BUILDING YOUR OWN
'DEER FACTORY'

Growing Deer Forage In Tough Conditions

Even in places that don't seem well-suited to food plots, you can provide your herd with better nutrition if you put your mind to it.

by David Morris

Before 1995, I thought I knew all of the most avid whitetail enthusiasts in the world. Then I met Gary Schwarz.

Gary's an oral maxillofacial surgeon by profession, but by love and by choice he's among the most dedicated, knowledgeable and innovative deer managers around. And as his El Tecomate Ranch in South Texas attests, he's among the most successful.

One of the great things about Gary's story is that he started with nothing, not even an acre of land or a dollar with which to buy one. While he was still in dental school, Gary and several friends got loans to buy ranch land. Over the years, by using conservation easements to provide tax relief to help in the purchase of land and ensure long-term protection of the habitat, Gary added more acreage, some on his own and some with partners. Today, Gary's own ranch, El Tecomate (Take-Oh-MOTT-Ay), is around 3,000 acres.

MAKING THE DESERT BLOOM

Even in Texas, where intensive deer management began, Gary's the leader in utilizing a food-plot-based nutrition program. His ascension to that position took time, creativity, hard work and a lot of experimenting, often in the face of steadfast insistence that what he was trying to do simply wouldn't work.

That skepticism wasn't without basis; few other regions present greater challenges for food plots than does hot, dry South Texas. That's one of the reasons I'm profiling Gary's program here in our series on private-land deer management. If agricultural food-source management will work here, it will work practically anywhere.



Dr. Gary Schwarz of Texas, shown in one of his cool-season food plots, has led the way in bringing year-round food-source management to an arid region. Photo by Glenn Hayes.

This wild El Tecomate buck, aptly called "Heart Attack," owes his size largely to Gary's food-plot program. Deer here have bigger bodies and racks than those on other local ranches. Photo by Glenn Hayes.

SIZE *DOES* MATTER!

In recent years, Gary's nutritional program has grown buck after buck big enough to win top honors in Texas trophy contests. His success even has been documented by scientific studies, the results of which are nothing short of startling. *In a three-year study of mature bucks, those on Gary's land averaged 20 Boone and Crockett points larger of antler and 26 pounds heavier in field-dressed weight than those of like ages on neighboring leases!*

Think about that. Twenty points — that's the difference between a 130 and a 150 or a 150 and a 170. To a trophy hunter, that's all the difference in the world! And that was four years ago. Today, the difference is even greater!

El Tecomate produces an astounding number of 160-class bucks and no small number of bucks topping 170. Plus, mature bucks typically run from 210 to 230 pounds on the hoof, which is virtually unheard of in South Texas.

In '97, Gary's daughter, Rebecca, shot a "management" 8-pointer that grossed 162 points and weighed 240 pounds, setting an all-time record in the youth division of the Muy Grande contest, one of Texas' biggest deer contests. And get this: Her buck beat the long-standing weight record held by none other than her brother, Blair!

Gary's success with food plots has drawn so much attention that he was literally forced into starting a seed company to help other deer managers obtain both the drought-tolerant seeds and the expertise in dry-land farming necessary to make food plots really work in this region. Joining forces with Fred Schuster, a professional farmer in the Rio Grande Valley, and Dr. Tim Fulbright, a wildlife biologist and range scientist with the Caesar Kleberg Wildlife Research Institute, Gary put together a team committed to helping

private-land managers succeed. Thus was born Tecomate Seed Co. (Rt. 2, Box 77A, Dept. WT, San Juan, TX 78589; 1-800-332-4054), which is headed up by Fred.

How did Gary achieve results that have caused even die-hards in this great deer state to sit up and take notice? Interestingly, his overall management strategy is essentially the same as the one used so successfully at Fort Perry Plantation, ***WHITETAIL***'s own deer-research facility in Georgia. Gary's program revolves around meeting the herd's year-round nutritional needs with cool- and warm-season food plots. How he has to go about it is what makes his program different.

Every place has farming limitations. In the South, these often include acidic soils and low nutrients, best solved by liming and fertilizing. In South Texas the big problem is a lack of rain, best solved with drought-tolerant plants and farming techniques that conserve moisture. No matter where you are, herd-management principles remain the same, but how you get food to the deer definitely varies by locale.

THE "MAGIC BEAN"

Hoping to find a great warm-season protein source, Gary tried many readily available plants, including cowpeas, soybeans, alfalfas and clovers, using standard farming techniques. But at best, he met with only modest success. South Texas' hot, arid climate called for plants better suited to dry-land farming in a hostile environment.

