



## Deer Associates eNews

News from the Deer Research Program at the Caesar Kleberg Wildlife Research Institute

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### The Magic of *Stacking*

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A common question before each deer season is “How do think your deer herd will be this year?” People often mention nutrition, typically (and appropriately) referring to the rains they had in the spring. Spring rainfall definitely influences overall antler quality in a deer herd. But the most important consideration—how old are your bucks?—is rarely cited in response to that question.

Age—which is absolutely required for trophy bucks—comes into play in two ways. First, past fawn crops (6, 7, and 8 years prior) have a HUGE impact on numbers of older bucks in a deer herd and, as a result, the number of trophies you might expect to see. Second, past harvest practices impact the age structure of bucks in a herd. Less intense harvest of trophy bucks in years past will result in more trophy bucks in a herd.

*Stacking* is my term for the management practice of setting the minimum harvest age of trophy bucks to 7 1/2 or even 8 1/2 years old. Setting a high minimum harvest age stacks age classes of trophy bucks on top of each other, thereby increasing the number of trophy bucks in a deer herd.

### ***Stacking Math***

*Stacking* is a very simple concept, but you need to see the math in the following table to understand the awesome power of *stacking*. The table assumes the following:

1. Fawn crops are consistent from year to year as a result of protein feed (consistency is not realistic, but protein feed at least eliminates the fawn crop busts).
2. A ranch produces 10 fawns per year that will survive to produce antlers of 150 gross B & C and greater at 5 1/2 years old and older (achievable on a 5,000 acre ranch on feed).
3. The first year of maturity—i.e. when the full antler potential of each buck is reached—is 5 1/2 years old.
4. All 150+ bucks in the targeted age class are harvested. This assumption is probably not realistic since some bucks elude harvest and others avoid harvest by breaking antlers. I make this 100% harvest assumption to illustrate the impact of *stacking*.

5. I assume that natural buck mortality after 5 ½ years old is zero. This assumption is incorrect, but I make it to illustrate simple *stacking* math. Later, I explain that the biggest risk of *stacking* is natural mortality of older bucks, an issue that merits further research.
6. The table only deals with 150+ bucks since I am only interesting in stacking trophies. I do not suggest stacking culls and even above average bucks.
7. Finally, I am assuming that 150+ is a trophy. For ranches that have been under a feed program for many years, 150 might be too low of a score to stack; likewise, it might be too high on other ranches where a 150 class buck is a very top end buck. The cutoff score for *stacking* will depend on the property.

The following table explains the magic of *stacking* on the number of trophy bucks in a herd:

<b>STACKING TABLE</b> <b>NUMBER OF 150+ BUCKS AT THE <u>BEGINNING</u> OF EACH SEASON</b>				
<b>Assume: 10-150+ bucks enter the 5 ½ year old age class each year.</b>				
	Harvest Rule: Take 5 ½ Yr. Old Bucks	Harvest Rule: Take 6 ½ Yr. Old Bucks	Harvest Rule: Take 7 ½ Yr. Old Bucks	Harvest Rule: Take 8 ½ Yr. Old Bucks
No. of 5 ½ 150+ Bucks at the <u>Beginning</u> of the Season	10	10	10	10
No. of 6 ½ 150+ Bucks at the <u>Beginning</u> of the Season	0	10	10	10
No. of 7 ½ 150+ Bucks at the <u>Beginning</u> of the Season	0	0	10	10
No. of 8 ½ 150+ Bucks at the <u>Beginning</u> of the Season	0	0	0	10
<b>Total 150+ Bucks at the <u>Beginning</u> of the Season</b>	<b>10</b>	<b>20</b>	<b>30</b>	<b>40</b>

Think about the numbers in the Stacking Table. Imagine how your perception of your deer herd would be if instead of 10-150+ bucks at the start of a season, you had 20-150+ bucks. Or 30. Or even 40! All you have to do is wait to stack age classes on top of each other.

