

## **Vegetation Responses to Three Deer Densities and Supplemental Feeding**

*Eric D. Grahmann, Nathan D. Kelley, Reagan T. Gage, Ryan L. Darr, Timothy E. Fulbright, Charles A. DeYoung, David G. Hewitt, and Don A. Draeger*

Supplemental feeding has been viewed as a way of allowing white-tailed deer populations to exceed carrying capacity while reducing the negative effects on the vegetation community. Alternately, contemporary thought has suggested that supplemental feeding may lead to excessive consumption of highly palatable plant species. The purpose of this experiment is to determine if supplemental feeding results in reduced canopy cover of highly palatable forbs and shrubs. This hypothesis will be tested by establishing 6, 200-acre enclosures on each of 2 South Texas ranches. Paired enclosures contain low, medium, and high white-tailed deer densities, based on typical population estimates for the western Rio Grande Plains. A pelleted supplement is provided in half of the enclosures on each ranch. Forb species richness and canopy cover of forbs and shrubs are being estimated during each summer of the study.

We determined which forbs are the most palatable to deer using bite counts with our tame does. Compared to the first vegetation sampling period in 2004, canopy cover of palatable forbs declined about 4% in enclosures with no supplemental feed. Canopy cover of palatable forbs has remained relatively constant over time in enclosures with supplemental feed. Canopy cover of forbs and shrubs palatable to deer is similar among deer densities. Based on these preliminary results, it appears supplemental feeding reduced foraging pressure on palatable forbs.

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