

Aging Whitetail Deer

by [Ken Gee](#)

Aging white-tailed deer can be an enjoyable and informative exercise. However, our ability to accurately place deer, especially adult deer, into specific age-classes is questionable.

The most widely used and accepted technique of aging deer is based on tooth replacement and tooth wear associated with the lower jawbone. The technique was first described in 1949. Since that time, very little work has been reported evaluating the technique using free-ranging, known-age deer.

In an effort to establish a population of known-age deer, we began trapping, marking, and releasing deer on the Noble Foundation Wildlife Unit (NFWU) in 1983. To date, we have a reference collection of 88 known-age jaws. To evaluate the accuracy of the technique as it is used and taught by most biologists, we constructed an aging quiz from this reference collection and administered it to 34 practicing deer biologists from the southeastern United States. The results were very interesting.

Ninety-one percent of the deer estimated to be in the 1-2 year age-class (yearlings) were indeed yearlings. Of all the deer estimated to be in the 2-3 year age-class, only 55% were aged correctly. For the 3-4, 4-5, 5-6, and 6-7 year age-classes, the accuracy levels fell to 29%, 23%, 44%, and 4%, respectively. Several deer in older age-classes were included in the quiz — and none were aged correctly.

So to briefly summarize, the accuracy level for estimating the ages of deer in the yearling age-class was relatively high. However, the accuracy levels dropped dramatically for deer estimated to be in the 2-3 year and older age-classes (adults). Roughly half, or in most cases, more than half of adult deer were incorrectly aged.

These results lead us to conclude that traditional tooth replacement and wear aging techniques allow us to confidently place NFWU deer into 3 age-classes only — fawn, yearling, and adult. Attempts to place adult deer into specific year age-classes were very inaccurate. This further implies that the technique may not be accurate elsewhere for assigning adult deer to specific year age-classes and that it should be carefully reviewed before doing so.

The tooth replacement and wear aging technique for whitetailed deer is diagrammed and discussed in our publication "Whitetailed Deer: Their Foods and Management in the Cross Timbers". If you are interested in aging deer, or in deer management in general, contact Patricia Merritt for a copy.