

# Dr. Deer's™ PRESCRIPTION



## WE HAVE A BIOLOGIST— OH, REALLY?

By Dr. James C. Kroll, Ph.D.

COLUMN • COLUMN • COLUMN

Every once in a while, something just begins to get under my skin, especially when it involves my chosen profession. I don't want to come off in this column as some sort of elitist, but I have a burr under my saddle, and it's about time someone said something.

There probably is no doubt in your mind that the economic value of the whitetail deer in Texas has exploded—and in the rest of the country, as well! Interest in private deer management and breeding deer is at an all-time high. A recent economic study sponsored by the Texas Deer Association placed deer breeding in the top 10 agricultural enterprises in the Lone Star State. Estimates by other sources suggest deer hunting in Texas is a \$3 billion industry.

Whenever there is money (or ego) involved in any human enterprise, folks I call “coyotes” tend to show up. And they certainly have shown up lately to take advantage of the pickings to be had in the deer world. In particular, there seems to be a lot of people calling themselves “biologists” nowadays. But the consumer is ill-informed as to what a biologist really is. One person

recently told me, “What I've learned is you don't need a degree in biology to manage wildlife. There's just not a whole lot to learn about the subject.”

### Beyond The Dean's Paper

If you go to the dictionary, the accepted definition of biology is, “... a branch of knowledge that deals with living organisms and vital processes.” This doesn't actually help a great deal, though, so let's dig into the subject.

First of all, biologists are people who study living organisms. But the broad discipline is broken into a host of specialties, including molecular biology, zoology, botany, physiology, anatomy, etc. To be considered a biologist, you generally have to have obtained a degree (bachelors, masters, or doctorate) from some accredited college or university. Yet even with a degree, does this qualify a person to practice wildlife management? Certainly a person with a degree in molecular biology is no more suited to manage deer than a person with a BBA.

There are several prominent universities in Texas offering degrees specifically in wildlife biology or management, and here is the difference

between the two. A wildlife *biologist* program trains students to become researchers, teachers, environmentalists, etc. A wildlife *management* degree prepares you for the hands-on work of managing animals and habitat. As a graduate of Texas A&M, I certainly am biased, but there also are excellent programs at Texas Tech University, Stephen F. Austin State University, Texas A&M at Kingsville, Texas State University, and in a few junior college prep programs. Each provides quality training for its students, and I personally know many of the professors at these fine institutions. All are well-qualified to produce great students. (The University of Texas, by the way, also claims to have a wildlife degree, but it mostly is focused on zoology and ecology—read “wildlife biology.” If you are a UT graduate, don't get mad, your graduates are among the finest in these two disciplines.)

Do you have to possess a college degree to be a good wildlife manager? Certainly not! Historically, some of the most notable game biologists either have not had degrees at all or held them in other disciplines. But unless someone has a great deal of experi-

ence, I would be hard-pressed to call them a “wildlife biologist.” The converse side of this is that having such a degree doesn’t necessarily qualify one to hang out their shingle as a professional, either. The definition of wildlife management always starts with the words, “art and science of.” A degree in wildlife science or management gives a student the *science*, but it takes working under the supervision of an experienced wildlife manager to get the *art* part of the equation.

European game keepers learned this a long time ago; a young man or woman could not call themselves by that title until serving an apprenticeship for several years. Game keeping, which I consider to be one of the noblest professions, goes back some 400 years. There’s even a patron saint of game keeping, St. Hubertus, who saved the red deer in Europe from over-harvest degradation. And that leads me back to what has me stirred up so much.

Landowners come to me regularly to fix problems created by so-called wildlife biologists. Some of these guys have never had a single course in wildlife biology or management—or have spent just enough time in school to claim they did. I tell my students it is easy to pick up on the language of deer management, yet quite another to actually understand the complex principles of managing herds and ecosystems, i.e., the “art.” Learning to speak the language does not qualify a person to be hired out to manage your property and deer herd. And the result of such misrepresentation is a growing number of landowners who have spent hundreds of thousands of dollars and countless hours getting nowhere in their management program. As a consequence, I find myself more and more becoming a “renovation” specialist, fixing the problems others have created.

So what’s the solution, and how can you avoid being victimized by

these folks? When you are considering hiring a permanent employee or consultant, don’t be embarrassed to ask for their résumé. Even if the person has just graduated, as long as they’ve had field experience while at college, they may be qualified. Most universities offer intern programs, in which students work for private landowners or agencies for one or more semesters. These experiences are invaluable, and it’s fun to see a young person mature through them. Our students here at SFA work constantly in the field, and I would put them against a lot of PhDs in ability (and while an advanced degree certainly points to experience, that’s not always the case, either). Again, you should ask how much practical experience your potential employee has managing game animals, and, of course, you should ask for a list of references.

