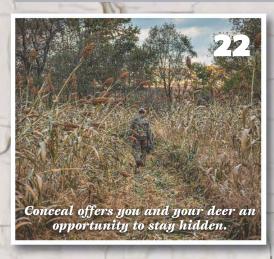


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by Scott Bestul

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8 Food Plots in a Sea of Corn and Beans

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**PowerPlant: Specifically Designed** to Produce Massive Tonnage of Spring/Summer Protein for Deer

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PowerPlant provides abundant protein during spring and summer and is also highly attractive to deer. It also provides excellent cover for deer.

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## A Message from RAY SCOTT

Founder of the Whitetail Institute of North America





Walker (L) and John-David Scott add their venison to the family freezer.

## **Keeping the Hunting Legacy Alive**

ost outdoorsmen agree that the single greatest danger to the sport of deer hunting today is falling participation. Fewer people are hunting for a lot of legitimate reasons.

Unfortunately, however, fewer permits affect state and federal dollars that support many hunting and environmental programs.

Paradoxically at the same time that hunting permits are falling, the knowledge and the intensity of hunters are escalating. The Whitetail Institute is the prime example of that. The dedication and enthusiasm of our field testers continue to grow. It's an interesting phenomenon!

At the end of the day, though, I think it falls to all of us to try to bring more hunters — especially youth —into the sport in any way possible.

That is why this year I have watched my youngest son "little" Wilson with great interest now that his two older sons are 6 and 8 and are getting into hunting. Big time. I'm happy to say he is determined to leave a hunting legacy.

I had the privilege of training him up as a hunter so I have watched with interest as he is doing the same with a good bit more strategy and a whole lot more patience.

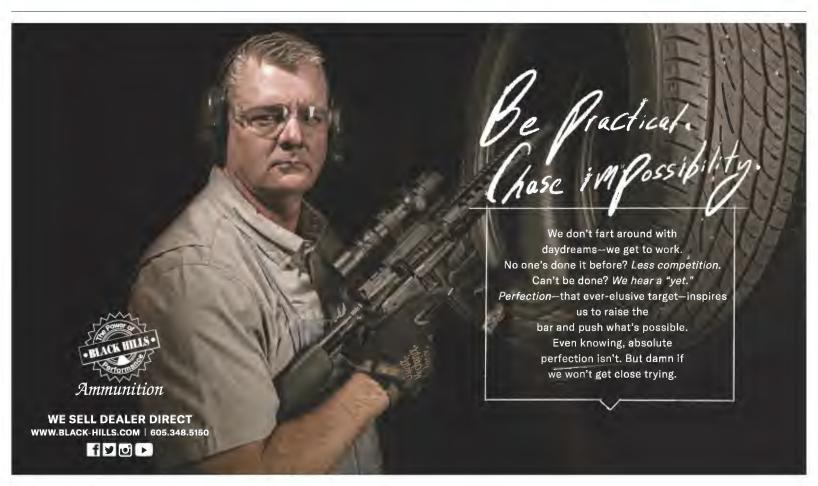
From the earliest days he has taken time with them in the woods from general exploring to camp outs, and later to let them help as he plowed, mowed, seeded and worked with the farm equipment. Of course he patiently introduced them to appropriate weapons starting with Red Ryders and a few unfortunate birds and squirrels and working up to their 243s.

This past opening youth season was gratifying for us all. On opening day my 8-year-old grandson John-David shot his second deer and the following week his 6-year-old brother Walker shot his very first whitetail.

The grand finales however were the trips to the processor to watch their very own deer being processed.

It was a really big day when dad brought the meat home in carefully separated grocery bags and they were able to put their own labeled meat in the freezer. They now know it's their job to help "fill the freezer" as they eat venison all through the week and all through the year.

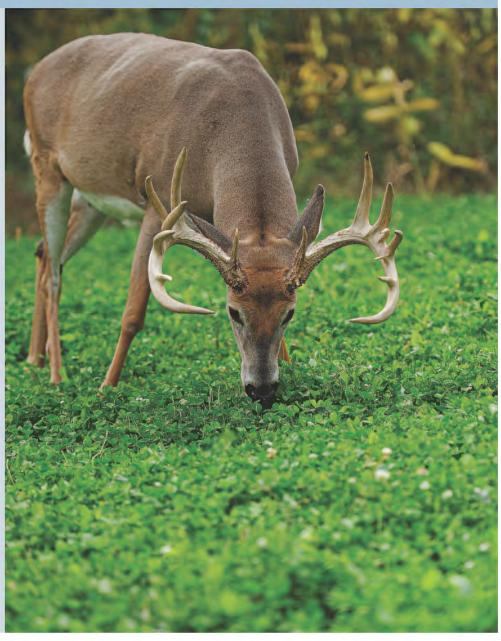
Ray Scott



## FROST-SEEDING: Howto Boost the Performance of Your Perennial Plots

By Scott Bestul Photo by Charles J. Alsheimer

've planted plenty of clover plots, but this one was special. I always start my favorite phase of the year — trailcam season — about July 4, and perennial plots are among my favorite sites to hang the season's first cameras. When I walked into the one-acre plot of **Imperial Whitetail Clover** to get the festivities started, my jaw dropped at the lush and seemingly perfect clover I had to wade through to reach my camera tree. The plot was covered with emeraldgreen clover and apparently devoid of weeds.



As I admired the gorgeous growth, I could think of only one thing that distinguished this clover plot from the many I'd planted; I'd frost seeded it several months before. Here in the upper Midwest, March and April flirt with the seasons others know as spring and winter. And that's when I'd visited the plot, broadcasting clover seed into a landscape dotted by patches of snow, swatches of dirt and blips of gray-green clover from the previous year's crop. I'll be honest; as I paced across that plot, my hand-crank seeder pitching tiny clover seeds into the mix of dirt-snow-green, I felt like I might be wasting time and money. How could those seeds take root in what seemed like a hostile environment?

Yet the result proved my effort was worth it. Instead of casting seed into a quagmire, I'd given a perennial plot the boost it needed, turning it from a solid performer into the stuff of which dreams are made. As I hung my camera that day, I knew I'd be getting pics of whitetails attracted to the best green food source in the neighborhood.

### Frost Seeding ABC's

Frost seeding is, as the name implies, applying seed to a plot when winter has barely left the landscape. In the upper Midwest, that usually means March or April, when the season is continually fluctuating between winter and spring. Soil temps might flirt with the freezing mark during the early morning, warm during the day and then plummet again when the sun hits the western horizon.

Although it might seem counter-intuitive, those soil conditions provide the ideal conditions for broadcasting seeds. As soil temps fluctuate between freezing and thawing, the Ferris Wheel cycle results in excellent seed-to-soil contact. When moisture in the top layer of soil freezes, ice expands upward, carrying soil with it. This heaving process helps work seeds such as clover and alfalfa into the soil, basically the same way cultipacking does. When spring temperatures are finally right, the seeds will germinate. The result is a boost in plot productivity that might not have been possible any other way.

### Proof is in the Pudding

One hardcore whitetail hunter and manager, and long-time Whitetail Institute fanatic, uses frost seeding on a consistent basis. Jason Say of Pennsylvania, owner of Wired Outdoors, said the practice has given new and extended life to his perennial plots.

"I totally get how easy it is to be skeptical of seeding when the weather is hopping between winter and spring," he said. "But frost seeding has not only allowed me to establish the best perennial plots but to maintain them for more seasons than any other method."

Say has maintained clover plots for six or seven seasons, thanks to a regimen that includes frost seeding.

"I frost seed even the lushest clover plots on my ground," he said. "The conventional wisdom is that you frost seed to take care of bare spots in a plot, and you can certainly do that, but I'm convinced that frost seeding gives even the best plot a boost that will not only make it better that year but also for years to come. I plant dozens of plots a year, and I've been at this for a while, so I've had a pretty good chance to see what works and what's less effective."

### Make it Work

As noted, the ideal time to frost seed is at the tail end of winter.

"Most of my plots are at home in Pennsylvania, and for me, that time is usually late March or early April," Say said. "You want that freeze-thaw cycle that keeps the ground heaving and settling, which works the seed into the dirt and results in the best seed-to-soil contact. I seed the entire plot at the normal rate advised on the bag, though I do add some extra seed if I have a bare or thin spot that I'm worried about."

Another advantage of frost seeding is that the new seeds germinate and grow quickly, which helps retard weed competition.

"Clover seed does very well in damp and cool soil," Say said. "So that clover gets a jump-start on the weed growth in spring, long before a lot of weeds even get going. And since clover is pretty aggressive it can make life tough on weeds, which is fine by me."

"There's a segment of hunter/managers out there who say, 'What's the matter with weeds in a plot? I see deer eat weeds all the time," Say said. "Well that's pretty ridiculous in my mind. Nothing provides more and better nutrition for whitetails than clover, so I want as much of it growing in my plot as possible. Plus, I think the weeds-are-nobig-deal thing is just an excuse for laziness. If you can't maintain your plots, don't do as many."

In addition to frost seeding, Say relies on a combination of mowing and herbicides to eliminate weed and grass competition.

"I just try to keep an eye on my plots and look for any weeds that are getting ahead of the clover," he said. "My preferred method is to spray early competition with Arrest Max or Slay which really knocks the competition out. If some weeds get lucky and survive, I come back and take care of them with mowing. Once again, there's no cookiecutter recommendation on mowing. Some plots need clipping just once a year. Others I'll hit two or three times. You just want to take the tops off the plants, not an aggressive mowing."

### Think Outside the Box

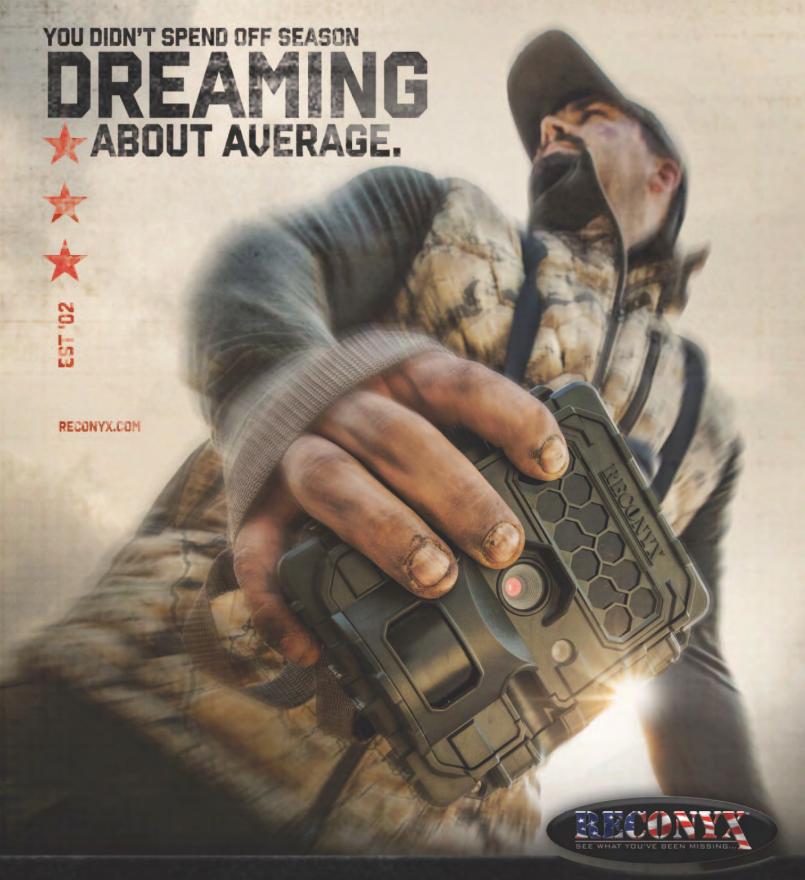
Always willing to experiment, Say has even used frost seeding on annual plots he plans to convert to perennial growth.