### ***Stacking* Only Temporarily Defers Trophy Buck Harvest; It Does Not Eliminate It**

Note that *stacking* involves a temporary (say 2 to 3 years) cessation of (or significant reduction in) the harvest of trophy bucks. In the above table, you end up harvesting 10 bucks per year once you have fully stacked trophies in each age class. The choice is whether to harvest 10 bucks per year at 5 ½ years old or 10 bucks per year at 7 ½ or 8

½ years old. Eventually, you end up harvesting 10 bucks each year whether you stack or not. *Stacking* simply requires a temporary deferral of harvest so that you end up with more trophy bucks in your deer herd.

### ***Why Do I Stack Bucks?***

1. I kind of fell into the practice of *stacking* in reaction to the extreme overharvest we experienced during the final years of a poorly run package hunting operation at the Faith Ranch. We had sold too many hunts for several years. To satisfy the trophy hunts we had sold, we had to shoot 5 ½ year old bucks. And we made some mistakes: 4 ½ year old bucks were taken, too. The result: the numbers of trophy bucks declined. I started *stacking* after we shut down the package hunting operation.
2. Truth be known, I didn't set out to stack; I was trying to increase age in a buck herd that had been decimated. The theoretical concept of *stacking* came to me later as I saw the power and magic of harvest deferral. The longer I stacked, the more incredible the results became.
3. *Stacking* reduces aging mistakes caused by trying to age bucks on the hoof because it raises the minimum harvest age. If you tell hunters to shoot 5 ½ year old and older bucks, the debate in the field becomes "is a buck 4 ½ or 5 ½?" Sometimes you will get this wrong and take a 4 ½ year old deer. But if you set the minimum harvest age to 7 ½, the debate becomes "is a buck 6 ½ or 7 ½?" Raising the minimum harvest age avoids the tragedy of taking a promising 4 ½ year old buck who has not reached its maximum antler potential.
4. *Stacking*, if done properly, forces a manager to keep track of individual bucks from year to year. Tracking reduces aging mistakes. At Faith Ranch we start tracking trophy bucks the first time we see them and we start harvesting significant bucks at 8 ½ years old. *Stacking* requires tracking, and tracking minimizes aging mistakes.
  - I should expound on aging because getting accurate ages of individual bucks underlies our *stacking* methodology. Aging bucks on the hoof is inherently inaccurate and simply does not produce the accuracy *stacking* requires. Instead, at Faith Ranch we assume that when we see a significant buck for the first time, the buck is 5 ½. (Actually, if a buck's antlers take significant jump—say, 10%--the next year, we then assume he was 4 ½ when we first saw him.) We then track that individual buck from year to year using census video, on the hoof video, and motion cameras. We can then say a particular buck is at least a certain age. To make *stacking* work most effectively, the scouting effort must be incredibly intense.
5. For those who believe that culling bad bucks out of a deer herd has a positive impact on future antler quality (I am a skeptic on this point), then *stacking* preserves the breeding capability of larger antlered bucks and should be a necessary companion to the practice of culling for genetic change.
6. *Stacking* is critical in an unfed environment. In an unfed environment with wildly fluctuating fawn crops, *stacking* is not just desirable, it is imperative if you want to

have mature bucks to harvest each year. We learned this the hard way in our package hunting operation when we got greedy and sold hunts based on the number of mature bucks we saw in our aerial census in a particular year. We did not feed in those years. But in subsequent years when bucks from poor fawn crops reached maturity, we found our trophy bucks were in short supply because we had failed to save trophy bucks for a rainy day (a poor metaphor, I know).