### It’s All In The Planning

Now, what should you get for your money? If you are hiring a consultant, the first and foremost thing is a man-

agement plan. I’m not talking about the fill-in-the-blank form used by Texas Parks & Wildlife Department—and that’s not said with any criticism of the agency, because the items on those forms are what TPWD needs to make its decisions. But a management plan, as laid out by a private consultant for a private landowner, should be a lengthy document, outlining the what, when, how, and where of various management activities.

Such a plan should begin with a stated goal for the project, followed by specific objectives to accomplish it. The second section should include a description of the property and its current conditions. This would include the natural and human resources available for the project, and this section commonly requires maps and aerial photographs to support the analysis.

It has been said to the point of exhaustion that there are three things involved in producing trophy bucks: age, nutrition, and genetics. (I prefer to put nutrition ahead of age, but that’s a point for a future discussion.)



D. FINE COBBIN, COLUMBIA CENTER, PHOTO

**The author not only speaks the language of deer management, he has the book learning and field experience to back up his words. Those factors combine to *earn* him the title of “wildlife biologist.”**

Furthermore, there is a fourth element: proper harvest. So the next sections of the management plan should include the current herd demographics (age and sex structures) and productivity, which relate to the age portion of the equation. The plan should next evaluate the status of the current nutritional plane of the property and should involve an assessment of the habitat and food availability. Since there is also a landscape component to deer management, the locations and distribution of the various habitat components needs to be discussed and mapped; most new graduates have received training in geographic information systems, which are invaluable components in assessing habitat quality. This section should end with an assessment of the limitations of time and space regarding nutrition.

The next section should provide an assessment of the antler quality of your

herd. I am amused by the zealots who use the term "quality deer management" and assert it is not about trophies! Yes, it *is* about the quality of the experience and land, but can you name me anyone who started out with the goal of producing mediocre bucks? To me, quality deer management is a

rather false assumption the deer residing on the property are "native" or "natural." I am in possession of the stocking records for Texas, and I'm here to tell you, with the exception of the King Ranch area, there is not a single "native" deer roaming the woods and brushlands of the Lone Star State.

---

***"I am amused by the zealots who use the term 'quality deer management' and assert it is not about trophies!***

***Yes, it is about the quality of the experience and land, but can you name me anyone who started out with the goal of producing mediocre bucks?"—Dr. James C. Kroll, Ph.D.***

---

system that produces large-antlered bucks in quality habitat, and that are killed in a quality hunting experience.

Too often I hear from biologists who assert the landowner should live with the genetic limitations of his herd. The premise behind this is based on the

They *all* were stocked, so give up on that argument. Further, deer herds, especially those on smaller properties, can have genetic limitations that prevent you ever from producing large-antlered bucks; sometimes you just get the luck of the draw. And some areas

have been so heavily harvested that the genetic potential has degraded beyond the point of recovery. So you see it is necessary to include a quality assessment regarding genetics in your management plan.

The next plan sections involve the real meat of your endeavor. They should include a series of prescriptions as to how, when, and where to conduct recommended practices. Keep in mind that I chose the word "prescription" carefully. You go to the doctor, he diagnoses your problem, and then he gives you a prescription to take to the pharmacy. On the bottle and written material there are detailed instructions about how much medication to take and when to take it. If you do not read this information or there is a mistake in the directions, the results could be fatal. Likewise, a management plan should include "prescriptions" as to what you should do, where you should do it, and when. I tell my students that the adage about the word "assume" is very true when it comes to a wildlife management plan. A biologist never should assume anything but basic

knowledge on the part of the landowner, and, therefore, every term should be fully defined.

Lastly, a management calendar is a handy addition to a management plan. The Texas A&M Extension Service has produced some very useful management calendars for a host of topics, including wildlife.

### **There Will Be A Test**

I tell my students that landowners always ask two questions. The first is: "What is it going to cost?" The second: "What am I going to get in return?" The correct answers to these queries should be important to anyone who wants to make an investment in their land and deer herd, but where they really become important is when the landowner's goal is to produce a profitable hunting or breeding operation.

A biologist should be well-versed and up to date on current operation costs and the efficacy of recommended practices, so if you're looking for a competent biologist and manager, they'll have those numbers. As for the second question, a landowner who

gets an answer of "Well, it's the right thing to do" should see lots of red flags. I have seen private managers and consultants get landowners to do some ridiculous things that cost tons of money and accomplish nothing. You do not want to find out five years down the line that what you're doing amounts to nothing more than a black hole your money is disappearing into.

When a landowner tells me he has hired a biologist, the first thing I try to determine is whether that person really is one—or at least is experienced enough to act like one. I hope you now understand why I get so testy when I discover the guy calling himself a biologist is just some Jake Legg who simply likes to hunt and fish for a living! I am not saying that only people with degrees in wildlife biology or management are qualified to serve as consultants or be hired to manage properties. Far from it! But I am stressing that folks should not throw the title "biologist" around lightly. It is not synonymous with ranch manager or landowner agent. 