"This is something I've been trying for the last few years and, while it's no guarantee, when it works, it works really well," he said. "The absolute best scenario is when your annual plot has been hammered by deer during fall and winter, which isn't uncommon in my area. This results in essentially a bare-ground plot that is perfect for frost seeding. There's excellent seed-to-soil contact, and as soon as the soil warms up, your clover is growing."

One of the main advantages of the practice is minimizing weed competition, Say said.

"You're not turning dirt and disturbing the soil, which almost always seems to get weed seeds up and going," he said. "If those clover seeds get a good head start, you can get a really nice and lush clover plot without a lot of effort and equipment use. Like anything in food plotting, frost seeding an annual plot is no guarantee, but I bet 70 percent of the time I can convert an annual plot into a really nice perennial this way."

Sowing clover before most songbirds have returned and turkeys are only thinking about gobbling might seem crazy at first, but as more hunters are learning, it's also an excellent way to boost — or even start — a clover plot that could be your best whitetail magnet.



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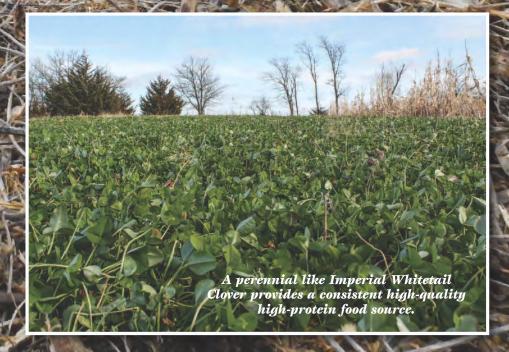
# FOOD Plots in a Sea of Corn and Beans

By Matt Harper

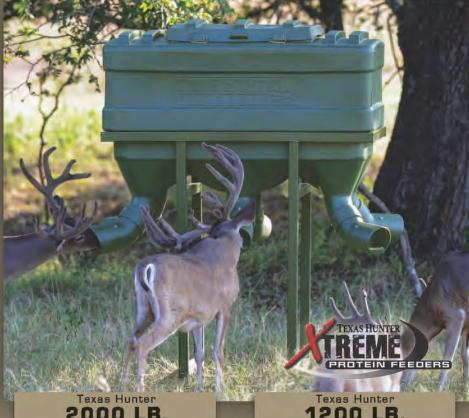
Photos by the Author

Perspective is curious. It can produce various viewpoints of images, activities, beliefs, opinions and values. Take golf, for example. I don't consider myself a golfer, but I enjoy hacking the ball around on a nice summer day. To me, golf is something fun but not an activity I take that seriously. Sure, I might get a little upset if I play poorly, but a few good drives in the round make it a good outing. I have friends, though, who take golf very seriously. They might have fun, but they're more concerned about their score than my concern, which is the current inventory in the cooler.

After harvest very little is left behind for deer in this agriculture field.



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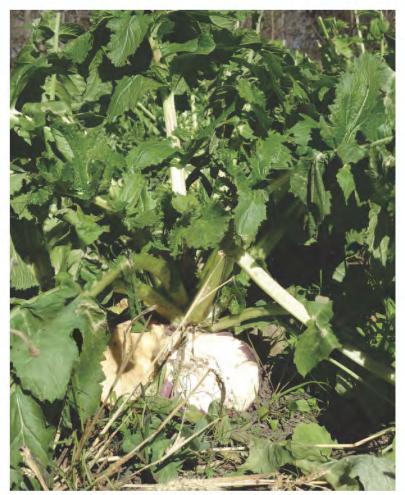
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The hunting world is also full of variations derived from various perspectives. For example, the elements that constitute a trophy buck in Alberta will differ from those in Florida. Some factions consider body weight or the age of a buck a better determinant of trophy caliber than the score of the antlers. A person's preferred method of hunting can also be influenced by perspective. Whether they favor bow, rifle, spot-and-stalk or sitting in a tree stand can be partially attributed to the perspective of how they grew up hunting, their years of experience or even the region they hunt. If you hunt deer in the Western states, sitting in a tree stand might seem like a crazy idea, second only to using a bow instead of a rifle.

One interesting perspective I often hear comes from folks who hunt outside the agriculture-rich Midwestern states. To someone who hunts woodland or grassland bucks, food plots make sense. But when they think of the Midwest, they frequently say, "Why plant food plots when there are thousands of acres of corn and beans all around you?" Even though I live and hunt in Iowa, I understand their perspective. If food is abundant, why would you need to plant another food source? On the surface, that's sound thinking. If countless acres of food are available, why add more? However, like most things, a perfunctory observation does not always tell the entire story nor result in an accurate conclusion.

I'm not saying agricultural crops such as corn and soybeans provide no benefit to deer. Far from it. Food in any form is better than no food and whitetails obviously use corn and beans. Compared to a habitat



Tall Tine Tubers provides both leaves and roots for deer to utilize during both the early and late hunting seasons.

with less food, agricultural areas typically produce bigger deer and have a carrying capacity to support a larger deer herd. But if you rely on corn and beans from farmers for nutritional management of your deer herd, you will notice some large gaps and shortfalls.

Do corn and beans supply the best nutrition for deer, and is it supplied when they need it? Does a deer-flooded August soybean field suddenly turn into a barren ground of stubble and pods during hunting season? It's important to understand that farmers don't plan crop production around management strategies for deer. Any benefit is ancillary. What was 200 acres of energy-rich winter survival food for deer swiftly becomes a sea of cornstalk shreds. If you want to manage your herd's nutrition and optimize hunting success in farm country, you must take matters into your own hands.

### **The Nutritional Aspect**

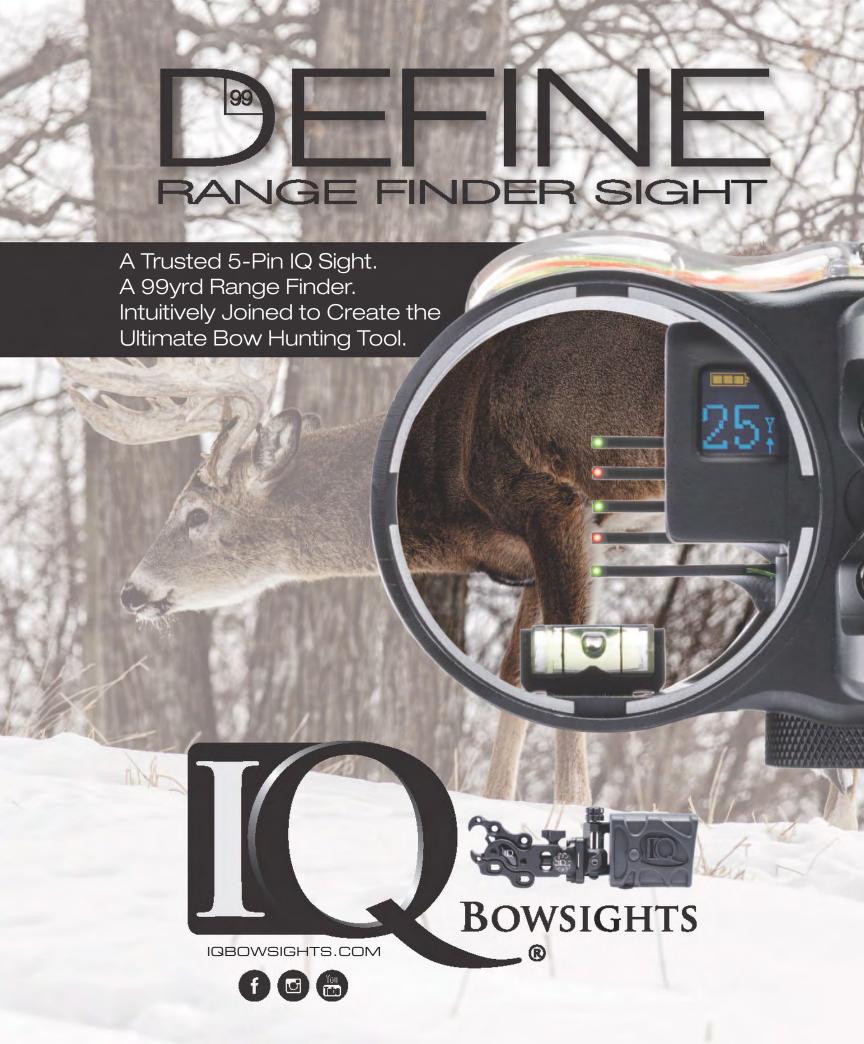
Deer eat 365 days a year. That's not news or a cutting-edge biological insight, but most hunters don't think about that — even most diehard hunter/managers. During the off-season, deer become out of sight, out of mind, as other facets of life take over, pulling our attention away from deer management. But to manage your herd properly, you must continuously be in tune with the nutritional needs of deer and what can be done to manage for those needs.

Spring brings new life to deer with a fawn crop and budding new antlers. Both spur the need for high-quality nutrition to maximize potential. Energy, as always, is an important part of the nutritional package, but ample amounts of highly digestible protein becomes critical during this phase. Even before fawns are born and antler buds are noticeable, a deer's need for protein begins to increase. Does are in the final trimester of gestation, and fetal fawns demand large amounts of nutrients as they grow more rapidly as birthing approaches. Early in pregnancy, a doe might reabsorb one or more fetuses if her nutritional needs are not met. But during the final stages of pregnancy, a lack of needed nutrients results in lower birth weights and an increased likelihood of aborted or stillborn fawns.

Fawns born alive but at a subpar birth weight are exponentially less likely to survive the first few days of life. Further, leading up to birth, a doe's mammary system prepares for the production of life-giving milk. One of the critical nutritional components of this process is protein, the demand for which climbs to an annual high of 18 percent or more. A buck's protein demands follow a similar pattern, with the nutritional requirement starting to increase as winter turns into spring and antler buds begin to sprout. Even during this early stage of antler growth, protein levels in a buck's diet can affect the eventual size of its rack. A deficiency can result in early stunting of antlers that will result in hardened antlers that are smaller than their genetic potential would allow.

