

## Fall Management Tips for Smooth Brome

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Fall fertility management of cool season grasses like brome is as important as late winter management for spring growth. If a soil test shows a low phosphorus level, then an application of the phosphorus with a little nitrogen will be recommended. The application is necessary to give to phosphorus time to get into the soil during the winter and be available to the plants in time for spring growth.

Since it is a cool season grass, smooth brome has the ability to provide us with fall production. As a “rule of thumb”, brome will provide about 70 to 75 percent of its annual production in the spring and 25 to 30 percent in the fall with proper management. If you do want to maximize this fall production, Nitrogen is needed. While this fall production is not enough to make haying an economical option, it does provide good grazing during the late fall and early winter. If there is adequate moisture and cooling temperatures in September, the fall grazing can be from late September till mid December.

**Stocking rates** are just as important for fall grazing as in the spring. Since there will only be about 1000 pounds of forage produced per acre, we need to calculate the stocking rate so that no more than 500 pounds per acre will be grazed. An example would be that a 700 pound steer should be allowed at least 2 acres for 75 days of fall grazing. 700 pounds time 2% consumption times 75 days equals 1050 pounds of forage consumed. We should probably plan to use no more than on half of this amount this year. It should be noted that this is different than calculating native grass consumption, which should not exceed 30%.

**Fertilization with nitrogen** is needed to maximize fall production. The yield potential will determine the amount of nitrogen that is needed. 25 to 30 pounds of actual nitrogen per acre is the amount that is normally applied in September. An example of calculating “actual” nitrogen is: One source of nitrogen is urea, which is 46% nitrogen. This means that it takes about 65 pounds of product to provide 30 pounds of nitrogen.

**Phosphorus** is an important nutrient for root development and plant health of brome. The only way to determine the phosphorus level of the field and to determine the amount to put on is with a soil test. The soil sample should represent the top 4 inch layer of the field. Instructions on obtaining a soil sample are available at my office and you can borrow a soil testing probe as well. Phosphorus is removed from the field when we remove the brome at about 12 pounds per ton removed. This means that to maintain an adequate level, we should be adding about 25 pounds each year. A soil test result of 15 to 20 ppm would be considered adequate. If nitrogen is being applied for fall production, the phosphorus should be put on at this time.

**Potassium** is important but is usually not a concern as the soils in Butler county are usually high in the nutrient.

**The ph** will also be analyzed in the soil test. While brome is not extremely sensitive to ph level, a top dress of 2000 ecc should be considered if the level is below 5.6.

Feel free to contact me for additional information on Brome management.