The quest eventually led Gary to Australia and a drought-tolerant annual forage legume called lablab, which is similar to cowpeas and soybeans but thrives with far higher soil pH than those plants prefer. Later testing showed lablab to be a great choice for South Texas; deer eagerly ate the high-protein forage and flourished on it.

What at first might seem to be a negative regarding lablab actually turned out to be a positive. Gary selected a variety, now trademarked Tecomate Lablab, that does *not* readily go to seed in his area. Why is this significant? Once an annual goes to seed, it loses much of its nutritional punch, having completed its mission in life. Cowpeas go to seed in 80 to 90 days, but lablab, which can be planted as early as late February in South Texas, continues to provide nutritious feed into December or first frost. Yes, Gary has to buy his seeds from Australia every year, but to him the tradeoffs are well worth it.

Still, even with lablab in hand, there were hurdles to overcome. One, farming techniques had to be refined to maximize the use of limited water. Two, lablab is a dicotyledon (as are soybeans and cowpeas), so its growing point is above ground. That makes it vulnerable to overgrazing during the first few weeks of growth. Of course, the latter problem could be reduced by lowering deer numbers (inconsistent with Gary's management objectives) or by planting enough acres to minimize early grazing pressure on the crop.

Planting plenty of acreage is what we at ***WHITETAIL*** have opted to do at Fort Perry Plantation, but that wasn't an option for Gary, due to his limited tillable land. To keep deer out during the critical three or four weeks lablab is vulnerable, he tried a "reversible" mesh-wire high fence around his plots. He finally settled on a fence 78 inches high, consisting of a 32-inch lower



section and a 47-inch upper section with an inch of overlap. When the lablab is large enough to withstand grazing, the lower panel is raised to let deer come *under* the fence.

Gary met his cool-season needs in the same way: He searched for better-suited plants and experimented. In time, he came up with several options that worked and finally settled on one mix as the staple on his ranch (at least for now). He calls it Tecomate Dual Deer Mix, a blend of several winter grasses, including wheat, oats, triticali and ryegrass, plus such legumes as Austrian winter peas, clovers, vetches and even alfalfa. The grasses address winter carbohydrate needs, and the legumes give deer a leg up on their early-spring protein requirements.

Food plots are backed up with free-choice supplemental feed: soybeans, cottonseed and high-protein pellets in the warm season and corn in the cool season. Gary views feed purely as a safety net, and he wouldn't use it at all if he could plant more land. But limited tillable ground restricts his food plots to 4.5 percent of the ranch's acreage.

Before we get to an overview of El Tecomate's basic program, I should say that what we're going to talk about is just one of several configurations that will work. Gary has other plants and plant mixes that have proved themselves as well, most notably Tecomate Buck Grass, Monster Mix and DQP (Deer and Quail Peas), a warm-season vining-type legume that provides over 20 percent protein.

These plots aren't vulnerable to early overgrazing, and DQP will survive the winter if temperatures don't fall below 28 degrees. Still, for now, lablab and Dual Deer Mix are the staples of Gary's program, so that's what we'll look at in our example. The point here is to see how one manager has improved his herd's nutrition. The specifics of this food-source system might not apply to you, but the principles certainly will.

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Gary's herd-management strategy is basically the same as with any other serious trophy program: (1) protect the younger bucks; (2) maintain a tight buck:doe ratio; (3) control herd size through aggressive doe harvest; and (4) limit the total buck harvest to ensure the presence of many older males. (The ranch actually takes few of its top deer, instead focusing on "management" bucks: mature 8-pointers and other older bucks lacking top-end potential.)

BANKING MOISTURE

OK, back to the nutritional strategy. Right up front, Gary had to find a way to overcome the greatest challenge of growing food plots in South Texas: a shortage of water. This required special dry-land farming techniques.

Using some old farming methods and some new ones, Gary came up with his own strategy for "banking water." At its heart is deep tillage, creating an 18- to 20-inch layer of soft, absorbent soil. This layer, prepared weeks or even months before planting, acts as a "sponge," soaking up rainfall and holding it above the hardpan but below the level at which sun and wind otherwise would suck it away. Even an inch of rain on this absorbent layer of soil can yield a good crop of lablab!

Continued on page 64



(Sandy, loamy soils are best for banking moisture. Heavy clay soils need irrigation and/or more rain and aren't as suited to dry-land farming.)

THE PROGRAM AT WORK

Gary normally plants lablab as soon as the danger of a freeze is over: late February or early March. Deep tillage in preparation for planting is done from mid-August through December, but the risk increases as time passes.

