J. Walter, Y. Newman, P. Deal, S. Gamble, C. Bateman, D. Mudge, J. Shuffit, E. Jennings, M. Warren. Brevard County Extension, 3615 Lake Dr. Cocoa, Florida 32926

Situation: Smutgrass (Sporobolus indicus), a significant weed in bahiagrass (Paspalum notatum) pastures reduces forage and per acre beef yields. Effective chemical control treatments exist. These treatments can require significant capital, labor, and equipment in addition to grazing restrictions rendering their incorporation impractical into pasture management rotation. Chemical treatments require the use of herbicides and equipment that emit greenhouse gases or may negatively affect water quality. Procedure: A cooperative, multi-agency field study was implemented on 56 acres of a commercial ranch in Central Florida. The objective evaluates combinations of grazing management (mob grazing) and cultural practices for effective control measures. Four replicates of three treatments (burn and graze, mow and graze, and graze only) in a randomized block were imposed in November 2009. Eighteen sampling points per treatment plot (4.5 acres) were established via GIS mapping. The number of plants and basal circumference were recorded at the start of the project and one year later. Head fires were utilized on burn treatments. Rotary mower (8"stubble height) were utilized on mowed blocks. Cattle grazed the entire 56 acres monthly during 3-4 days at 5.5 au/acre, totally 8 grazing events. Results: Plants size and numbers were significantly reduced on burn treatments. Previously covered smutgrass areas began infilling with desirable grasses one year post treatment. Conclusion: Control burning and mob grazing of smutgrass infested bahiagrass/limpograss pasture in Florida provides effective control. Additional evaluation is needed to capture long term effects control of smutgrass and increase of desirable species.

View of field before treatment - 2009

Burn Treatment 6 Months Post Treatment - June 2010