

Considering antlers and estimating live age of whitetail bucks

One of the cornerstones of quality deer management (QDM) is achieving a balanced age structure in the deer herd. Of course, this involves allowing young bucks to reach older age classes. Most QDM programs strive for bucks to reach at least 3 years of age before harvest. More advanced programs allow bucks to reach 4 years of age before harvest. Many hunters try to age bucks based on size of antlers, but antler size is not a good estimate of age. Yes, buck grow larger antlers as they get older, up to 5 – 7 years of age, but antler size within a given age class can vary considerably. For example, on a given property in Tennessee, it is common for the antler size among 3-year-old bucks to vary by 20 inches (as measured by Boone and Crockett Club scoring system) or more. Variation in antler size by year-class can be a result of genetics, nutrition (food available to that animal), timing of birth (May vs. August, for example), or implications from disease or injury.

Antler size is a product of age, nutrition, and genetics. If a buck is killed when young, it has no chance of growing older and producing a large rack. Therefore, hunters must allow bucks to reach older age classes if they want bucks to grow relatively large antlers. On average, bucks realize approximately 75% of their antler potential at 3 years of age, 90% of their antler potential at 4 years of age, and throughout the US, bucks reach peak antler size between 5 and 7 years of age. If a buck lives to maturity, but nutrition is limited, antler size will be relatively small. Available nutrition first goes to body growth and function. Only after those requirements are met, does additional nutrition go into antler production. The genetic potential of a particular buck can be realized only if the buck lives to maturity and nutrition is not limiting. As mentioned, some bucks inherently are able to grow larger antlers than others. However, there are few bucks that would not please the majority of hunters if those bucks were able to reach 4 years old or older.

Antler restrictions have been used to help bucks reach older age classes. Common antler restrictions include 4 points on one side, 8 points total, a spread minimum that might range from 12 – 15 inches, or a minimum antler score based on the Boone and Crockett (B&C) scoring system. In most areas, various antler restrictions are effective in protecting yearling bucks and increasing the percentage of 2-year-old bucks in the population. However, beyond that, antler restrictions typically allow only the highest scoring individuals within an age class to be killed, while protecting bucks with smaller antlers in that age class. Over time, antler restrictions can lead to overall lower antler scores among mature bucks because the highest scoring bucks were eligible for harvest when they were younger. Progressive managers no longer use antler restrictions, but use an age restriction and/or limit the overall number of bucks that can be killed, thereby protecting many bucks from harvest and increasing the overall age structure by default.

At this point, it should be obvious bucks must be aged on the hoof, and antler characteristics should be used only as a *clue* to identify a buck's age. Body size and conformation provide a much better estimate of age. Learning body conformation characteristics by age class is important to successfully achieve a balanced age structure. Without any reference to antlers, a general description of body characteristics by age class is described below. More thorough information is available in various publications, including *Observing and Evaluating Whitetails* by Dave Richards and Al Brothers. It is an excellent reference, with hundreds of explanatory color photos, available through the Quality Deer Management Association (800-209-3337). It is very important to realize that estimating age by body conformation is not an exact science, there can be lots of overlap and variability, but with a little practice and

observation, you can be quite accurate in separating young bucks from middle-aged bucks from older bucks.

Yearling bucks are easy to identify with slim faces and necks. Their body also is relatively slim and their legs appear long (in relation to body size). 2-year-old bucks still appear long-legged and their back and stomach generally are taut. The neck and body is larger than a yearling, but the face still appears larger than the neck from the front and long from the side. 3-year-old bucks exhibit a fuller neck and deeper chest, which, for the first time, appears as large, or larger, than the rump. The stomach and back are still straight and taut. The face no longer appears larger than the neck. When bucks reach 4 years of age, for the first time, their legs do not appear relatively long because the body is well-developed, which may make the body appear relatively long. The stomach and back do not sag. The neck is more muscular and full, and the base of the neck often is nearly even with the bottom of the chest. In a QDM program, a 4-year-old buck is a prime target. If the vast majority of hunters could get a shot at a 4-year-old buck, they would take it. When bucks reach 5 years of age, the back and belly often begin to have a sag. Usually, the base of the neck is even with the brisket, giving the buck a noticeable “full” and blocky appearance.

Using body characteristics to estimate the age of bucks requires practice, just like learning to judge antlers. Of course, this can be frustrating if no mature bucks are present! However, if young bucks are not shot, the population ultimately will include mature animals. Using references such as *Observing and Evaluating Whitetails* will help ready you for field judging live bucks.

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