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White-tailed deer managers should focus on three concepts

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Important concepts in white-tailed deer management are often overlooked by many managers because they focus on superficial aspects of deer management. Much hoopla exists pertaining to products for sale and deer management fads, which cause many managers to lose sight of important concepts. Most goals for free-ranging white-tailed deer can be successfully addressed when managers focus on three important concepts: 1) excellent deer habitat, 2) adequate doe harvest and 3) conservative buck harvest.

Excellent white-tailed deer habitat has both herbaceous areas (dominated by forbs and grasses) and wooded areas (dominated by trees, shrubs and vines), many plant species, various successional stages of plant communities, and predominantly native plants. White-tailed deer exist in a wide range of locales. The optimum amounts of herbaceous and woody areas vary depending upon soils and climate. In many situations, 25 to75 percent well-distributed woody cover can be optimum. However, I have seen excellent deer habitat on one Oklahoma ranch with as little as 12 percent well-distributed woody cover. Openings completely devoid of woody vegetation generally should be less than 200 yards wide in at least one direction. Productive soils support more deer and larger deer than infertile soils. Plant diversity is important to provide optimum nutrition throughout all seasons and rainfall variations. Management practices such as fire and rest from disturbances should be used to maintain plant diversity and diverse plant community successional stages. Practices such as appropriate livestock grazing and selective herbicide application also can be beneficial for managing deer habitat.

Adequate doe harvest is important to maintain relatively close adult sex ratio, deer abundance within carrying capacity (optimum number that a habitat supports), optimum deer nutrition and good fawn crops. Males have higher mortality rates than females, so doe harvest is necessary to keep adult sex ratio relatively close. A habitat can provide optimum nutrition for only a certain number of deer. When deer numbers increase beyond carrying capacity without adequate doe harvest, deer nutrition declines, which decreases deer health, deer weight, antler size and fawn survival. Although seemingly counterintuitive, more fawns can

be recruited into a healthy population with fewer does than a population with overabundant does that exceeds carrying capacity. When a habitat has too many does, inadequate space for additional bucks exists.

Conservative buck harvest is important for goals emphasizing abundant bucks or large antlers. Age of bucks harvested is less important than total number of bucks harvested. When bucks with large antlers is an important goal, generally less than 15 percent of the buck standing crop should be harvested annually. Depending upon deer density, adult sex ratio and fawn crop, buck harvest rates for this goal are commonly only one buck per 400 to 1,000 acres. Buck harvest rates outside this range may be appropiate in atypical situations such as very productive habitats, distorted sex ratios, etc. Free-ranging bucks tend to grow larger each year they live, and it takes many years for a buck to grow his largest set of antlers.

Unfortunately, many managers of free-ranging deer populations focus on and are distracted by superficial management practices such as food plots, mineral supplementation, buck culling, breeder bucks, stocking better genetics, harvesting certain age-classes of bucks, etc. Many of these practices are appropriate in penned-deer situations, but inefficiencies exist and limited progress occurs when managers of free-ranging deer focus on superficial issues rather than developing and maintaining excellent deer habitat, adequate doe harvest and conservative buck harvest. ■