As antler growth continues into spring, protein intake demands continue to increase in unison with the velvet antler. Let's look at what happens in farm country during late winter and early spring. Corn and bean fields are barren coming out of winter and essentially devoid of food, having been picked clean during winter. As temperatures increase, farmers begin to prepare fields for planting, waiting for the appropriate soil temperatures. Corn requires a soil temperature of 50 degrees, and soybeans require a warmer temperature in the upper 50s to 60 degrees.

Planting times vary depending on southern or northern climates, but for the middle of the grain belt, farmers typically plant corn in



April and soybeans in May. By the time germination and sprouting occurs, does have passed the final trimester and are nearing birth, and bucks' antler buds have been active for several weeks. Corn sprouts can appear in April but contain fewer needed nutrients than young soybean plants, which might not appear until mid-to-late May. This timing assumes fields get planted on time. Colder-than-normal springs or heavy early spring rainfall might prohibit planting and can push that time back several weeks.

Let's say your hunting property is next to or includes several acres of corn and bean fields but also has a high-quality perennial food plot, such as Imperial Whitetail Clover. Imperial Whitetail Clover is designed to be cold tolerant and will be one of the first things to green-up as winter loses its grip. In southern Iowa, I've seen green Imperial Whitetail Clover as early as February and certainly by March, and those food plots provide a great food source for deer much earlier than corn or bean fields. If your hunting property has an Imperial Whitetail Clover food plot, does and bucks can access high-quality protein and other nutrients when they need it.

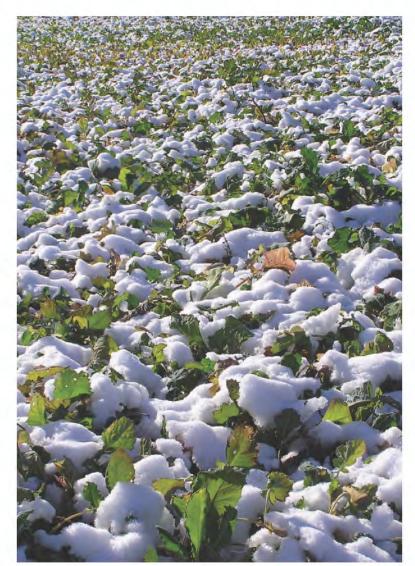
As spring turns into summer, farm country looks like a food-source Garden of Eden, with fields of tall corn and thick beans filling the landscape. During this time, many would consider food plots a waste of time and money among the bounty of farm crops. Unquestionably, millions of tons of food are being grown, but that doesn't necessarily translate to millions of tons of deer food. Although corn grows in abundance during summer, it's little more than good cover deer can use to hide, bed and travel. The plant, stalk and leaves, are almost non-digestible to deer.

Deer are small ruminants, which means they require highly digestible plant material that is low in structural fibrous material. Only when ears and then kernels start to form does a cornfield provide substantial food. That doesn't occur until late summer, and even then, corn is low in protein. Corn to deer would be like an apple orchard to people. It will eventually produce a fruit we can eat, but we would be hard pressed to survive by eating the tree.

Soybean fields can be good food sources to deer. They have a high protein level and are highly digestible. There is a caveat, however. As soybeans grow, protein and digestibility decrease, which is the case for most plants. Deer use soybeans heavily as a food source, but as protein levels and digestibility decrease with age, especially when pods and seed are being produced, those fields become a less preferred food source. Deer will still eat in beanfields during late summer but not as heavily, and if a more digestible high-protein food source is available, deer will gravitate toward that.

Some types of soybeans are used for food plots. These are called forage soybeans and have different characteristics than regular field beans. Forage beans grow taller and produce more leaf tonnage than actual beans. PowerPlant is an example of a forage soybean-based food plot product designed for a spring, summer and early fall food source. But again, field soybeans do not have the same characteristics as forage soybeans, so if you're relying on a farmer's bean field to be your sole summer food source, there are better options.

One option is to plant a forage soybean field, such as PowerPlant. But even if you do, I recommend having a high-protein perennial plot such as Imperial Whitetail Clover or Alfa-Rack Plus. These perennial products are designed to be high in protein and, equally important, stay vegetative and highly digestible throughout spring, summer and fall. This coincides with the antler-growing and fawn-rearing season, which is when protein needs are greatest.



A brassica like Winter-Greens provides incredibly attractive forage to deer even under snow.

When the cool days of autumn displace the dog days of summer, corn and soybeans mature, produce seed and die. Soybeans have lost their leaves, but deer have access to the beans and bean pods. Deer also have access to ears of corn. For a brief time, deer use these food sources to their nutritional benefit. It's brief because farmers soon pull into fields with combines and semis and harvest most of the food source. That's why the farmer grew the crop: to harvest and sell, not to leave food for deer. With the quality of today's modern harvesting equipment, a farm that had hundreds of acres of food one day can have almost none in three or four days. The abundant food source is here today and gone tomorrow. Also, farmers often disk the ag fields soon after the harvest, burying even more grain.

During fall and winter, deer food in farm country can go from abundance to extreme scarcity in days. In fact, more heavily wooded regions of deer country might have more food than farm country if mast trees had a good year. If you think I'm wrong, drive through Iowa during February. Mile after mile of empty fields paints a bleak picture for deer food.

Fall and winter food plots, such as Winter-Greens, become a vital nutritional management tool. This brassica-based product produces tons of extrememly attractive and nutritional forage deer can use

throughout winter. Products such as Tall Tine Tubers and Beets & Greens also produce tons of extremely attractive leafy forage but also produce edible root structures, which deer dig up and consume late in the season.

You might say, "Why don't I just plant corn as a food plot?" You can do that, but here's some perspective. Years ago, when I was experimenting with various food plots, I planted a one-acre field of corn. As fall approached and my plot turned golden, sporting large silktipped ears, I began to get jacked about hunting it. Right before the season, I scouted the plot and found that large areas had been knocked down, and it looked like a herd of buffalo was using my plot. I thought every deer in the county must have been coming to my corn plot. When I sat there the first time, deer came to the plot, but so did some industrious raccoons, which were the cause of the downed corn. They broke off the stalks to get the ears to their level and then feasted. Also making appearances were turkeys, squirrels and a large beaver that was using the stalks to build a new home.

The amount of food deer got from that plot was minimal. I found that brassica plots were far more productive, producing more actual food than corn, and that competition was far less. So, you could plant a 2-acre brassica field or a 15-acre cornfield. My billfold likes the former. Plus, bowhunting a 15-acre cornfield requires a 300-yard pin on your bow.

### Some Notes on Hunting Farm Country

Hunting farm country can be challenging. I'm not saying it's more challenging than hunting big-woods bucks, but farm country has its difficulties. Before the harvest, there is too much food. Have you tried to hunt a 180-acre bean field? Deer come to the field from everywhere. I used to hunt an 18-acre bean field, and even that was maddening. I'd sit on one end of the field and watch deer filter into the other end, and then sit at the other end of the field the next night and watch deer come out where I was the night before. Then there's the harvest. That deer-attracting field quickly becomes a desert.

Planting smaller hunting plots with deer-specific products can help solve those issues. The concept is not difficult to grasp: Provide a highly attractive food source for deer, and they will eat it, improving your odds greatly for hunting. My farm has active crop production fields, but almost all the deer I've harvested were in or traveling to or from a food plot.

### Summary

There's little argument that deer in farm country benefit from crops grown there. But if your intent is to nutritionally manage deer and improve your odds for harvesting a good buck, relying on neighboring farmers is not a great strategy. The methods, timing and crops used by farmers are intended for maximum financial return and have nothing to do with maximizing deer herd potential. In fact, many farmers hate deer because of them feeding on their cash crops. Maximizing deer potential requires a different methodology, especially with the forage varieties planted. If you're a deer hunter in farm country, don't get fooled by the sea of corn and beans. That sea is not always productive or attractive, and it can dry up overnight. Take matters into your hands. Manage for deer, not combines.



## PowerPlant:

Specifically Designed To Produce Massive Tonnage of Spring and Summer Protein For Deer

By Jon Cooner

And summer is discussed, the conversation always includes protein, and the reason is simple: protein is vital to a host of physiological processes deer go through every spring and summer. PowerPlant is specifically designed to provide massive tonnage of high-protein food for deer right when they need it most. Let's break that down:

Protein — The Most Important Spring and Summer Nutrient. As I mentioned, deer go through lots of physiological processes that heavily depend on protein during the spring and summer. These include antler growth, doe pregnancy, doe lactation and the physical growth of all deer, including fawns. Exactly how much protein deer need during the spring and summer is a matter of some debate, but it is generally recognized that bucks require about 16% dietary protein when building their antlers, does about 18% when they're lactating, and fawns up to 20%, some of which they get from their mothers' milk.

Mother Nature's Low-Protein Offerings. Mother Nature provides enough protein for deer to grow antlers and reproduce. However, she rarely provides enough protein for deer to "max out" on antler size and body weights. Compare the dietary protein needs I set out above with the protein content of most natural forages of spring and summer, which generally runs about 6-8%. Also, consider that even these meager protein sources become less available as August approaches in most areas. Even with these low protein levels and lack of availability, deer can obviously "survive," but a manager who wants to improve deer quality as far as their genetic blueprints allow will have to supplement protein to make up for the shortfall.

And that's exactly what PowerPlant does. In fact, no other competing food plot product the Whitetail Institute has ever tested can match PowerPlant for its tons of production of high-protein forage for deer.

### PowerPlant's "Specific Design"

So, we can end the article right here by declaring that the answer

to supplementing nature's shortfalls in spring/summer protein is to plant forages that produce lots of protein, right? Well, not exactly. The reason lies in understanding something I said in the first part of this article: "PowerPlant is specifically designed to provide massive tonnage of high-protein food for deer right when they need it most."

## 1. PowerPlant Delivers Abundant Protein During Spring and Summer

"Specifically Designed... for deer." To understand why specific design is so important, consider that even the highest protein plants on earth would do deer no good if deer aren't attracted to them. That's why, in addition to protein production, the Whitetail Institute has taken such great care to ensure that PowerPlant exhibits two additional traits: excellent attraction, and the ability to keep producing even as deer feed on it.

### 2. PowerPlant is Extremely Attractive to Deer

PowerPlant is attractive to deer in two ways: as a highly palatable forage, and as a bedding area. As for high palatability, an excellent example of how PowerPlant can be more attractive to deer can be seen by comparing agricultural-type soybean plants to the vining, forage-type soybeans in PowerPlant. There's no question that deer are attracted to agricultural soybeans and the vining, forage-type beans. However, the vining beans in PowerPlant grow as supple vines that remain tender, unlike agricultural soybeans that tend to become tougher and more stemmy (and therefore less palatable to deer) as they mature.

PowerPlant also includes Sunn Hemp, which does double duty as a second extremely attractive food source and as a lattice for the vining beans to climb and maximize production instead of growing along the ground. Small amounts of sunflowers are also included in PowerPlant to provide additional lattice.

In addition, to its excellent attractiveness to deer as a food source, deer are also readily drawn to PowerPlant as a bedding area. When you recognize the fact that PowerPlant is designed to grow into a thick mass up to 8 to 9 feet tall, you can see why PowerPlant draws deer so heavily as a bedding area, boosting its overall attractiveness even further.

