Dr. Deer's™ PRESCRIPTION

Show Me The Data

By Dr. James C. Kroll

In science there are few laws and rules, as the scientific method is a brutal taskmaster to please. There is no room for dogma in science, only cold, hard data critically analyzed and repeatedly tested by the scientific community. One of my best friends and colleagues is Dr. Larry Redmon, Texas A&M University state forage specialist, whom I have credited with what I have named, "Redmon's Rule: Show me the data!" Unfortunately, science has become a political sport driven by sociological and philosophical agendas, and the scientific method is a victim in the process.

In 2011, Wisconsin Gov. Scott Walker appointed me Deer Trustee—or "Deer Czar"—to fix the Badger State's many problems in deer management. At issue, a public increasingly unhappy with the Wisconsin Department of Natural Resources actions related to deer management and hunting. The agency had lost most of its credibility with anyone but the local community of government scientists and academicians. Wisconsin is credited as the birthplace of modern wildlife management, since Aldo Leopold was the first to develop the underpinnings for managing wildlife. The wildlife management establishment looked upon Wisconsin as the highest example of the application of science to wildlife management. How could the public then lose faith in folks who claimed to apply scientific principles credited to Leopold in the stewardship of the Wisconsin deer herd?

The issues were many, but the single most culprit was use of an Excel spreadsheet model of deer populations, based on the proportion of yearling bucks in the harvest. Each year, DNR modelers would estimate the harvest demographics, plug them into the model, and "divine" a population estimate for each management unit. Subsequently, what often was viewed as draconian measures were imposed on landowners and hunters in management units where the herd was deemed too high. This gave rise to "earn-a-buck," which dictated hunters had to take



Mark L. Berry Photos

an antlerless deer—as opposed to female deer—prior to being allowed to kill a buck. Although this strategy has been shown to work on private lands, applying it to public hunters was the last straw for most Wisconsin hunters.

In addition, what was "too many" deer was determined by an arbitrary and dated assessment of the amount of deer habitat present in each management unit. We discovered these determinations were founded on a quarter century old remotely sensed evaluation of habitat types. Grasslands often were not interpreted as "deer habitat." I was amused at this because the bucks I have been hunting in Kansas and the Dakotas would find it amusing that where they live was *not* deer habitat.

Our greatest surprise during this process was that, when we asked for 37 sets of data related to sound decision-making to deer management, the agency came up seriously lacking. If you ask any reasonably competent deer biologist what data are needed to make sound management decisions, the list would include the items we requested. In all the surprises we discovered during my Deer Trustee tenure, this was the most devastating and disappointing. With this introduction, let's talk about what deer management should be about, whether on public or private lands.

