazing, a paddock is grazed 7-15 d and rested for 10-15 d while in intensive rotational it is grazed 1-4 d and rested 20-30 d. The longer rest period should lead to more stable banks. In continuous grazing the pasture is not divided into paddocks. Erosion pins are measured every season, except winter, to estimate bank erosion. Stream bank erosion should increase in the following order: riparian forests, grass filters, intensive rotational, rotational, continuous, and row-crops. Preliminary results show that riparian forests and grass filters have the least bank erosion and row-crops have the most. Grazing practices do not follow the expected trend. In some regions intensive rotational and rotational grazing have more stream bank erosion than continuous probably due to differences in precipitation and number of grazing animals.

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