## 3. PowerPlant is Designed to Tolerate Heavy Browsing by Deer

So far, we've discussed the facts that PowerPlant provides an extremely attractive, abundant, high-protein food source and a bedding area for deer. The third "specific design" characteristic that helps make PowerPlant such a superb forage for deer is its ability to withstand heavy browsing by deer once it establishes (once it reaches a height of about two feet).

Most folks who have planted stands of straight summer beans and peas before have seen first-hand how quickly deer can wipe them out. One way PowerPlant is designed to avoid this problem is due to the ability of the vining beans and Sunn Hemp to regenerate and continue to grow as deer feed on them.

PowerPlant is designed to grow vigorously until the frosts of fall arrive. After that, food production stops, and PowerPlant continues to provide cover for deer into the cold winter months.

# PowerPlant...

a spring/summer annual that produces high protein and massive tonnage.

Deer love fresh spring legumes. So much, in fact, that they can clean out an entire planting before the plants are even established. The mix of high-protein annuals in PowerPlant better withstand heavy browsing to produce a high-tonnage crop that continues to thrive throughout the heat of summer, providing deer with not only excellent forage, but with attractive bedding areas as well. In university testing, PowerPlant produced more tonnage per acre than any other spring/summer annual tested. Deer will come for the succulent plants and stay to bed and spend more time on your property.

The New PowerPlant now includes Sunn Hemp that produces even more protein and is

### Arrest MAX APPROVED

which helps you control competing grasses within your PowerPlant plots.



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Research = Results®

## Recommended Plot Sizes, Seeding Rates and Strategies for PowerPlant

Minimum Recommended Plot Sizes and Seeding Rates for PowerPlant

Recommended Minimum Seeding Rate
Plot Size
1 acro 25 lbs per acro

Areas of Low to Average Deer Density Areas of High Deer Density

1 acre 25 lbs. per acre 1.5 acres 50 lbs. per 1.5 acres

Strategic Use of PowerPlant During Hunting Season. Power-Plant's recommended plot sizes allow you to continue to use it during hunting season. Here is a great strategy for turning your standing PowerPlant into one of the best harvest plots you can imagine. Start by determining your most common prevailing wind direction during hunting season. After you determine your prevailing wind direction during hunting season, locate a permanent stand site on the downwind corner or edge of the PowerPlant plot. Then, 3-4 weeks before the start of your fall planting window, mow lanes through the PowerPlant. Wait a few weeks for the clippings to dry, and then disk or till the clippings into the lanes, smooth the lanes with a drag or roller, and plant the lanes with an Imperial Whitetail annual such as Pure Attraction, Winter-Greens, Beets & Greens or No-Plow.

This is shown in the accompanying graphic. The bright green area represents standing PowerPlant. The red areas represent the lanes you'll mow 3-4 weeks before your fall planting dates and later plant in an Imperial Whitetail annual.

## Strategies for Extending the Utilization of PowerPlant



PowerPlant provides an abundance of highly nutritious forage that lasts until the first hard frosts of fall. After frosts arrive, deer can continue to use the residual beans and peas, but the forage growth will be finished. Even so, the remaining PowerPlant will still continue to provide cover for deer. The new PowerPlant stands up tall in the cold much better than the original PowerPlant.

Here are some strategies to help your PowerPlant plot remain attractive through fall and winter and create one of the best harvest plots possible:

Most areas have a prevailing wind direction during the hunting season. Once you determine your prevailing wind direction during the hunting season, locate a permanent stand site on the downwind corner or edge of the PowerPlant plot. Then, 3-4 weeks before the start of your fall planting window, mow lanes through the PowerPlant, wait a few weeks for the clippings to dry, and then disk or till the plant matter into the lanes. When your fall planting dates arrive, plant the lanes in an Imperial Whitetail annual such as Beets & Greens, Winter-Greens, Pure Attraction or No-Plow.

When deciding how much lane area to add, keep in mind that you want enough lane area to keep the plot attracting deer even after frosts, but not so much that you destroy the feeling of safety deer have in the tall, thick PowerPlant. If you do it right, you'll

Most Common Wind EXTENDING THE UTILIZATION **Direction During** OF YOUR POWERPLANT PLOT Mow lanes through your PowerPlant in late summer or early fall. Don't remove so much PowerPlant that you diminish the feeling of safety PowerPlant provides for deer. Lanes about 10-20 feet wide are a good rule of thumb. During the fall planting dates for your area, plant the lanes in a Whitetail Institute fall annual such **PowerPlan** as Beets & Greens. Winter-Greens, Pure Attraction or No-Plow.

likely find that deer continue to bed in the PowerPlant and step in and out of the lanes throughout the day. The lanes should be skinny and provide a feeling of safety for deer inside the tall adjacent PowerPlant. Then the Beets & Greens, Winter-Greens, Pure Attraction or No-Plow in the lanes will make the plot an attractive source of nutrition all the way through the late season.

For more information about PowerPlant: Visit whitetailinstitute.com, or call the Whitetail Institute at (800) 688-3030.



You should put in enough lane area, but not too much. You want enough plantable lanes to keep the plot attracting deer even after frosts, when PowerPlant begins to stop producing, but you don't want so many that you destroy the feeling of safety deer have in the tall and thick PowerPlant. Keep the lanes fairly skinny (10 to 20 feet wide is a good rule of thumb) so that deer will feel safe using the lanes during daylight hours. If you do it right, you'll likely find that deer continue to live in the PowerPlant and step in and out of the lanes throughout the day. The fall/winter annuals planted in the lanes will make the plot an attractive source of nutrition all the way through the late season.

### **Final Thoughts**

Don't miss out on your opportunity to benefit from the use of PowerPlant. The Whitetail Institute has run out of PowerPlant every year since its introduction. And as more and more hunters find out how well it performs, demand for PowerPlant continues to increase significantly. In fact, PowerPlant sold out last year quicker than ever, more than two months before the planting season was even over.

PowerPlant provides a host of benefits even beyond those I've mentioned above. For example, other wildlife will use PowerPlant as cover for their young and can benefit from the small seeds produced by the sunflowers in PowerPlant.

PowerPlant may also be an option if you have poor soil that is less than optimum for planting a perennial like Imperial Whitetail Clover or Alfa-Rack Plus. And what if you've missed your spring planting dates for your favorite Imperial Whitetail perennial? In such cases, PowerPlant can be a great option for attracting and holding more deer on your property and providing them critical protein during the spring and summer until you can plant your perennials in the fall.

PowerPlant is also easy to plant. For optimum results, PowerPlant should be planted in a seedbed where soil pH is at least 6.0 and with as little weed and grass competition as possible. Start by performing a soil test. Use a professional laboratory soil test kit – one that sends soil off to a lab, and not the probe or slurry-type do-it-yourself kits, which aren't consistently accurate. Then in early spring, add any lime recommended by your soil-test report to the surface of the plot. As soon as possible in early spring, disk the lime thoroughly in to the top few inches of soil, and smooth the seedbed with a heavy, fence-type drag. Try to do this before spring green-up if possible.

In areas subject to heavy weed and grass invasion, a great option can be to wait several weeks after spring green-up for weeds and grasses to return, and then spray the seedbed with a glyphosate herbicide such as Roundup. In many areas there are literally millions of dormant weed and grass seeds in the ground, and when you till the soil, you will almost certainly bring many to the surface where they will germinate and grow. By tilling in lime and smoothing the seedbed early before green-up, you can allow these weed and grass seeds to germinate and then control them with Roundup before planting PowerPlant. This is not a mandatory step, but remember that you will be fertilizing your PowerPlant with nitrogen fertilizer, which can also stimulate weed and grass growth, so if you are concerned that weeds and grass might compete with your PowerPlant during its early stages, spraying with Roundup before planting can be a great idea.

More Great News: PowerPlant is Arrest MAX Approved. If you experience grass competition soon after planting, remember that PowerPlant is approved for spraying with the Whitetail Institute's selective grass herbicide, Arrest MAX.

Since its introduction, PowerPlant has continued to prove itself a winner. Independent academic studies have confirmed that of the available spring/summer annuals on the market for deer, PowerPlant outperforms them all. If you are looking for a food plot product that provides massive amounts of protein and unsurpassed browse tolerance even during the hot summer months when natural forages dry up, PowerPlant is the answer. No other annual food plot planting, branded or generic, can compare.

## Boost Your Deer (and Turkey) Hunting with Imperial Whitetail Clover

By Brian Lovett
Photo by Tes Randle Jolly

green clover plot, shotgun balanced on my knee, I felt like a man in a dream.

Deer had obviously been hammering the lush green growth since the snow receded and would continue to do so through summer and into autumn. But that chilly May morning, I was watching about 15 turkeys — including three strutters — put on a show in the Imperial Whitetail Clover. The landowner had planted the plot to boost local whitetails and improve his bowhunting prospects, but the clover was about to pay second-season results.

### **Best Overall Choice**

That hunt illustrated a point savvy food plotters have known for years: If you're planting for deer and turkeys, you cannot beat White-tail Institute's Imperial Whitetail Clover.

Of course, chufa receives lots of attention from turkey hunters. The Whitetail Institute recognizes that and offers Turkey Select Chufa (see story on page 32). That's a great choice for someone who just hunts turkeys or has lots of land. But folks who want to attract and

hold deer, turkeys and other wildlife do better with Imperial Whitetail Clover.

Basic turkey biology backs that up.
Clovers are among the first plants to
green up in spring, and turkeys are attracted to the nutritional benefits of that
fresh growth, especially when hard mast and
agricultural waste grain are scarce and other common foods — insects and soft mast, for example — haven't yet developed.

Further, as clover grows tall and lush through late spring and into summer, it provides other benefits for hens and poults. Turkeys will eat the actual clover plants, but a healthy clover plot is also full of insects, and turkeys like to hunt bugs in clover as well. Clover plots will also get thick and tall enough by mid-spring to provide good cover and nesting habitat.

And of course, Imperial Whitetail Clover also provides year-round benefits and attraction for deer and other wildlife. Most land managers hunt deer in fall and winter before turning their thoughts to spring turkeys, and clover plots are obviously important for whitetails. Imperial Whitetail Clover creates two-pronged benefits: critical nutritional and attraction power for deer, and nutritional, nesting and attraction power for turkeys and other wildlife.

"If you have enough available acreage to plant and some of the plots have soils that are too well drained and too dry to support clover, that's a place you might want to consider planting chufa," said Steve Scott, Senior Advisor at Whitetail Institute. "But the No. 1 food plot choice for deer hunters who also hunt turkeys is Imperial Whitetail Clover. It offers the best of both worlds. It attracts both game animals."

Clover also provides a great turkey hunting setting, especially for youngsters, hunters with limited mobility or folks who simply like to sit in blinds. The open fields let you see turkeys at long distances and prepare for a quality shot. Further, they're great places for decoy setups, as birds can see the fakes from afar and react to them. Gobblers love to strut in clover plots and similar areas, and will return to those spots often during spring. A well-planned setup at the edge of a clover field is often the ticket to a punched tag.

