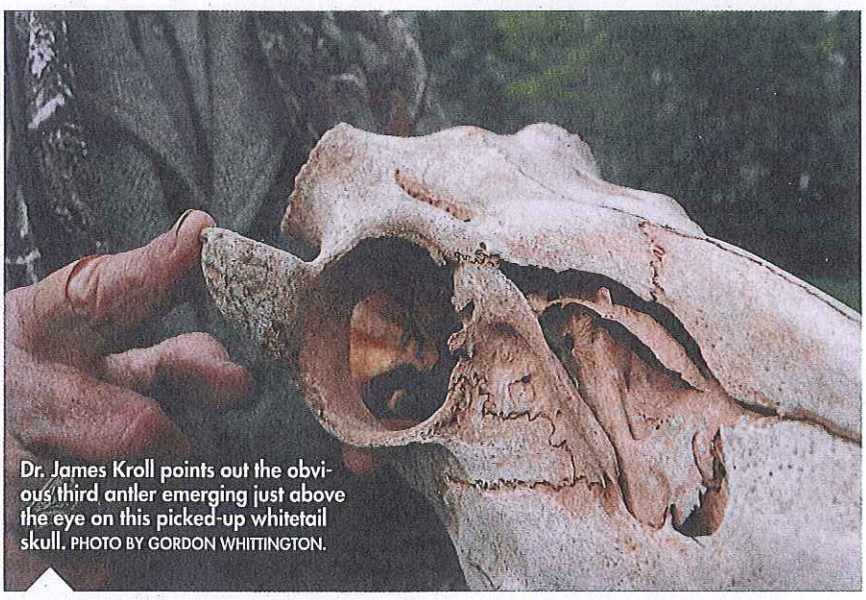
Dr. DEER

BY DR. JAMES C. KROLL

THE STRANGEST ANTLERS

A good friend recently showed me around his trophy room, replete with fine heads, horns, skins and antlers of a host of species. But it struck me he only had one, at most two, specimens of each species, save one — whitetailed deer! Paying more attention, it dawned on me the vast majority of non-whitetails differed only in size, and most showed little variation. No wonder he only displayed a single specimen. They all looked pretty much alike.

There are a host of reasons why whitetails are the most popular big game animal, but the greatest one, in my opinion, is there seldom are two exactly alike. The reason, of course, is antlers. Antlers come in all forms and shapes, rendering each set very much like a fingerprint. In this column, I'll discuss one of the rarest antler qualities of all.



Dr. James Kroll points out the obvious third antler emerging just above the eye on this picked-up whitetail skull. PHOTO BY GORDON WHITTINGTON.

AN ARKANSAS HUNTING TALE

In the last two seasons of "Winchester presents Dr. Deer," we presented a segment called "Build Your Own Deer Factory," which highlighted deer management on properties around the country. In the past, Arkansas has not risen to the top in discussions of trophy hotspots, but the Natural State is emerging as a place to watch in the 21st Century. We were excited to feature the efforts of David Jordening in managing one of the most challenging places in the country, the Mississippi River flood plain.

Located right on the Mississippi River, David's property floods frequently. "We knew exactly how many deer we had on my property," David told me in spring 2011. "Zero!" The reason was that his entire property was under water, including his lodge.

Studies have shown that when the Mississippi River floods, resident deer try to stay as long as possible but eventually have to leave for higher ground. The bucks leave first, followed later by the does. Studies even have shown buck social groups somehow know where to go, ending up at the same places every time. After the water recedes, bucks filter back to their original home ranges. Obviously, the trip back and forth is fraught with peril. That is where a great hunting story begins.

After the 2011 spring flood, David had no idea how the bucks he had spent so much time and effort producing would fare. Talking with him on the phone, I assured him most of his bucks would make it back home in time for the season, but it would be important to make his place welcoming to his deer. He does a great job of planting food plots, comprised of Buck Forage oats, chicory, clover and summer legumes. So, peas and soybeans would be the first approach, followed by the fall mix of oats and clover. By fall, he once again was sending me photographs of great bucks, some of which showed antler damage; 2011 was shaping up to be a good season after all.

There are many joys in managing whitetails, but one of the best is sharing the fruits of your labor with family and friends. David is no exception and is very generous with hunting invitations, especially when it comes to his grandson, Will Clark, who is studying at Auburn University. Going to college in Alabama restricts the amount of time Will can hunt with his grandfather, so their hunts are special. David has carefully landscaped his property in a manner I could not improve upon myself. He has carefully located timber plantings adjacent to food plots and connected each to route deer purposefully over the landscape.

One of these places produced numerous trail camera photographs during the summer and early fall, but only of small bucks. The movement pattern was obvious: The bucks were moving from thick bedding cover to

the edge of a large food plot, where they hoped to intercept does coming to feed on the lush forage. Somehow, one buck managed to construct a huge rub outside the view of his camera, then seemed to disappear. The size of his calling card created quite a stir among the hunters, yet the probability of killing him seemed low. In spite of the odds, young Will decided to focus on this unseen buck.

