

## **Early Antler Shedding Research Project Update**

**by Daniel Kunz and David G. Hewitt**  
**January 2012**

Last winter in the [January 2011 CKWRI Deer Associates newsletter](#) we discussed an interesting phenomenon many south Texas landowners and managers were experiencing that seemed to coincide with high rainfall years in 2007 and 2010. A small percentage of bucks were shedding their antlers while still in velvet during late summer. CKWRI and TPWD were fortunate to partner with David Killam and David Kitner of the Duval County Ranch, who were interested in why these bucks had been afflicted. They graciously allowed ranch access, ranch personnel, and funding to investigate this question. Five deer were harvested and biological samples were collected for numerous laboratory tests. These tests were inconclusive for the most part, possibly because too much time had passed between the time the bucks shed their antlers and the time they were harvested. The only abnormality we could discern from the tests was that bone density was low in the afflicted deer, which suggests nutrients and minerals were being drawn from afflicted buck's skeletons as they tried to partially regrow their antlers.

During our annual helicopter survey in January, we marked all locations where additional early shed bucks were observed. After the season the Ranch paid for a helicopter and capture crew to help us capture 5 deer which apparently had shed antlers early and regrown small antlers. We collected data from these individuals and ear tagged them for later identification.

With the help of David Kitner, Duval County Ranch employees and numerous lessees, we followed the antler growth of most of the captured bucks. Several of these ear tagged bucks were photographed and documented, with most showing normal antler growth.

These results show the anomaly was short term and not a purely genetic problem. Knowing that mature bucks, at least in some years, can have abnormally small antlers, and then grow normal antlers the next year will help hunters and managers make better informed culling decisions. Our results suggest that after excessively wet springs and summers, it may not be necessary to cull mature bucks with exceedingly small antlers, but there is more to learn.

Researchers will continue to monitor this phenomenon and will be ready to conduct more sampling the next time South Texas has a good rainfall year, so stay tuned for more updates.



*Eight year-old buck captured on March 3, 2011.*  
Photo by Dave Hewitt



*The same 8 year-old buck (ear tags 7 and 8)  
photographed in December 2011.*  
Photo by Bob Purvis



*Four year-old buck captured on March 3, 2011.*  
Photo by Dave Hewitt



*The same 4 year-old buck (ear tags 1 and 2) photographed in July 2011.*

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