### **Clover Countdown**

That was my hope as I surveyed the turkeys in the field. Hens fed slowly from one side of the plot to the other, raising their heads periodically to check for danger or chase off rivals. Two longbeards stayed in lock step with the girls, never getting farther than a few yards away as they strutted, spit and drummed. Another gob-

bler stuck to the timber, watching the show,

strutting and gobbling to stay in the game. And an awkward jake cruised the perimeter, half-strutting now and then but keeping his distance from the gobblers.

My calling and decoy setup had sparked some interest from a few birds, but the gobblers staved well out of range most of the morning. Still, I remained optimistic, knowing the green groceries in the plot would likely keep the hens around until I could entice a longbeard closer.

My opportunity finally arrived about two hours later, as aggressive calling coaxed the timber-bound gobbler out of the woods and into the field. After a brief march to the plot's center, the bird looked hard at my iake decoy and then began an intimidating half-strut march toward the fake.

The 30-yard shot was anticlimactic. Sure, I was happy to have killed a great early-season bird, but the two-plus-hour experience with that flock had already made

my day. And I realized it had been possible mostly because of Imperial Whitetail Clover.

If you hunt deer and turkeys, consider Imperial Whitetail Clover as the backbone of your all-around management and hunting plan. You already know how it helps whitetail hunting. And the results from spring gobbler season might surprise you.



### REAL HUNTERS DO THE TALKING







Thad about three years of history with this buck. He was Labout 160-inches three years ago when I started getting trail cam pictures of him on a 30-06 mineral site. I passed on him that year on multiple occasions. He broke his main beam on the right side at the base the second year, but I saw him multiple times.

This year I started getting pictures of him in early August on a 30-06 Mineral site. He had blown up into the biggest deer that I'd ever seen on my farm. I also started getting trail cam pictures of him on a 3-acre Imperial Whitetail Clover plot. So, I set a blind in between the mineral and food plot.

On the second day of black powder season I caught him going from the mineral to the clover plot with a bachelor group of bucks. I shot him at 65 yards. (photo 1) It is the only deer I have ever harvested with a black powder

I attribute the health of the deer herd to Whitetail Institute products. I have about five food plots ranging from 1 acre to 7 acres. I plant mainly Imperial Whitetail Clover. My Wife, son and daughter have all shot big deer over Whitetail institute food plots. Also included are a few other photos of what Whitetail Institute products have done for my hunting family.

Brad Oliver - Kansas





We started using Imperial Whitetail Clover on our farm three years of Whitetail Clover on our farm three years ago. We had some deer that stayed on our property before that but once we started using Imperial Whitetail Clover we started seeing more and more deer hanging around. After the second year of using it we noticed a lot more bucks with a noticeable difference in antler growth. This is the 3rd year of planting Whitetail Institute products and as you can see from the photo we will continue to use these products from here on out. I was able to harvest this Pennsylvania swamp donkey not even a 100 yards from our plot. Thanks Whitetail Institute for the amazing products.

Marcus Grant-Pennsylvania



bucks heading to the same spot to feed in one of the best

food plots I had. The Imperial Whitetail Clover has proven to last season to season no matter the amount of deer pressure and that is one reason I keep coming back to this product. I have never had a problem with it and will continue to use it and see more improvements as time goes on. Other products that I have seen great results with are Winter-Greens and Pure Attraction. These are my go-to winter food plots as they draw the deer in from all over to feed at a time when there is not much around. Since using the Whitetail Institute products, I have increased the number of deer sightings on the land and have seen many more target bucks over the years. The 30-06 Minerals work great during off season to keep the deer feeding and growing and also work great for getting trail camera pictures. I would like to say a big thank you to Whitetail Institute for their hard work and creating the best food plot products to this

Brandon Hively - New York

Thitetail Institute products have changed my hunting ground experience for the best. Over the past 10 years that I have been using Whitetail Institute, I have seen tremendous differences in the herd size and our bucks. Not only are the deer appearing healthier and gaining more weight, they are showing improvements in the size and mass of their antlers as well.

I manage 300 acres and have approximately 15 acres of food plots. The Imperial Whitetail Clover is by far the best all season food source. It keeps the deer coming back before and after season and all year long. I have seen as many as 30 deer in an acre plot pawing through the snow to get to the clover. Last year my mom managed to kill our target buck and her biggest buck to date heading to an Imperial Whitetail Clover plot. (photo 1) Later in the season during the first day of the New York state crossbow season my girlfriend killed her first buck ever in the same clover plot (photo 2). That was two of our target



Thought my hunting property four years ago. I planted Imperial Whitetail Clover and found it to be the kitchen for the deer in the area. Three years ago, I took a 10 point (score 162) just inside the woods from the food plot. (photo 1) This year I took a 9 point with my bow in the same area







(photo 2) and three weeks later my son got a nice 10 point on the other side of the plot. (photo 3) I'm convinced the clover is the reason for our success. I'm anxious to try "Conceal" this spring as there is nothing more important to deer than good cover!

Jim Radthe - Maryland

## **Send Us** Your Photos!

Do you have photos and/or a story of a big buck, a small buck or a doe that you took with the help of Imperial products? Send it to us and you might find it in the Field Tester section of the next issue of Whitetail News. Email your digital photos and a three to four paragraph story telling how you harvested the deer and the role our products played to:

info@whitetailinstitute.com or send them to: Whitetail News. Attn: Field Tester Response 239 Whitetail Trail, Pintlala, AL 36043

RARRARARARARARARARARARA

# CCCEALE We've Got You "Covered"

By Whitetail Institute Staff

Photo by Jason Say

mperial Whitetail CONCEAL is designed to quickly produce screening cover for food plots, deer bedding, hunter travel and much more. As such, its potential uses are virtually unlimited. CONCEAL sold out last year, and it's expected to sell out this year too, so don't delay ordering CONCEAL if you want to be sure you don't miss out on it this year!

In this article, we'll use the term "cover" to describe what is in essence "screening": something that obscures deer or hunters from visibility sufficiently to give deer a feeling of safety coming to your property, staying there, and utilizing the property more often during daylight hours.

Winning the Competitive Sport. There's no question that deer hunting is a competitive sport. While many of us have occasionally connected with deer during past seasons purely by luck, we know that consistent success during hunting season depends almost entirely on the quality of our preparation. The better we prepare, the more our odds of success increase. In essence, preparation is a matter of

stacking the deck in the hunter's favor in two ways: by maximizing the drawing and holding capacity of our hunting property, and by minimizing the chances that deer will detect us as we move to and from our stands. Both are heavily influenced by the availability of cover.

CONCEAL's Primary Attraction: Cover. Designed to be planted in the spring CONCEAL is a carefully designed blend of fast-growing plant types that produce thick foliage and that grow to different heights, producing a dense wall of foliage up to 8-9 feet tall, which provides highly attractive cover for bedding and travel.

**CONCEAL's Secondary Attraction: Food.** While CONCEAL is also designed to be attractive to deer as a food source, it's not designed to replace your food plot plantings. Here again, the Whitetail Institute's detailed attention to research, development and testing is evident. The Whitetail Institute designed CONCEAL to offer just enough attractiveness as a food source to give deer even more incentive to use it and still maintain its value as cover by regenerating and continuing to grow as deer utilize it.

Examples of Uses for CONCEAL. CONCEAL's thickness, height and rapid growth make it ideal for establishing bedding areas near food plots and anywhere else you and your deer would benefit from cover such as screening food plots from public roads and neighbors, and dividing large, open areas into plantable strips.

Another application for CONCEAL is to plant it in strips to establish cover for deer and hunter travel. For example, CONCEAL can be used to funnel deer between two heads of woods that are separated by open ground. Consider that by providing deer one way to cross the open space and remain concealed, you can actually alter deer travel so that they walk by your stand! In most cases, planting a strip of CONCEAL about 90-100 feet wide between the two wooded areas is sufficient to allow you to hang stands in multiple locations at each end of the strip so that you can hunt it in any wind direction.

Also consider how important it is that hunters be able to access stands without spooking deer. That can be difficult to impossible in cases where the only way to reach a stand is either through a bedding area that surrounds part of the food plot or across open ground. CON-CEAL can be the answer in such cases by allowing you to plant tall, thick cover across the open ground to shield hunter travel. In most cases, planting a strip of CONCEAL at least 15-20 feet wide will be sufficient. Once CONCEAL is established and toward the end of summer, mow a 3-6 foot wide walking path through the middle of the CONCEAL to allow a quiet and concealed entry and exit. One bag of CONCEAL will plant 1/4 acre, which is approximately 20 feet wide by 500 feet long. CONCEAL can also be used to plant little spots of cover to camouflage ground blinds and, for those of us who are getting old enough to need to drive a little closer to our stands, a spot to hide an ATV or other vehicle out of sight.

Conclusion. CONCEAL comes in 7lb. bags that will plant 1/4 acre and is designed for planting in the spring. Do not plant CONCEAL until soil reaches a constant temperature of 65° or higher.

Finally, keep in mind that if you own the property, it's a good idea to establish more permanent screening. In most areas, you can identify native grasses, shrubs or trees that can provide permanent screening once they're mature enough. CONCEAL is an ideal tool for providing screening cover until your permanent screening plants are able to do the job.



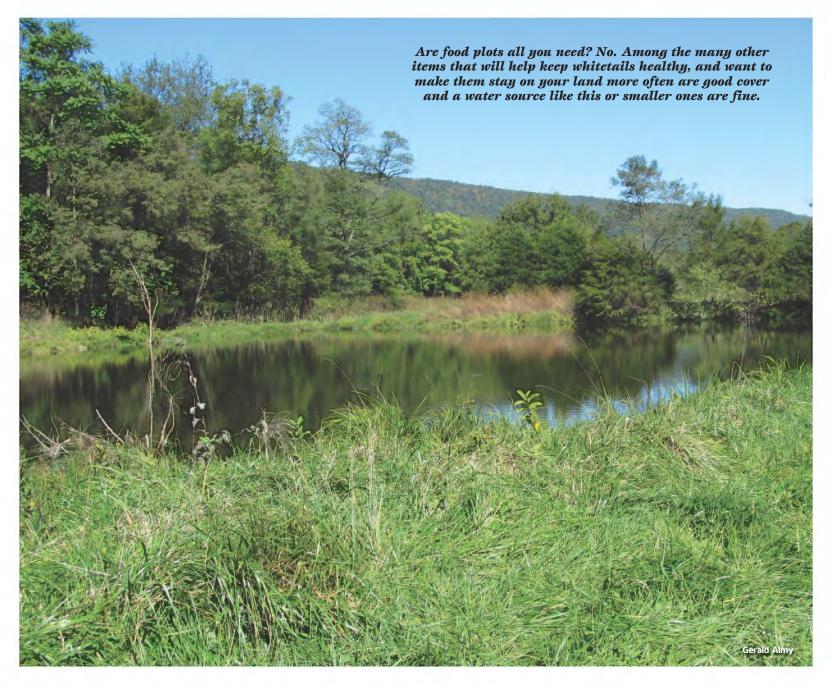


By Gerald Almy

he best hunting setups on my land, as at many small properties, are spots where you first see your quarry when it's almost in range. However, the stand I hunted during a cold November day on my 117 acres in Virginia was a bit different.