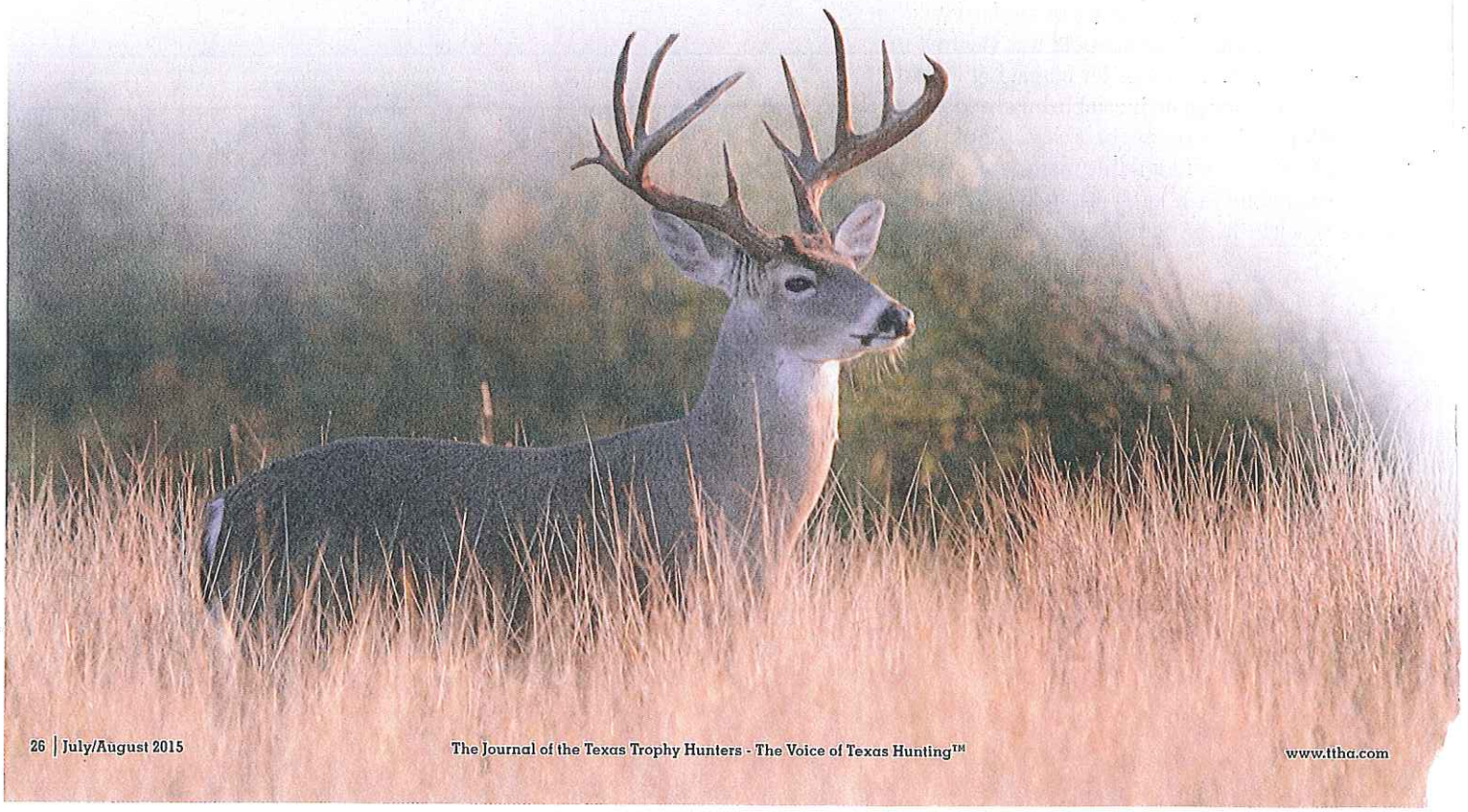
Private Land Management

Did you know that 80 percent of wildlife lives on 60 percent of the land? Private landowners control the vast majority of wildlife habitat. Yet, on my first evening in Wisconsin, at a social dinner arranged by me to calm agency fears, one of the top agency folks said: "I believe considering private land management is a violation of the North American Wildlife Model!" I dropped my fork! In subsequent years, I have discovered this attitude prevails among state and federal biologists, even in the great state of Texas. There is a reluctance to include private lands in the management process.

Chief among our final recommendations to Gov. Walker was the development of a Deer Management Assistance Program (DMAP), aimed at involving the public and private landowners in deer management. This would include the acquisition of biological data on which to base decisions. Dr. David Guynn, a member of my team, founded the concept when he served as a professor at Mississippi State University. Working with a colleague, Dr. Harry Jacobson, Dave pioneered a program that would change the way deer are managed in many states. Texas was one of the latest additions, but calls its program the Managed Lands Deer Permit (MLDP).

The "genius" of Dave's program lay in four components. First, he and Harry developed a research and education program aimed at needs developed through public input. Second, existing and newly acquired information was shared annually with user groups and cooperators. Next, training would be provided to private managers and landowners in data acquisition—census, demographics, reproductive performance, etc. This would require relinquishing some of the power held by professional biologists to the "unwashed" public. Finally, the greatest accomplishment of the DMAP lay in *timely* development of annual reports to cooperators, which informed them of progress in each program, and compared each to the whole. This opened the door magically to biologists because cooperators wanted to know why their program was not as good as others. For example, one cooperator might discover that his lactation rate trends—a conservative measure of fawn crop—were not up to the other cooperators in his geographic area. "Well," a biologist could say, "maybe it is because the others harvested the recommended number of does over the last several seasons."

