

## What is a White-tailed Deer?

o you know what a deer is? I have no doubt that if you are capable of reading this article you can identify a deer when you see one. But, I'm not referring to deer identification; rather, do you know what a deer is with regard to its relationship with its environment and how it's equipped to utilize it?

## Some who manage deer say that "deer are just like cows."

This mindset towards deer management often leads to practices that are commonly associated with managing cattle, such as the placement of feed in troughs or some other type of feeder, the use of salt and/or mineral supplements, and confinement. Cows - of course - are domesticated and herding animals, and their associated behavior fits well with the use of feed, supplements, and confinement. Also, sound husbandry and veterinary practices are an integral part of cattle management. Such practices are necessary to prevent or treat problems associated with the management of herding and domesticated animals. Deer - of course - are wild animals that are designed to disperse over space and time to minimize negative social interaction, reduce the likelihood of disease and parasite transmission, and maintain genetic viability...basically, just the opposite of cows. To manage deer like cows poses a genuine risk to deer, other wildlife, and wildlife habitat.

To successfully manage deer - using practices consistent with the principles of stewardship - managers must understand the morphophysiological adaptations of deer. That is, managers must understand how deer are behaviorally, morphologically, and physiologically adapted to utilize habitat, and they should consider these adaptations when developing habitat management plans. I have observed many properties that were poorly managed or downright mismanaged because managers lacked the ecological knowledge necessary for successful deer management. Deer are classified as concentrate selector herbivores – a classification based on the anatomy of the digestive tract (buccal cavity, rumen size and shape, etc.), feeding behavior, and forage selection. They are highly selective feeders that select the most palatable, nutritious, and digestible plants and parts of plants. Forbs, legumes, vines, and woody vegetation are the plant life forms that receive the highest use by deer. However, not all plants in these life forms are highly preferred by deer, and preference for particular plants will vary seasonally. This is another piece of ecological knowledge a manager must possess for successful deer management.

Based on the above classification, managers must consider food quality and quantity when managing habitat for deer. Although this may seem obvious, food quality and quantity are not important



to every wildlife species. For example, when a bobcat - an opportunistic carnivore - is in need of food, it does not search for the highest quality food item; instead, it eats whatever is available regardless of quality. Regarding quality, deer food must be highly palatable, contain high levels of nutrients, and contain volatile fatty acids for energy. In regards to quantity, each deer requires five to seven pounds of food per day to meet its nutritional demands (you may observe slight variations in this amount depending on the literature you read). Feeding and searching for food are the primary activities of deer; therefore, efficiency of feeding will determine the energetic cost and the overall health of a population. So, habitat managers should strive to provide an abundance of quality, native food for deer where quality deer management is a goal.

Successful management begins with a thorough knowledge of deer habitat and how deer are equipped to utilize habitat. If you need help with your deer management plan, don't hesitate to contact a wildlife biologist to assist you. Getting assistance from a competent wildlife biologist could be the difference between a successful or failed plan.