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## ‘Coastal’ or ‘Tifton 44’ Bermudagrass for the Southeastern Piedmont

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**Why Does it  
matter?**

Hybrid bermudagrass is the major perennial warm-season forage grown in improved pastures in the Southeast. ‘Coastal’ bermudagrass has been the most frequent choice in the Piedmont but ‘Tifton 44’ has provided an option with improved cold tolerance for our region. Producers need guidelines for target grazing heights that provide the appropriate amount of available forage to optimize either animal performance or gain per acre.

**What was  
done?**

A four-year grazing study was conducted by Agricultural Research Service Scientists from Watkinsville, GA, and Raleigh, NC to compare the productivity of ‘Coastal’ and ‘Tifton 44’ bermudagrass under grazing conditions at three heights (2, 4, and 5 inches). Pastures were stocked from approximately May 1 to September 1. To explain the impact of these grazing heights on per animal and per acre performance we also measured the weight of forage present, the chemical composition of the forage offered to the grazing animal, and the way in which the forages were chewed by the grazing animal.

**What was  
found?**

Overall animal performance was marginally better on ‘Tifton 44’ (1.3 lbs/animal/day) than with ‘Coastal’ (1.1) but pasture productivity provided similar pounds of gain per acre over the season and similar grazing days per acre. As height increased from about 2 to 5 inches gain per animal increased from 0.9 to 1.3 lbs of gain per day but that required a reduced stocking rate (decreased from 6.5 to 4.5 animals per acre). Consequently, gain per acre declined from 1200 to 880 lb/acre/season. Leaves of the two cultivars had similar digestibility but stems of ‘Tifton 44’ were more digestible and likely explained the slightly better animal performance with this cultivar.



However, these effects were relatively small and hard to detect. For example, samples of the chewed forage collected from grazing steers were of similar nutritional value and likely were predominately from the forage leaves. Grazing times were also similar among cultivars and across canopy heights and averaged 11.8 h.

**What is the  
impact?**

Producers have a viable option in ‘Tifton 44’ but their choice is likely to be based largely on cold tolerance rather than per animal or per acre production. The marginally improved per animal performance of ‘Tifton 44’ would not justify the approximately \$150 per acre expense of replacing ‘Coastal’ pastures. Producers need to be good forage managers to realize the potential benefits of either hybrid bermudagrass. Nitrogen fertilization must be adequate (200 to 300 lbs/acre; split applications; see sheet on nitrogen fertilization and hybrid bermudagrass) and utilization should be managed to maintain between 2 and 3 inches of bermudagrass regardless of cultivar. Animals must not overgraze hybrid bermudagrass during periods of reduced growth. Supplemental feed or additional pasture must be provided to reduce animal demand for feed during periods of reduced growth so that the hybrid bermudagrass will respond with increased growth when drought or cool temperatures are no longer limiting. If producers do not have the management skills to effectively utilize hybrid bermudagrass then naturalized species with reduced management inputs may be a better choice.

**Research  
Team and  
Contact  
information**

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