

Data Collection Review

March is a time of rejuvenation. Spring is characterized by a panoramic display of colors and fragrances complemented by comfortably cool temperatures. It is a preferred time for deer as few people enter their secret realm, and above all, they obtain ample amounts of highly desirable regrowth springing forth from the once barren drab winter landscape. To the hunter, however, it is limbo. Most outdoor activities come to a screeching halt following the last few days of quail hunting in February. Sportsmen return to their workplaces trying to make up those extra days they spent looking for that buck of a lifetime. Others spend time on the phone researching potentially new areas to hunt. For the most part, deer hunting is placed on hold until the following season when in reality all those incidental sightings, antler measurements, weights, etc. are placed in a folder somewhere in the office and never looked at again. March is the prime time to review this data and compare it to years past to determine whether the harvest practices or various management employed on the particular area are benefiting herd quality.

Like the end of a semester in college, the end of the deer season is a time to reflect on just how well or poorly we did the past season.

Reviewing population and harvest data is the hunter's report card. It's what I refer to as the road map to success. But like hunting, what you get out of it is equivalent to what you put into it.

I have always enjoyed the comments made by old-timers when they talked about the good old days. I would ask them if they ever took big deer, and they would respond with "they were all big, most of them weighing in excess of 300 pounds". My next

question would be “How did you weigh them” and they invariably would say “didn’t have to, those old bucks were just huge”.

Now as a hunter, I could understand where they were coming from, but as a certified wildlife biologist with 30 years of experience managing hundreds of thousands of acres, I couldn’t accept their belief that those deer actually weighed what they thought they did.

A harvest analysis is simply the compilation of all data collected from harvested deer. Basically, age, weight, both dressed and live, and antler measurements are the principal ingredients required for harvest records.

Live weight data is simply the weight of the entire animal prior to evisceration (removal of entrails).

Dressed weight data is the weight of the animal following evisceration. This information is more useful because hunters traditionally field-dress their animals immediately. It’s also a better estimate of the animal’s correct weight because the contents, and in particular, rumen weight, can vary by animal.

When it comes to bucks, the antlers represent vital information. Conventionally, the only measurements taken from the antlers were the inside spread, length of beam, basal circumference, and number of points. These measurements alone are less than representative of actual antler size. There are additional measurements obtained from a rack to interpret or compare it with others.

I am a firm believer in collecting a substantial sum of data. You simply never know when it could prove vital in a management decision. Thus, the rack of a whitetail

buck, which often reinforces the dynamic status of the whitetail, represents a substantial target for data collection.

When collecting data from the antlers, I measure the entire antler, both sides, as you would measure them for the Boone and Crockett records. In other words, every inch of antler is measured. Thus, not one, but four circumference measurements are recorded “at least in most cases” unless the deer has less than six points, then only three are collected. In addition, all antler points are not only counted, but measured as well. Not only are the individual measurements compared with other equal-aged deer, total amount of inches of antler growth are compared.

All the aforementioned pieces of information are rendered useless if the age of the animal is not obtained. How many times have you heard individuals speak of that buck being over the hill or another being extremely young, without ever looking at the jaw of the animal? The analysis of the lower jaw of a whitetail deer is critical if you wish to estimate the approximate age of an animal. And even then it is only an estimate, but at least one that can be relied on for reference.

The most useful and economic age-estimating procedure is the tooth replacement and wear technique. Here one employs the fact that certain teeth such as the first three molars, the third one being three cusp, are shed and replaced sometime around 18 months of age with the new third molar being two cusp. Differential wear on the teeth is used to distinguish the older-age classes.

Although the technique is hindered by aberrations in tooth wear, it remains to be useful. The critical aspect about aging deer, in my opinion, is to remain consistent in your estimations. In other words, the age you determine may be incorrect, but consistent

with all your other measurements. Thus, you are lumping classes of deer into groups exhibiting similar wear regardless of age. It is, however, important to note that based on Texas researchers Cook and Hart, 66% of the estimates obtained by skilled, or more importantly, experienced field personnel, are correct, and when they are incorrect, 76% of the estimates were older or overestimated ages. Thus, it is obvious that one's estimate is affected by many factors besides experience.

In order to enhance your capability of aging deer, you can obtain a consortium of known age jaws and construct a known age jaw board to help you in your estimations. Several commercial brands are available, but known age jaws from your particular area would be most advantageous.

Without question, the easiest way to obtain proper ages to accompany the other data you collected is to remove and retain the jaws. Once you have the jaws, you can then have them analyzed by a wildlife consultant or representative of the Texas Parks and Wildlife Department.

Basically, all the information derived is pivotal around the age of the animal. In other words, the data is concentrated in age classes with 18-month-old deer sorted with yearlings; 2.5-year-olds lumped with 2.5-year-olds, etc.

So, the question arises--why collect all this information and how does it benefit us? Harvest data is extremely beneficial when it comes to predicting herd health and welfare.

Harvest data can be used as a yardstick in measuring quality of animals existing on the areas we hunt. By collecting data annually, one can continually monitor improvement or degeneration of the animals managed. For instance, it can be utilized to

demonstrate the onerous impact overgrazing can have on the deer quality, or the negative effects generated from excessive habitat destruction.

To the deer hunter, harvest data, particularly of the bucks, represents a numerical photograph of buck quality that occurs on the particular area. Thus, if the production of 160-inch class bucks is your goal, a ranch with a 120-inch class average for mature deer indicates a problem that must be corrected. On the other hand, the landowner can use deer data as an advertisement, particularly if the deer herd demonstrates high standards. Thus, to the landowner, properly collected and prepared harvest data can help generate revenue, for good harvest records are better than the fanciest brochures.

Data collection doesn't cease or at least should not stop after the hunting season. For instance, those short forays during spring can be turned into excitement as searches for shed antlers are conducted. These calcified structures represent additional sources of information which can fortify some of your harvest data. Although it is impossible to correlate those fallen antlers to any age class, they can represent a variety of aspects concerning your deer, including but not limited to buck numbers, antler points, mass, and even locations desired by the bucks that supported the recovered racks.

Regardless of your goal as a hunter, landowner or manager, it is unachievable without some sort of guideline to measure progress. Appropriately collected harvest data is the road map to success. Thus obtaining records on the status of one's deer herd is not only practical, it is imperative. Like investing in the stock market, one must know whether stock values are rising or falling. The same holds true in deer management.

As a private lands management consultant, I annually assist many landowners in setting up their recordkeeping systems as well as analyzing their data. Like a stock

broker, I can critique this information and recommend to them what must be adjusted or in some cases, dropped. Deer hunting is a sport we can no longer take for granted. It is expensive. Data collection is the only method we have at estimating deer quality, in turn the results of our investment.