

Effects of Supplemental Feed on Deer Activity and Intake Rates

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Supplemental feed adds to the nutritional quality of deer diets and provides an additional forage choice. Additionally, supplemental feed may alter foraging behavior and overall activity by increasing the amount and rate of energy consumption. Our objective is to determine the effects supplemental feed has on forage intake rates and activity patterns of white-tailed deer.

We placed tame does in 200-acre enclosures with and without dry, pelleted feed provided *ad libitum*. The number and time of bites taken by each deer of each plant species will be recorded during all seasons. Plant samples will be collected and analyzed for nutritional content, allowing us to estimate forage and nutrient intake rates for each deer. Radio telemetry will be used concurrently to study activity patterns. Each deer is fitted with a transmitter that indicates activity if the collar moves. A receiver placed in the enclosures will record time and duration of activity for each deer. We will estimate the percentage of daily activity for each doe by dividing the recorded active time by total monitoring time.

Knowledge of the effects of supplemental feed on forage intake rate and activity patterns will provide insight into how supplemental feeding may affect productivity and nutrition of white-tailed deer. Additionally, this study will help us determine whether supplemental feeding ultimately alters deer habitat by altering deer diet.

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