The Most Vital Element to Deer Management

The techniques employed to enhance quality whitetail deer and the habitats they depend upon are as diverse as the regions these ungulates occupy. Wildlife research scientists have provided much information on managing this species over the last 25 years, but even this knowledge continues to be investigated. A conclusion based on the scientific method, adhered to by all researchers, is not the final answer, but a starting point for more research; and spearheaded by a vanguard of landowners interested in the whitetail deer, a variety of new questions are continually arising.

The one question deer enthusiasts frequently ask is "Just what is the most important aspect to managing for trophy deer"? The answer depends on one's definition of a trophy, which is impacted by geographical region defined further by climate, soil type, vegetative component, and in most if not all cases, domestic stock management.

The basic deer management formula, often referred to as a "three-legged stool", is age, nutrition, and genetics. I refer to it as the holistic approach to deer management, because with one of them missing, the other two components are negatively impacted.

Unquestionably, the most effective strategy employed by landowners or more importantly deer hunters who make the ultimate decision each time they pull the trigger is discretionary buck harvest. A selective buck harvest, particularly one based on age criteria, allows managers to manipulate the age class structure of the male segment of the deer herd which is vital to the development of older, larger racked bucks. In most cases, deer have an adequate forage supply because they will consume just about everything that grows in the wild. By satisfying their basic nutritional requirements while they are being allowed to reach the older age classes, an increase in antler size is realized. Just how big those antlers become, however, remains limited because even though deer reach their optimal antler growing years, overall antler size remains dependent on the nutritional value of available forage in concert with their inherent genetic potential. In reality, it's irrelevant how old a deer gets if it exists on subpar or abused habitat because it will never achieve the optimal size most managers set as a standard today.

For example, bucks inhabiting the brush country of South Texas, referred to as the big buck mecca of Texas, are renowned for exhibiting exceptionally large antlers. These bucks are not a byproduct of high fences or any other technical ingredient. Historically, even prior to the implementation of modern day non-traditional whitetail management strategies, exceptionally large antlers developed simply as a result of the right combination of genetics complemented by a rich plant diversity limited or enhanced by climatic conditions. Antler size was enhanced further by a strict trespass law that reduced the number of bucks harvested, affording deer the opportunity to reach their optimal antler-producing years. Thus with all three legs of the stool addressed, some exceptional antlered males developed on a natural basis.

Ninety miles north of the fabled brush country is the Texas deer herd factory, the Edwards Plateau, where some bucks in the older age classes exist, but antler size does not compare with that of their southern cohorts. Why? Even though they are of the same subspecies, *Odocoileus virginianus texanus*, hill country vegetation is not as diverse or as nutritionally strong as the vegetative component consumed by deer in the brush country, thus "one leg of the stool" is missing, and the stool leans. Historically, the region was void of predators such as the coyote, and as a result, deer populations reached levels detrimental to the habitat upon which they depended.

The paramount ingredient to the development of a healthy deer herd displaying above average antler size remains to be the habitat. Whenever man impacts the habitat by burning, disking, sculpting, grazing, etc., both wild and domestic inhabitants are impacted. If this disturbance is performed correctly, a positive impact is realized.

The impetus behind Texas deer management is not always the production of trophy Boone and Crockett bucks, but the realization of the healthiest animal that a particular habitat can produce. For example, if your area of interest is the Piney Woods of Texas where soils are poor, rain, or any other ingredient will not sustain an average antler size comparable to deer located in the vegetatively diverse region of South Texas. In other words, you can manage for trophy deer where the vegetation is sustained at an early successional stage generally more palatable to deer, but the antler statistics of deer on poor quality soils cannot and should not be expected to compare to those developed on highly fertile soils.

The point I am making is that the paramount goal of management should be based on the realistic probability that expected results can be achieved, and this is often determined by location.

It would be unrealistic if I suddenly acquired a landholding in southern Florida and decided to manage Keys deer "the smallest of the 30 different subspecies of whitetails" with the goal of producing racks that naturally occur in the thorn scrub of South Texas.

If the production of trophy caliber deer is one's goal, it's critical that expectations remain based on that which can develop in the particular geographical region.

Deer quality always varies on a regional basis. This fact alone makes them unique. Sad would be the day when the cloning of deer is affordable and all one needs to do is decide when he or she would like to shoot one. That's right, one deer, because if antlers were all the same, why would anyone want more than one of them?

The uniqueness of antlers "no two are ever the same" is what makes whitetails so attractive to sportsmen. And face it, without the contingent of deer hunters across the U.S., many of us would be out of work. It's the sportsmen (our customers) who must be happy when visiting our forest and brush lands, and I can assure you most have yet to see a mature buck, alone harvest one regardless its size.

As a private lands wildlife biologist in Texas, I have had the opportunity to manage for trophy-racked bucks on both open range and high fenced properties that were only dreams of mine as a youngster growing up. Privileged to take numerous Boone and Crockett whitetail as well as help others to do so has been a surreal opportunity, but none of the record class deer I have taken have ever eclipsed the excitement I realized when my first buck, a yearling, appeared among the hardwoods in the Appalachian Mountains not far from my home when I was 19 years old.

Reality is the most important issue wildlife managers must address. The fact that unbelievable racks develop in certain regions does not mean they can occur everywhere, particularly on a natural basis.

Today things are changing at an escalating rate, and a landowner with adequate means can develop a deer herd exhibiting exceptional antlers, even on poor quality habitat. By providing deer with a quality feed ration on an annual basis, they can circumvent the nutritional problems faced in the past. They can also augment the genetic integrity of a particular deer herd by selective breeding processes via DMP pens or go so far as purchase and release select deer of known genetic lineage. And although these tools are considered nontraditional management practices, their implementation is increasing. Today an individual can purchase a parcel of property, construct a gameproof fence around it, and purchase all the big bucks desirable as long as feeders are provided to sustain them.

This is unquestionably the closest thing to a silver bullet that I have witnessed in over 30 years, but questions pertaining to survivability and susceptibility to diseases must be addressed. Wildlife biologists trapped and transplanted thousands of whitetails in the early days of management, many of which were used to restore deer east of the Mississippi when EHD, once known as Killer X, swept across and decimated deer herds throughout the Southeast during the late 1940s and early 50s. But these deer were wildtrapped deer. Today we have some 40,000 deer in Texas licensed breeding facilities available for purchase and release, but there remains a dearth of information on their ability to adapt to the wild.

The fact is, deer are a product of their environment regardless their genetic constitution. Thus it's the manager's responsibility to protect the habitat from abuse. In other situations, habitat improvement is required. The problem is all habitats, at least on a natural basis, are a derivative of climate and soil type. The more we learn about land stewardship, the more we understand about the limitations on quality deer herds. Bottom line is, a 150-class deer at six years of age on one area is comparable to a 180-inch class deer on another nutritionally stronger environment. Thus that 150-inch buck is every bit the trophy that the 180-inch deer is, at least on a natural basis, which after all, is how most of us developed as hunters.