7. Similarly, in an unfed environment a mature buck's antlers will fluctuate in size depending largely on spring rainfall. *Stacking* maximizes the number of mature bucks in a herd that can benefit from one of those great (yet rare) spring rainfall years. When those great spring rains come, you want to be sure you have plenty of mature trophy bucks in your herd to take advantage of that rare occurrence.
8. In a fed environment where the fawn crop busts are eliminated, *stacking* becomes more of a value judgment since there will always be trophies entering the 5 ½ year age class each year. But I value big bucks and lots of them—so *stacking* satisfies my own personal value preference for lots of big bucks.
9. *Stacking* makes harvest decisions easier. Should we harvest a particular buck or not? Your *stacking* rule (7 ½? 8 ½?) makes this decision for you.
10. I like to make movies of trophy bucks. I use non-linear video editing software to combine clips of bucks taken from the helicopter and video taken on the hoof with stills taken by motion cameras. *Stacking* adds to my material and enhances the quality of my movie.
11. Even if you do not make movies, you probably enjoy looking at big bucks. Commercial hunters and guests do, too, even though some of the big bucks might be off limits to them. *Stacking* enhances the overall experience of a hunter by increasing the number of big bucks he can see during his hunt.
12. I have a belief (in a few years, I'll be able to assess that belief with data) that bucks in general—and in particular bucks on feed—get better with age (i.e. 7 ½ and older). If my belief is true, *stacking* produces bigger harvestable bucks.
13. Finally, for those of you who collect wine, think about how difficult it is to open that rare bottle when you only have one or two left. When you have a case, you think nothing of it. *Stacking*—and the resulting large numbers of trophy bucks in your herd—makes it easier to make an exception and harvest a special buck at an earlier age. This happened to me a few years ago when we saw a perfect book typical 12-point on the game survey. I had shot a book non-typical, but I wanted to check the box on a book typical. Although we were confident the 12-point was only 5 ½ years old (it was the first year we had seen him), I was concerned that the buck's antlers might grow non-typical points in future years that would keep him out of the book. I ended up checking that box, but that decision was made much easier with the knowledge that we were *stacking* plenty of other large bucks.

### ***Reasons Not to Stack Bucks***

1. The big risk of *stacking* is buck mortality. *Stacking* increases the risk that a buck dies of natural causes before he can be harvested. But just as I believe that bucks get bigger with age in a fed environment, I also believe that bucks on feed

live longer (and I have *some* data to support this belief). In a protein fed environment, the risk of mortality is reduced but it is still a risk.

2. *Stacking* requires control of the property you are managing for a number of years. I would not recommend stacking on a short term hunting lease or on a property where bucks are vulnerable to harvest by neighbors.
3. In the world of finance, nothing is more true than the following phrase: “Investment, by definition, is consumption deferred.” *Stacking* is investment; harvest is consumption. Some people simply do not have the temperament to defer their consumption to a later date. But invest (or stack) and you will have more money (or more big bucks) at a later date.
4. *Stacking* costs money as you wait for the age classes to stack on top of each other. Lease payments; feed costs; overhead, etc. Some people require the payoff sooner, and I completely understand that sentiment. But the payoff from *stacking* is so huge that I am willing to stack those costs as well as my bucks.
5. Perhaps you do not care about having lots of big mature bucks in your deer herd. If that is the case, *stacking* is not right for you.
6. Similarly, if you believe the only good trophy is a harvestable trophy, then *stacking* will not be your cup of tea. *Stacking* assumes you also enjoy looking at lots of huge bucks.
7. Finally, I should address a comment that James Kroll made in the May/June 2009 issue of *The Journal of the Texas Trophy Hunters* magazine. Dr. Kroll wrote: “*Stockpiling bucks is not management.* I discovered this long ago on one of the largest and best-known ranches in Texas. Each year they manage to harvest a monster buck, but in order to do so, their hunters have to ‘inventory’ a lot of bucks—and deer have a shelf life.” [Emphasis in original.] Two points:
  - The number one risk of *stacking* is buck mortality. Dr. Kroll’s “shelf life” comment is insightful and right on point. Yet, as I mention above, I believe that protein feeding significantly extends “shelf life” and thereby reduces the mortality risk of *stacking*.
  - I am not interested in taking one monster buck per year and letting the rest simply die. I want to take (in the Stacking Table example above) ten big bucks per year. *Stacking* simply defers that harvest time for several years so mature age classes stack on top of each other. I want lots of trophy bucks to harvest, but I also want lots of trophy bucks left after the season is over.

*Stacking* is not for everyone. But for those who own land or have long term leases and who have the temperament to defer consumption to a later date, *stacking* is a powerful management tool that can completely transform the overall appearance and quality of a deer herd.

*About the Author:* Stuart W. Stedman is a businessman from Houston whose family owns the Faith Ranch in Dimmit, Webb, and Maverick Counties. He has been a supporter of the Deer Research Program of the Caesar Kleberg Wildlife Research Institute since the mid 1980’s and has been a member of the Institute’s Advisory Board since 1989.