Photo by Dustin Reid

www.whitetailinstitute.com



It was almost like a western situation, reminiscent of whitetail hunts I'd taken in Wyoming or Montana, where you could see for long distances. So, I was glassing farther away and glimpsed a buck I hoped to encounter almost a quarter-mile distant.

He was a wide, heavy 8-pointer. He hung out almost exclusively on my land and seemed to sense that I didn't shoot young bucks. Therefore, he showed himself fairly often. But he was no longer one of those young bucks that I didn't shoot. His thick neck — which blended seamlessly into a deep chest, sagging belly, blunt face, sway back and massive 8-point rack — confirmed that status.

I first saw him where I'd expected: — easing out of a sanctuary I keep off limits. It's a rugged 30-acre patch that consists of brush, shrubs, wind-fallen trees and young conifers. The herd had already experienced some pressure from my neighbors during the opening of archery and crossbow seasons, and I figured he'd hole up in that rough, secluded area.

I didn't see the buck again for a few minutes, but soon he emerged from a patch of mixed shrubs and white pines I'd planted to provide an approach route to a small pond. The weather had been hot and dry, and the old boy was thirsty. I saw his rack and part of his body there, but he was too far for my crossbow.

Soon, he stopped where I'd expected he might — at a cluster of persimmon trees that were dropping their sweet, orangish-yellow fruit. Then he disappeared into a stand of mature trees. I lost him there, but it was soon clear he had worked through a staging area I'd enhanced, consisting of a feathered edge between the woods and an Imperial Whitetail Clover plot. Then he made the final move I was waiting for, stepping into the corner of the field.

The crossbow bolt found its mark, concluding one of the most enjoyable hunts on my land — enjoyable because of the buck's impressive 22-inch-wide rack and the Western feel of the outing, using binoculars, spotting the deer far away and watching him slowly work



Cover for bedding and security and thermal protection...hinge cutting is one technique to provide it.

through various habitat areas into point-blank range.

The experience was fulfilling on another level. A food plot had brought the buck within range, but the hunt also showed the value of the many other improvements I'd made. It made clear you need more than food plots to let a buck grow old and spend most of his time on your land. In one afternoon, that 8-pointer used a sanctuary, a cover strip that allowed a daytime approach to a pond, the water source, a grove of persimmon trees, and a mix of open and thick cover in a staging area that had been improved via shrub planting and chainsaw work. And he used all those enhancements within minutes before emerging into the final ingredient that kept him on the property — a nutritious Whitetail Institute food plot.

Of course, other elements kept him there, too. In this article, we'll look at those habitat improvement projects and the aforementioned extras in more detail, hopefully illustrating that you can't develop a quality deer property with food plots alone. They are vital, but they can't stand by themselves. And if you don't supply other habitat elements, your neighbor might.

Providing these extras, or tweaking and enhancing habitat features already on your land, are particularly important if, like me, you only own a small parcel of 40 to 200 acres. Careful management and packing the property with everything possible entices bucks to stay and improves the quality of that animal. And that's vital for optimal antler growth by letting deer age to 3, 4 or even 5 years, where possible.

Of course, time limits many folks from establishing all these extras. I'm lucky that doing these projects is my "job" as research for articles.

But time-challenged managers should try to work in as many as possible, one at a time. And do them well, rather than rushing or cutting corners, trying to complete every enhancement at once. A few well-done projects are more beneficial than a dozen half-baked improvements.

Before deciding which projects to undertake, study topos and Google Earth photos to get a full understanding of the lay of your land, where things are lacking and which areas lend themselves to specific improvements. Through trail cameras, you probably already have a feel for how bucks use your land. Work that knowledge into planning where to make enhancements. Perhaps a low spot that drains several hollows or hillsides would make a good pond site. A remote thick cover area would be good for a sanctuary. An open hillside could nurture a dozen fruit trees.

Also consider the surrounding topography and vegetation and where deer will be coming from so that the improvement will be where deer will use it. It makes no sense, for example, to put a water source in the middle of an open field. A mature buck will never use it or do so only at night. If you locate it near bedding cover, however, and provide a strip of Conceal or other cover to provide secure access, older deer will likely use that water hole.

Also consider how you will approach some of these enhancements if you plan to hunt near them, considering sun angle and wind direction. By adding those elements in strategic locations, you'll more accurately pattern how deer travel as they use the enhancements.



Some hard mast bearing trees with acorns help any property. Try to have early and late maturing oak species.

Here are eight valuable projects to consider undertaking to complement your food plots.

### 1. Add Water

You don't need an entire pond. Sometimes, small water sources tucked in cover are better for mature bucks. But make no mistake, a deer needs several quarts of water a day. If he doesn't find it on your property, he'll go somewhere to find it — and might end up hanging from a rafter in your neighbor's barn.

Use a children's pool, pond liner material, a cattle water trough or a special deer watering setup. Sometimes, you can simply use logs and rocks to dam up a creek so it holds water year-round. If you need to place the water source in an open area, provide a secure travel route to it by planting Conceal, conifers or something more permanent.

### 2. Enhance Natural Forage

This can encompass many projects. Hinge-cutting low-value trees is a good place to start. Animals can then feed on the tops that continue to grow at their level, eating the leaves, twigs and buds.

Releasing edible shrubs, fruit trees and brambles that are crowded and shaded by other trees is also worthwhile. Fertilizing some browse such as greenbrier, plum, grapes and honeysuckle can sometimes double their forage production. Trimming back grape vines or pulling them lower where deer can reach them are also worthwhile steps, which are easy to accomplish in an afternoon.

### 3. Plant Nut and Fruit-Bearing Trees

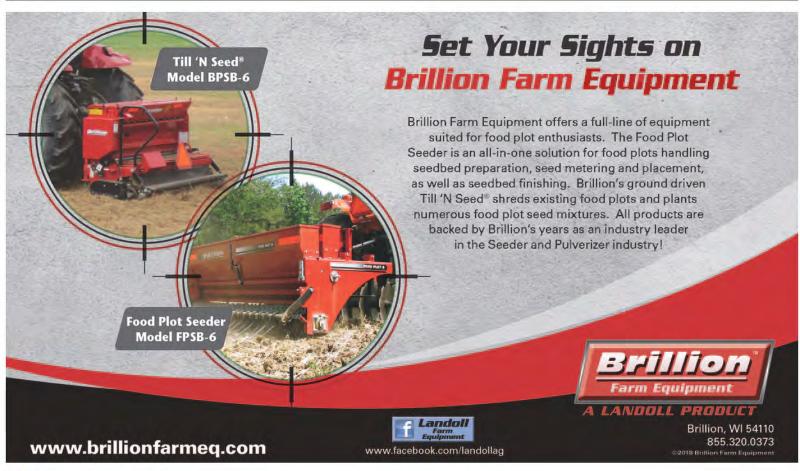
Choose fast-growing oaks, such as sawtooths or Morse Nursery's hybrid white oaks and chestnuts, if you don't have enough hard-mast trees on your property. Plant some oaks with early acorn drops and other late-maturing varieties.

Fruit trees are not essential, but considering how bucks on my property use them, I would never dream of not having a variety available. Good choices include pear, persimmon, apple and plum. Deer will demolish peaches, too, but the peaches will be long gone before the season opens. I still grow them to keep deer content and focused on my land 365 days a year. These fruits are sweet treats that are packed with vitamins and minerals, such as phosphorous and potassium.

Put fruit trees where they'll get at least five hours of sunlight, with slopes preferable to bottoms. Be sure to plant at least six trees so they will cross-pollinate. Tree shelters will protect the lower trunks of young nut and fruit trees from rubbing bucks and other critters.

### 4. Give them Minerals

No matter the quality of your native forage and how many food plots you plant, a deer still needs various minerals, vitamins and micronutrients that aren't in that forage. You can solve this by creating one or, preferably, several mineral licks in states where they are legal. Imperial Whitetail 30-06 provides the proportions of calcium, phosphorous and other micronutrients and minerals needed for lactating does and bucks growing antlers.



Find several spots near cover, and start trial licks. Dig down 6 to 12 inches, loosen up the soil and mix the bag of minerals with it, after first clearing any grass, leaves or sticks. Then continue to replenish the sites that get hit hardest. Avoid checking the sites except to refresh them, and wear rubber boots when you do so.

### 5. Build Bedding Areas

You might not have to add these. Many properties have prime areas where older bucks bed on ledges and shelves, in swampy or remote areas, or storm-damaged locations with fallen trees and jumbled brushy cover. If you lack these, you can create them in several ways.

First, select an isolated, remote spot bucks would like on a hill or bench, on the leeward side and preferably near the center of your property. Then clear-cut or fell several low-value trees, allowing some to fall on top of each other. If there aren't many such trees, cut them or large branches, and also some cedars from nearby, and drag them in. If your land is mostly open, planting blocks of Conceal in strategic spots can provide prime bedding areas.

Don't make woods bedding sites too cluttered. Deer must move in and out freely and have a primary access route and one or two secondary escape paths. If you live in a cold climate area, be sure to add a few pines, spruce or cedars in clusters to block the wind and snow



The author drags a cedar to a prime potential bedding spot to add cover and make it more appealing to a mature buck.

and provide thermal protection during winter.

If you can't do this chainsaw work, hire a logger who will work with you cutting firewood or pulpwood in small, mostly clear-cut blocks. The harvested areas will allow sunlight to penetrate, encouraging species such as blackberry, greenbrier, grapes and honeysuckle to grow. Have him leave the tops, or push them into windrows or piles to channel deer in the direction you want them to travel, such as toward a food plot.

### 6. Control Predators

Control of predators is vital for two major reasons. The first is obvious. Coyotes, bears and wild dogs can cause significant fawn losses that will affect overall deer populations on a property. They also kill adult deer, including trophy bucks. Second, when they have a choice, deer favor areas where they can feed unmolested and feel relatively safe moving without being chased constantly by predators. Your land will be more attractive if it has fewer predators than surrounding areas.

### 7. Control the Deer Population and Hunt Smart

You can't stockpile more deer on a property than the habitat will allow. Trying to do so is a losing proposition. And chances are you will be overrun with does, which might dominate the prime areas and sometimes nudge out bucks.

In cooperation with adjoining landowners, if possible, enact a plan to keep doe and buck populations as close to balanced as possible. That means harvesting more does and passing up more young and middleaged bucks in most cases. Having land that is not overcapacity brings many benefits. You will attract mature bucks and sustain a balanced healthy herd that will not damage the native habitat. The rut will also be more intense.

A second aspect to smart hunting will help you get the most out of your food plots: Always consider environmental, cover and hunting pressure situations. Don't overhunt a location, don't hunt it until the wind is right and plant strips of Conceal to shield your approach where necessary. Also, don't do too much plinking, ATV riding and other activities that might make deer feel like they need a quieter place.

