

Selective Doe Harvest

Once you've brought a deer herd into balance with local resources, maintaining balance requires more careful thought about which does you choose to take.

By Drs. Steve Demarais and Bronson Strickland

The questions surrounding deer hunting and management are almost endless, and the discussions around the campfire can go on for hours. Which cool-season food plot forage will attract the most deer? Or, should you worry more about production or protein content in your summer food plots? Oh yeah, let's not even mention the best-rifle-caliber debate. But, for many of today's thoughtful hunter-managers, a topic you may have thought

had finally been resolved has revived with a new twist.

Not too long ago, many hunting camp debates changed from "should we shoot does?" to "how many does should we shoot?" Early in a Quality Deer Management program, the emphasis is on balancing a population with available nutrition and protection of young bucks. In areas where deer density exceeds the habitat's carrying capacity, the brown-and-down doe harvest mantra is most appropriate at this stage of management. You need to emphasize harvesting as many adult does as possible while minimizing harvest of buck fawns. At this stage in a QDM program, the "KISS" principle (Keep It Simple Stupid) is generally the best approach for most hunting clubs. Keep the harvest plan as simple as possible and focus on correcting the most limiting factors: density and sex ratio.

Knowledgeable hunter-managers eagerly engage in the "work" of deer management and regularly harvest enough does for population control. Now these same folks want to step it up a notch in their efforts to further improve their deer population. They've put up the walls, raised the roof, and installed the plumbing; now it's time to work on the painting. They've reduced population density, improved sex ratio, protected younger bucks and managed habitat. They wonder if selective harvest of does might be appropriate. After years of shooting any doe that presented a good shot opportunity,



they thoughtfully ask "Which type of does should we harvest?"

Research has shown that younger mothers are not as productive as experienced mothers, and this fact makes sense. Their younger age naturally limits the number of fawns produced and their ability to take care of them. First-time mothers have anatomical and physiological limitations that only time and experience can correct. The more dominant nature of older mothers also allows them access to better quality habitat (if in limited supply), which would insure her fawns receive optimal nutrition and have the greatest growth potential. Where there are predator issues, the more dominant mothers also control access to the best escape and hiding cover (if in limited supply), which could improve fawn survival.

For those hunter-managers in an advanced stage of deer management, an understanding of how age and experience potentially affects fawn production leads to the correct answer for the question of "Which type of does should we harvest?" In well-managed herds, you no longer need to maximize the number of does



QDMA's educational poster, *Identifying Antlerless Deer*, can help keep your group informed when you cross the bridge into more selective doe harvest goals. Visit www.QDMA.com to order this and other posters in QDMA's educational series.



LINDA ARNDT

removed with each squeeze of the trigger, because the deer population has been reduced and is in balance with habitat conditions. Your goal now is to produce the greatest number of well-nourished buck fawns, so the target of earlier harvest efforts now becomes the protected animal. When it is possible to clearly identify a female yearling or fawn, then that is the best type of doe to remove. With that shot, you are removing the least effective future mother while leaving the most accomplished mother to produce the most consistent number and quality of fawns.

This is much easier to say than to do. Hunters must take more care in identifying their female targets. Making note of the relative body sizes within the deer family unit, which consists of an adult female, a yearling female and the current year's fawns is a good start. Differentiate between the older doe and her yearling daughter from the previous fawning season. If there isn't a yearling doe, then be careful that the larger buck fawn isn't misidentified as a yearling doe. Make special note of the top of the head when the smaller deer look in your direction. You might not differentiate

the buck fawn's pedicles (antler bases), but their presence will give him a flat-topped appearance. The doe fawn may have dark spots of coloration where the pedicles would occur on a male, so make sure she has a rounded head when she looks in your direction.

There's another doe harvest question that is tougher to deal with. Suppose there are two doe family groups within range, one with larger fawns that have lost their spots and appear to be fully weaned and another with much younger fawns that still have their spots. Most hunters would harvest the adult doe with the older fawns because the younger fawns still need their mother's milk. Suppose too that your property has a relatively long breeding season in spite of having a near balanced sex ratio. Those late-born fawns will be stunted compared to early fawns, and may take three to four years to catch up. The Mississippi State University Deer Lab has documented that there is a genetic component among the many factors that affect breeding dates. If that late-fawning female is genetically programmed to fawn late, then you would do your management

program a favor by preferentially removing her. (You are not eliminating genes, just an individual deer. You can't alter population-level genetics through selective harvest, but given the choice between two family groups, remove the culprit that is throwing late fawns instead of your early-fawning doe.) Without their mother to provide leadership, those late fawns will likely become early and regular visitors at your food plots, which will facilitate their harvest as well.

So, for those of you who have moved into the later stages of advanced deer management, it's no longer brown-and-down when it comes to doe harvest. You'll likely still need to harvest some adult does to fulfill your quota, but consider preferentially targeting those younger females to insure the best quality fawns are produced. And, hey, there's another good reason – it has to do with the grill! 

About the Authors: Drs. Steve Demarais and Bronson Strickland are research biologists at the MSU Deer Lab, in the Department of Wildlife, Fisheries and Aquaculture, Mississippi State University.