The problem was that it would take a south wind (blowing away from the cover edge into the plot) to hunt the spot. Young Will managed to get a couple of hunts in during Thanksgiving but only saw the young bucks photographed during early season. To make things more difficult, there was a great deal of wild hog activity in the area, and deer do not like hogs!

On December 13, Will got his chance. Arriving just after completing the semester at Auburn, Will encountered a perfect wind to hunt the spot. Parking three quarters of a mile away, he slipped along the forest edge well before first light. Rather than make noise erecting a stand, he climbed up a huge oak tree into a old box stand. At daylight, he saw a young buck working the staging area. Behind the small buck Will caught a glimpse of movement.

In landscaping the area, Will's grandfather had planted hundreds of oaks in a strip that funneled deer to the plot; and two deer were following the landscape feature. The first deer was a doe, followed by a larger deer. What he then saw took his breath away. All he could see was a huge set of antlers!

The first thing the large buck did was run off the young buck, passing within 50 yards of the stand. The chase took the buck in and out of view and Will could not get a clean look at him. The Jordening management program not only involves landscaping and nutrition, but also limiting buck harvest to mature animals. Will certainly did not want to make a mistake.

"Trying to decide if the buck was mature enough to harvest," Will reported, "was agonizing!"

He could see part of the buck's body and one side of his antlers, which appeared to have some strange characteristics. When the buck turned his head, there appeared to be something white on that side. He quickly ran all the cues his grandfather taught him through his mind, deciding it was indeed a mature buck.

By the time Will made the decision to shoot, the buck was 160 yards away and rapidly disappearing. The only shot he had was the buck's neck (a chancy place to shoot any deer). He squeezed the trigger on his 300 Christiansen Arms rifle and the buck ran off, showing no sign of being hit.

It was 8:05 a.m. and Will decided rather than pursue the buck, to call his grandfather, who told him to sit tight until he could get there.

They walked to the spot where the buck stood, finding blood and bone. David is an experienced deer hunter and after only 40 yards knew there was a problem. They would need help. In a growing number of states, blood-trailing dogs are becoming more popular and legal. Two of the best trailers in eastern Arkansas are Deanie Green and Gary Odel, and they just happen to work for David. They brought two of their best dogs, Bear and Ranger, to help. It did not take them long to get on the buck's trail, but it would turn out to be a prolonged and exciting chase through the bottomlands of the Mississippi River. The dogs finally bayed the buck in thick cover, and as the men approached, the buck was putting up a spirited defense.

Will waited for a safe shot and finished the buck. Pulling the buck from the thick brush, no one could believe what they saw. The buck was sporting a huge set of antlers, later grossing 181 Boone & Crockett, but the score was irrelevant. Will had killed a buck with one of the rarest antler types for whitetails. It had a third antler emerging just above its right eye.

THE ANTLER STORY

The dynamic nature of deer movement caused by periodic flooding creates many dangers for bucks traveling long distances through thick cover to reach higher ground. I have never seen any place within the range of whitetails where antler damage occurs more than this region. The timing of flooding and migration coincides with early antler growth. Reviewing the catastrophic flood history for the Mississippi River from 1734 to the present, the vast majority of these floods have occurred in later winter through spring, the time when bucks are most vulnerable to antler damage. In most cases, aberrant antler growth such as extra beams, acorn points or "broomed" beam tips, are a one-year affair, meaning a growing antler point or beam is damaged, causing a change in growth pattern. Although interesting that season, the next season more often than not sees completely normal antler growth. Then there is the example of Will's buck.

After antlers are cast, the tissue around the pedicel begins to grow and heal over the wound left by losing the antler. Most people erroneously think damage to a pedicel will result in a permanent modification of antler growth. The fact is in most cases, the pedicel damage is quickly repaired, with the one exception of a pedicel that breaks partially, dangles for a while, then heals back in some odd direction. Even in such cases, the resulting antler is somewhat normal, just growing in a different direction. It is damage to the tissue around the pedicel that causes the really interesting and often long-lasting effect.

The cells of this tissue are not unlike stem cells, in that each one contains all the genetic instructions for building a complete antler. In addition, it has been proposed each of the bones of the frontal portion of the skull may also have these capabilities. Damage to these tissues can either stimulate antler growth or, as I have demonstrated myself, a few cells dislodged and relocated elsewhere on the deer's face can grow into an antler. Once established, the miniature antler will return the rest of the deer's life.

So, when Will killed his buck in December 2011, he joined a rather unique club of hunters. I consider every buck to have a unique set of antlers, but this buck was more unique than the vast majority. The environmental conditions imposed by the dynamic flooding environment of the Mississippi River apparently increase the probability of a variety of antler variations, far beyond simple genetics.

We always are interested in strange antler types, so please contact us when you see or harvest an unusual buck.