The DMAP was a soft way to get people to do the right thing for deer management, rather than the heel of the agency dictating what would be harvested and when. Furthermore, who could challenge the reliability of data, when cooperators were intimately involved in the collection of these data? In essence, this created a group of "citizen scientists." Some cooperators even became involved directly in research projects, sometimes underwriting costs. Here at the Stephen F. Austin State University Institute, we enjoyed the same benefits when multiple landowners and individuals supported physically and mon-



etarily our landmark antler research in South Texas.

In the late 1970s I was simultaneously developing a similar program—the East Texas Cooperative Deer Management Program (ETCDMP)—here in East Texas, so you can understand my excitement when I met Dave and Harry through the newly formed Southeast Deer Study Group, made up of a bunch of young southern deer biologists and managers. I quickly adapted my program to mimic the Mississippi model. The program proved successful, and later handed over to the numerous wildlife managers being hired by the timber companies. Unfortunately, some of these failed rather quickly because of a single flaw; they did not give timely feedback to the cooperators. It's easy to give a seminar to a bunch of avid deer hunters on the principles of deer management. And, it was easy to get caught up in the "heady" feeling of being viewed as an expert. Yet, it's quite another to follow up on your promises. Once cooperating hunting clubs learned they would not gain insight from joining, they began to fall to the wayside.

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Return to Redmon's Rule

Many years ago, I was curious about why hunting lease owners had to keep a record book and turn it in each year or be in violation of the law. I asked the question because I realized nothing ever came from these records. The answer was staggering. When all said and done, the records had been stored away in the basement of the John H. Reagan Building—at the time, the home to Texas Parks and Wildlife. When I asked why the data were not being used, the answer was equally frustrating: "Because you cannot rely on the data collected by the public." Then why on earth require something you do not intend to use?

If there is anything I have learned during four decades of practicing wildlife management, it's that professional biologists believe they are the only ones qualified to collect data. Yet, my experience during ETCDMP and since has been there are folks out there who are far better at collecting accurate information, in spite of not being professional biologists! This especially is true when the people involved have a vested interest in improving deer management on their land.

The number of annual reports produced for the public from DMAP data has diminished over time; and as a consequence the interest in such programs has declined. Texas continues to increase its number of participants, because the MLD Program has been tied to "carrots" such as increased harvest and expanded seasons. What has happened in Texas is *exactly* what I predicted. The popularity of the program is its own worst enemy. One of the reasons behind the founding of the Texas Deer Association was TPWD used a heavy-handed approach to implementation that required properties to undergo a browse survey each year to determine if each property was overstocked with deer. I worked closely with Dan Lay, the developer of the evaluation system, here in eastern Texas. It was a useful system, but developed by Dan in a region that had a moderate climate. Application of his system to other ecological regions was foolhardy at best, especially in areas such as South Texas. In retrospect, our objections to having to allow biologists on your land in order to keep MLDP was unwarranted, since we should have recognized the popularity of the program soon would outstrip the ability of the agency to support it. Browse surveys are rarely seen now days.

The bottom line—we are missing out on the powerful tool a DMAP program can be, especially on private lands. Each year, cooperators should receive feedback via a written report on progress, as well as a sit down meeting to discuss progress, even if it's in the form of a large group meeting. At present for many participants it remains a "black hole," into which data are dumped and feedback never comes; not to mention lost opportunity to effect changes in a geographic context.

We have to accept a program like MLDP or DMAP is well worth the investment, provided it is well funded, and it allows timely feedback to participants—the cooperators. In some states, consultants are taking up the slack, and that's probably a good approach, provided the landowner, the consultant, and the state biologist work in concert. It also depends on the quality of consulting professionals. Just saying you are a "biologist" does not make the grade. In Texas, there even are people calling themselves "foresters" who are nothing more than timber buyers. Lately I see a more cooperative attitude toward private managers, and that's encouraging. What I would like to see is a system in which the state biologist serves as a coordinator and compiler of data and disseminator of information. Information systems, modeled after the old Mississippi program, should be established regionally that produce timely results to cooperators via print and digital media.

Deer management is a partnership between the landowners who control much of the deer habitat, hunters, and biologists who generate trust and faith in information and data. Involving the public in research and data acquisition is the fastest way to improve management and develop this trust.