### 8. Create Sanctuaries

This leads to the final ingredient, besides food plots, any property should have, particularly smaller properties: a sanctuary or perhaps several. These are areas where no human activity occurs, except to retrieve a wounded deer. The more remote, rough, thick, swampy or steep these locations are, the better. They can be as small as a few acres or up to half the property if the situation dictates.

### **Conclusion**

Food plots offer one of the best ways land and wildlife managers can boost deer on their properties. But many extras will also help bucks feel secure, stay well nourished and want to stay on your land throughout the year.

That heavy mature 8-pointer, among other bucks, proved the value of those extras to me.







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# White tailInstitute RECORD BOOK BUCKS...

### Bill Dixon - Iowa

I started planting food plots 10 years ago or so. I started out with ag clover from the co-op and whatever seed I could find in the box stores. It wasn't until three years ago when I bought some property in NE Iowa that I really started to do a lot of research on different kinds of seed and their manufacturer. Imperial Whitetail Clover was the first product that I ever used from Whitetail Institute and the results were just like





the testimonials. I was caught by the rain and did minimal tillage with low expectations and ended up with a beautiful clover plot anyway. The deer that started using the plot blew my mind. I harvested a nice 150inch 10-point buck with my bow that year on a travel route that he was using to check the food plot for does and followed it up with another nice 150-inch 10 point with my bow the next year. I get as much

enjoyment watching the young deer in the food plots as I do hunting them. Whitetail Institute has set the food plot seed bar so high they are traveling alone. I always tell new food plotters, the only time you will consider the price of Whitetail Institute seed is the first time. After that it isn't a question. I would use Whitetail Institute products even if all the rest were free. Thanks for all the hard work and development from the Whitetail Institute Team!

### Jason Miller – Missouri

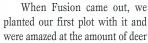
All of us hunters want that perfect food plot. So much time and energy goes into it and it truly starts with a vision you have in your mind. You can close your eyes and see it, but it is going to take so much more for that to happen. We have a 156-acre spot that is in row crops. Putting in a food plot along the edges works best for that particular

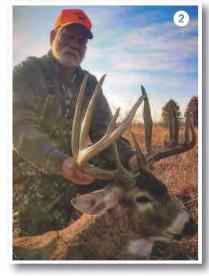


farm. (photo 1) This is where products such as No-Plow, Secret Spot, and BowStand come into play. Year after year it attracts a large amount of deer. This past year we were blessed with taking three bucks off this property.

We plant a lot of different plots in various states and we use the

words "Salad Bar." We will plant two plots side by side. For example, we will plant Fusion and beside it plant Beets & Greens. This gives the deer a variety to eat from the hot summer months to the cold days in winter. As our cameras have shown us the past few years these salad bar plots have deer in them 12 months of the year. With bucks running all over the countyside during the rut these plots are a great way to take a nice buck. You will find does coming to these plots and when they do, be ready because many times bucks are following right behind them.





that was passing up the wild clover beside it and coming right to the Fusion. This past fall a friend of ours, Ron Schulgen, took a 190-inch buck that had been visiting a Fusion plot. (photo 2) Photo 3 shows a 170-inch buck one of our team members, Chris Goode, killed in Illinois.

A new product this season we look forward to planting in Illinois is Conceal. We



have a new farm that has a twoacre hay field right beside a gravel road that will be transformed into a Fusion plot this spring. Conceal will be perfect to keep that plot hidden from the road.

Hunting has become more than a couple weeks of the year. It is about planting food plots, checking cameras, mineral locations, spraying, shed hunting, scouting, stand placement, shooting our bows and building friendships. Taking that glory picture after a successful hunt is just the cherry to top off a great year. If you plant it, they will come.

### Kent Robinson – Kentucky

I started using Whitetail Institute's Fusion, Imperial Whitetail Clover, Alfa-Rack Plus, Beets & Greens, as well as 30-06 minerals five years ago. After the first year, bucks started to show up that I never knew existed. Including this big guy who at the time I figured to be a 4 1/2-year-old. He had good genetics but lacked mass. Fast forward four years of hard work and hunting the same deer and watching him grow bigger and bigger every year, I finally got my shot and made it count on this 184-inch brute. Not only did he continue to gain mass every year, but he kept adding inches everywhere and I give credit to Whitetail Institute's products for not only giving him the nutrition to keep growing bigger at such an old age but also for holding him on my land throughout the entire season for several years. Since I started using Whitetail Institute products, I've noticed a significant difference in the rack size of the bucks on my property and an overall healthier herd. Thank you, Whitetail Institute, for making such great products! They are second to none!



### Steve Hedberg - Minnesota

We see as many as 15-20 deer in the Alfa-Rack Plus food plot in late fall, especially during muzzleloader season. This past year I killed a 147-inch 10 point in an Alfa-Rack Plus plot with my bow. (photo 1) Casey Jorgenson killed a 131-inch 8 point (photo 2) and her sister Lauren killed a 171-inch, 12 point (photo 3). Both of their bucks were killed with shotguns.

There hasn't been a year go by where there wasn't an opportunity for a good buck. We are just more selective now. Our goal is 3-1/2 years of age

I went without taking a buck two years ago but passed up many 125-130-inch deer waiting for the big boy to show. That's hunting. Thanks Whitetail Institute for a great product.





### Rob Hudson – Pennsylvania

Three years ago, I planted Fusion in a two-acre clearing on our hunting land. The first year it struggled, and the weeds had to be controlled with Slay and Arrest. The second year it really took off. It spread, covering some bare spots and with the help of proper fertilizer, weed control and mowing, it has become a very good food plot. The deer started showing up almost immediately but what surprised me was the quality of 8 and 10 points that continue to come to the plot. Whitetail Institute has made a huge difference in my deer hunting and the quality of the bucks.

Last year during archery season I shot this 17-point, non-typical in the Fusion field at 30 yards with a crossbow. He began coming in regularly to the plot back in the summer. One afternoon I watched him at 59 yards come in and munch on the Fusion for 1/2 hour but was out of range. The day I shot him, there were 8 doe in the plot when he showed up chasing one of them around. He is one of 6 nice shooter bucks I saw last season.

He weighed 250 pounds, had a 23-inch spread and was 7-1/2 years old. It has not been officially scored yet. The state scorer will be here later this month to score him. I'm told by the taxidermist it should score about 180.

I'm looking forward to another great season at the food plot, and plan to create a few more plots with Whitetail Institute products.



### **Send Us Your Photos!**

Do you have photos of a buck that qualifies for the Pope & Young, Boone and Crockett or your state record books that you grew or took with the help of Imperial products? Send it to us and you might find it in the Record Book Bucks section of the next issue of Whitetail News. Email your digital photos and a three to four paragraph story telling how you harvested the deer and the role our products played to

info@whitetailinstitute.com

or send them to:

Whitetail News, Attn: Record Book Bucks, 239 Whitetail Trail, Pintlala, AL 36043

# Turkey Select Chufa The premier high-energy food source for turkeys

By Whitetail Institute Staff

ver since it first opened its doors food plot revolution, the Whitetail Institute has focused solely on developing the industry's top food plot products for deer. Turkey Select Chufa is a natural complement to that and another example of the Whitetail Institute going the extra mile for its customers.

To explain, two of the many things that separate the Whitetail Institute from the rest are the Whitetail Institute's total dedication to its customers and the deep relationships the Whitetail Institute has

developed over the years with a broad range of contacts in the seed industry. It is through those contacts that Whitetail Institute identified a source of high-quality chufa seed, and since turkeys are second behind deer on the list of game animals our customers manage and hunt, the Whitetail Institute made the decision to make Turkey Select available to its customers.

Chufa is a perennial sedge that produces underground tubers, which are a highly preferred, high-energy food source for turkeys and waterfowl. Also known as "ground almonds" and "tiger nuts," chufa tubers rank 10th among the most important waterfowl foods in the United States, and many believe they're the number one preferred choice for turkeys.

at whitetailinstitute.com. Be sure to wait until there is no remaining chance of late spring frost before planting Turkey Select. Be sure you choose a site that gets lots of sunlight for Turkey Select. While Turkey Select can adapt to a wide variety of soil types, medium

many turkeys you have in the area.

to lighter soils with soil pH of 5.5-7.5 are best. Soils that remain moist are optimum for maximum tuber production. In sites where grass competition is expected to be especially heavy,

it can be a very good idea to incorporate Roundup into seedbed

duce underground tubers during the summer, and once the foliage dries in the fall, turkeys dig the mature tubers up with a vengeance. Although chufa is a prolific-growing perennial, smaller plots in high-

density turkey areas can be wiped out the first fall, but if enough is planted to withstand that initial attack, it can last for years, benefitting

both spring and fall turkey hunters. Obviously how much is enough

will vary from case to case based on how much you plant and how

Plant early enough to leave 100-120 days for the chufa plants to ma-

ture before the first frosts of fall. Exact dates, which vary regionally from April to June, are on the back of the product bags and also posted

> preparation. Turkey Select is also Arrest MAX-Approved to help you control grass competition through the spring and summer after planting.

> > Turkey Select is available in 10-pound bags that plant 1/4 acre. For additional information about Turkey Select, go to whitetailinstitute.com, or call the Whitetail Institute at (800) 688-3030. Www



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## Why the Spring/Early Summer Period is Most Critical for Whitetail Deer

By **John J. Ozoga**Photo by Charles J. Alsheimer

Poor nutrition during spring and early summer negatively affects the well-being of all deer. Invariably, an inadequate diet during this critical period contributes to poor growth of young deer and poor reproductive performance among does, and yields physically smaller-thannormal bucks carrying inferior antlers at maturity.

Most importantly, the quality and amount of deer nutrition during late pregnancy and early stages of fawn nursing will determine deer reproductive success, population growth rates and, ultimately, deer hunting success and harvest rates.

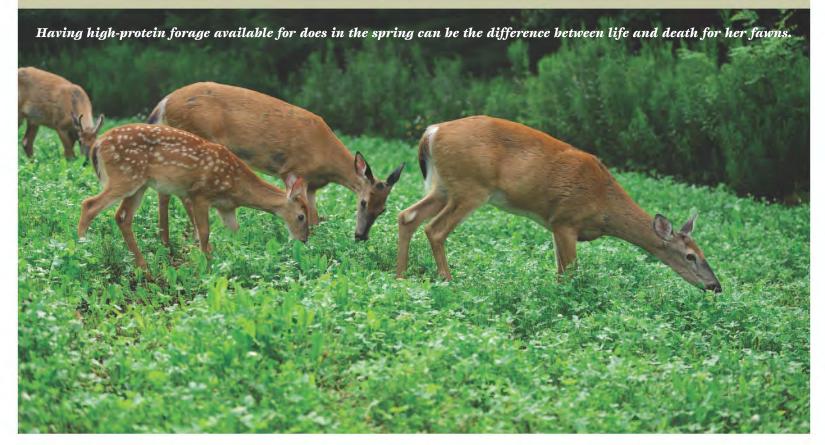
If a pregnant doe's diet is inadequate, she draws on her bones and body tissues to nourish her fetuses. If she survives, when severely malnourished, she tends to give birth to weak, undersized fawns, most of which die in a few days.