Once it rains, Gary either *lightly* tills the plot again with a field cultivator or applies herbicides to control weeds and grasses that would draw out precious soil moisture. Finally, when the time is right, he plants lablab with a row-crop planter at a rate of a seed per 8 to 12 inches (8 to 10 pounds per acre). The fence keeps deer out for three to four weeks until the lablab is well-leafed.

Gary wants a field ready for grazing by the first two weeks of April. To encourage rapid growth and curb weed competition, he normally cultivates the crop a time or two. The result is a stand of up to 8,000 pounds per acre of highly digestible lablab with 25 to 30 percent protein that will put bigger antlers on bucks and boost does' milk output. And this in a place long thought incapable of consistently growing warm-season crops!

The need to bank moisture prior to the spring lablab planting obviously curtails Gary's ability to double-crop warm- and cool-season crops on the same acreage, as we routinely do at Fort Perry. During wet years, double-cropping certainly can be done at El Tecomate; the problem is, you don't know in advance when it's possible.

Gary can plant a winter crop prior to planting lablab and take a chance that sufficient winter and spring rains will replenish moisture used by the winter crops. Or, he can play it safe and plant the winter crop on another plot, letting the awaiting lablab field bank fall moisture for spring lablab planting.

Gary's done it both ways but prefers to bank moisture to maximize lablab success. Fortunately, due to the thrifty nature of South Texas deer, the long growing season and high productivity of the native habitat, even without double-cropping less acreage is needed to achieve astounding results here than in many other regions.

The Dual Deer Mix planting isn't quite as critical as the lablab planting, as cool weather stretches out fall soil moisture a bit. Still, Gary's best results come when he deep-tills in mid-August through early September to capture moisture prior to planting Dual Deer Mix (using a grain drill and a planting rate of about 30 pounds per acre) in November or early December.



Lablab, an Australian legume like soybeans and cowpeas but better-suited to South Texas, is Gary's warm-season staple. Photo by Glenn Hayes.

Why so late? Earlier plantings, while feasible in cooler, wetter climates, are likely to suffer from heat and lack of moisture in South Texas. By waiting to plant, much higher productivity can be expected. True, the benefits of the plot as an attractant early in hunting season are lost, but the main goal of Gary's fall planting program is to provide nutrition to overcome the effects of a stressful rut. (In South Texas, the rut is later than in most other regions.)

Even in this region, it's possible and practical to follow a warm-season crop with a cool-season one. The warm-season crop can be plowed under and deep tillage done in, say, September, leaving time to bank moisture before the late-fall planting. Gary frequently does this but sometimes lets the lablab stay later into the fall and plows it under just prior to planting Dual Deer Mix. Moisture is the deciding factor. When following lablab with Dual Deer Mix, Gary usually foregoes planting lablab in that field and instead lets the cool-season mix carry over into the warm season, when it does well.

3.5 DEER PER ACRE!

It's interesting that, despite differing farming techniques and forages at Fort Perry and Tecomate, the number of deer that can be supported in optimum health on an acre of food plot is the same at both: 3.5 deer per acre of plot!

The dynamics involved in getting there are very different, of course. In Georgia, where Fort Perry is located, high-quality natural browse is limited for much of the year, but a friendly farming environment allows for efficient two-crop farming with little downtime between crops; thus, the great majority of the herd's year-round diet is derived from food plots.

South Texas' native plant community is more nutritious than that of the Southeastern U.S. and is better able to pick up the slack between plantings or when crops suffer from heat/drought. Native browse and forbs typically make up a higher percentage of the diet on Gary's ranch, though his deer feed heavily on crops when they're available.

Knowing how many deer an acre of food plot will support helps you set specific population goals and/or your total acreage needs for plots. It even can help you determine placement, distribution and sizing of individual plots (as we'll discuss next month).

Yes, the El Tecomate program takes work. But look at what it produces. One of Gary's 20-acre warm-season plots can yield over 160,000 pounds (80 tons) of highly nutritious deer forage annually! At $300 a ton, that amount of high-protein pellets would be $24,000, not counting the cost of feeding it. Once your food plots are set up, the annual cost of planting is a fraction of that, and good plots actually produce bigger deer than pellets do.

With just 4.5 percent of its land area in food plots, El Tecomate supports a deer per 6 acres (more than 100 per square mile) and has jumbo body and antler size to go with that high density! Is it worth it? Gary thinks so . . . and so do a growing number of other folks, both in South Texas and elsewhere.

(Editor's Note: Much of this information has been adapted from David Morris' newest book, *Advanced Strategies for Trophy Whitetails*.)