White-tailed Deer Management During Drought

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When summer turns to fall, many folks start to think about white-tailed deer hunting season. With the 2011 drought in the Southern Great Plains, many people are curious to know if conditions have affected deer populations and if there is anything to be done to mitigate potential effects.

The drought has probably caused at least some negative effects on forage quality and quantity. Deer rely heavily on forage such as forbs during summer and spring to meet nutritional demands associated with lactation and antler growth. If nutritional needs are not met, fawn survival is jeopardized and antler growth may be compromised for body maintenance. Reduced fawn survival can cause short-term reductions in overall deer population numbers because there are fewer fawns to replace adult deer mortalities. The lack of nutrition could also result in more spikes this year. Yearling bucks that are spikes in a drought year could end up becoming trophy bucks if they are able to meet their nutritional needs in successive years. Increased fawn mortality and reduced antler quality may be more prevalent in areas that did not receive rains early in the growing season. Timely rains early in the growing season probably created conditions where deer were able to meet or exceed their nutritional needs.

If the drought continues into this fall and winter, doe body condition could be poor enough during winter and spring that some does may not carry fawns to full term, potentially reducing the fawn crop in 2012. Similarly, bucks could be in poor enough condition going into spring that antler quality is compromised next year because it will take them longer to recover from the effects of the rut and because of reduced forage due to drought.

If vegetation was significantly reduced during late summer or early fall due to drought, August/September spotlight, camera and/or daylight cruise surveys may have reflected higher deer densities compared to previous years. Most likely, this is not because deer densities increased; rather, there was better visibility during surveys or better response to bait during camera surveys than in past years. Survey results can be deceiving, so remember that surveys are only estimates.

As managers, we can have an impact on white-tailed deer populations through selective harvest. If necessary, adjust deer harvest depending on management goals and the condition of the deer herd. So what should we consider regarding buck and doe harvest during the upcoming deer season?

Buck Harvest
Bucks have higher natural mortality rates than does, which is one reason why most knowledgable managers
try to harvest fewer bucks than does on a yearly basis. If managing for trophy-quality antlers, buck harvest should be conservative and only bucks with desirable antler size or configuration should be harvested.

**Doe Harvest**
If the goal of a manager is to reduce the overall number of deer in the herd or to balance buck-to-doe ratios, he or she should capitalize on the opportunity that the drought created to have more impact this year and aggressively harvest does. This might be a year when a manager can really have a significant impact on the overall population through doe harvest. However, if deer densities and buck-to-doe ratios are suitable, consider reducing doe harvest during at least the upcoming season to reduce the risk of adversely changing population parameters.

Deer populations have endured drought in the past, and they will survive this one. However, managers should remember that white-tailed deer will endure drought better on properties with good to excellent deer habitat than on properties with
lower quality habitat.