In addition, nursing her fawns is the most energy-demanding time for female whitetails. The malnourished mother might not produce milk and might behave abnormally by not defending her newborn, or she might even abandon them.

Life for a young fawn is precarious. Even those healthy enough to survive the first day or two might later succumb to malnutrition, predation, accident, disease, abandonment, adverse weather or many other maladies we don't fully understand. In some environments, the consequences might be relatively minor, but sometimes, almost an entire age class of deer can be lost.

### **Fetal Failure**

Investigations conducted by Louis Verme at the Cusino Wildlife



Research Station in Michigan revealed that the doe's nutrition during the final one-third of pregnancy (April through early June) is by far the most crucial factor determining the newborn fawn's fate.

Based on controlled studies, Verme found 92 percent of fawns born to does malnourished throughout pregnancy died within 48 hours of birth. Some were born dead or died at birth.

All died from nutritive failure. That is, most were small and weak, the mothers did not produce milk, or the doe abandoned them and the fawns starved.

When winter diets were poor, as they commonly are on Northern whitetail range, and spring diets were good, does still lost 35 percent of their fawns. In contrast, about 95 percent of the fawns survived if their mothers were well fed throughout pregnancy.

Fawn birth weights ranged from 2 to more than 10 pounds. Survivors, on average, weighed about 8 pounds at birth, but those that died weighed about 4 pounds. Five pounds seemed to be the cut-off

Using his research experience, Verme predicted newborn fawn mortality rates in Upper Michigan based on examination of fetuses from 1,000 road-killed deer during a five-year period. Predicted average annual fawn birth weights ranged from 5 pounds to more than 7 pounds. Predicted newborn fawn mortality, attributed only to nutritive failure, ranged from 10 percent to 68 percent, averaging 34 percent annually.

Newborn fawn mortality rates have been equally variable in the arid Southwest, where drought can reduce the quality and quantity of deer foods and fawn-hiding cover. In one study, fawn losses ranged from 10 percent during years of heavy rainfall to as much as 90 percent during years of drought.

### **Protein Effects**

Earlier studies conducted at the Cusino Wildlife Research Station demonstrated that food stress causes a reduction in the amount of milk a doe produces, but milk quality did not change.

Several years later, other researchers reported the amount of protein in the diet of the pregnant doe greatly influenced newborn fawn survival. When fed a 13 percent crude-protein ration, does didn't lose any fawns after birth. By comparison, a group of does fed a 10.4 percent crude-protein diet lost 25 percent of their fawns, and another group receiving 7.4 percent had 42 percent fawn mortality.

Because no dead fawns had milk in their stomachs, delayed or inadequate milk production was considered the primary cause of mortality. These results clearly indicate that pregnancy increases the need for dietary protein.

### Fawn Bedding Cover

Healthy newborn fawns cared for by healthy mothers are well endowed with inherent strategies that help minimize detection and increase their chances of surviving early life, provided they have favorable ground-level hiding cover. Unfortunately, researchers are finding examples where poor hiding cover contributes to excessive predator kill or weather-related stress.

As noted, drought in southern Texas often causes scant low-level vegetation, poor maternal nutrition and a resultant increase in fawn mortality rates largely because of covote predation. The latest studies in that area indicate heat stress can cause poor fawn growth rates and



make small, weak fawns more prone to disease and predation.

Likewise, on the prairie grasslands of South Dakota, researchers found that most fawns bedded in tall grass providing superior overhead vegetative cover, better concealment and great thermal insulation fared better as compared to surrounding cultivated cropland. Conversion of grassland to wheat production increased fawn mortality because of coyote predation and hypothermia.

Researchers in Illinois found the best newborn fawn survival habitat was large forest patches bordering open areas, with more irregular edge habitat as compared to "mortality habitat."

In other words, coyotes seem to be more successful hunting small patches of cover and straight-line edges.

### **Lactation Crisis**

Given nutritional shortage during early stages of fawn growth, Canadian researchers suggest that a doe's immense resource needs might no longer be sufficient to cope with energy needs of lactation, growth and replenishment of body reserves. If so, they theorize lactating does would adopt a conservation strategy, ensuring their own future reproduction and survival at the expense of their newborn offspring.

Accordingly, they said, "This trade-off in energy allocation could be expressed through changes in behavior. For example, females may decrease nursing activities and increase time foraging when food resources decrease."

Using captive deer, the Canadian researchers manipulated food availability to simulate nursing doe food shortage during summer. At the same time, they monitored maternal care traits and fawn behavior when fawns were five to 80 days old.

All does used in the study were fed unlimited feed except from May through August, when half were fed full rations and the other food-restricted group was fed 20 percent less.

In a nutshell, this study demonstrated that a mere 20 percent shortage in the mother's nutritional needs during peak lactation caused a change in maternal behavior and resulted in the death of 88 percent of their newborn. Fourteen of 16 fawns died after 16 days of age, long after formation of the doe-fawn bond. By comparison, well-fed mothers lost only 13 percent of their fawns.

The most striking differences in lactation behavior between the two groups occurred during the first 30 days. Thereafter, time spent suckling decreased sharply.

Fawns from the food-restricted group spent more time suckling and soliciting attention from their mothers than fawns from well-fed mothers, suggesting they tried harder to get milk. Even so, fawns from food-restricted mothers grew slower and suffered higher mortality.

Food-restricted mothers also spent 21 percent more time foraging than well-fed does, in an apparent attempt to compensate for energy shortage. Hence, study results support the energy conservation theory that given nutritional stress, does will sacrifice their newborn for their own benefit.

### **Conclusions**

The primary goal of deer management must be to maintain healthy deer via diversified habitat management that best meets the whitetail's seasonally changing food and cover requirements. Understandably, those basic needs and management strategies will vary depending upon the environment and require proper herd control.

There is no doubt that predation of newborn fawns can be a serious factor causing high newborn fawn mortality, thereby curbing annual deer recruitment rates in some parts of the whitetail range. Unfortunately, only controlling predator numbers does not seem to be a reasonable solution to the problem.

Further, I believe the real problem in many areas is poor maternal nutrition, and that excessive loss of newborn fawns is compensatory because many fawns would die anyway.

If newborn fawn mortality is judged to be excessive, as it commonly is in the North, I see no logical solution other than providing better food and cover conditions for pregnant and lactating does as well as for young fawns. Regardless of environmental conditions, I believe opening management can play a critical role in satisfying these basic needs.

Because the duration of cold weather and snow cover partly governs deer health, reproductive success and survival prospects in the North, top priority must be given to maintaining mature conifers as deer wintering shelter, interlaced with early successional stages of deciduous vegetation as a winter food source.

Remember, the combination of poor deer wintering habitat and a long, severe winter can eliminate 30 to 40 percent of a wintering deer herd. As a result, throughout their Northern range, many deer populations are currently below carrying capacity of the summer range.

Even in the North, creating and maintaining openings within deer winter complexes is important, because snow tends to melt from open habitat at least two weeks earlier than in adjacent forest cover. It is recommended these open areas be cut, mowed, planted and burned as necessary to maintain them in cool-season clover mixes for maximum spring benefit.

Obviously, in the South and Midwest plains, limiting factors are much different, and sometimes might deal with drought, deer overpopulation, improper land use or various other factors.

There's good evidence that heat stress in the South should be taken in account when managing fawn-rearing habitat. For example, because areas with moist soil are cooler than dry areas, it is recommended that wetlands, riparian areas and even low spots should be maintained with quality fawn bedding cover.

Likewise, on the Midwestern plains, researchers report increased fawn mortality because of predation and cold stress, since changing farming practices have eliminated vast areas of prime fawn bedding cover. It seems rectifying that problem will be difficult.

Food plots can no doubt play an important role in improving deer maternal nutrition and softening the predator effect. When carefully planned, food plots can target specific seasonal dietary needs for whitetails, such as high-protein-content forage superior to that typically available in native plants during spring and early summer.

If you're seeing fewer fawns per doe than expected on your property, review the reasons I've discussed here. Timely killing a few coyotes might help some, but it won't cure the problem of poor-quality food and cover just before and during the fawning season.

If you determine that inadequate nutrition during the critical preand post-fawning period is at least partially responsible for fewer fawns than expected on your property, consider food plot management as a remedy. And, above all, have the expert staff at the Whitetail Institute help you formulate a management program that best meets the environmental constraints of your area.

























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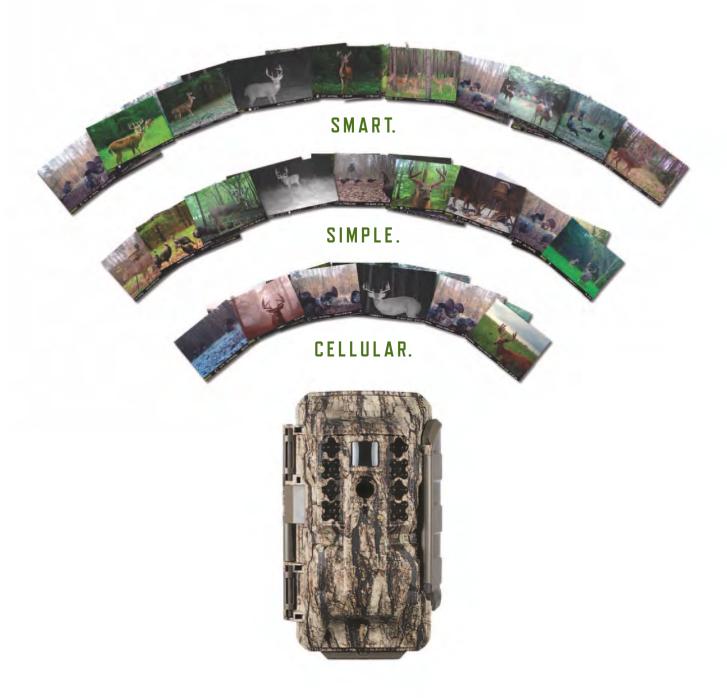
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# The WEED DOCTOR

By W. Carroll Johnson, III, PhD., Weed Scientist and Agronomist



f you read agricultural literature from decades ago, weeds were managed in major crops using sound crop rotations, cover crops, carefully constructed seedbeds, elegantly designed tillage implements to mechanically control weeds, and judicious use of then-new chemicals called herbicides, which were limited in effectiveness.

Today, modern weed control is herbicide-first, which is instinctively the weed-control tool of choice for homeowners and farmers. The reasons for this paradigm change are not complex: Herbicides bring convenience, simplicity and cost effectiveness to weed control. I consider herbicides to be a modern marvel. However, herbicide-first weed control brings consequences, including a preponderance of herbicide

resis-tant weeds. In conventional agriculture there is renewed interest—almost urgency— to not abandon herbicides but revert to a balanced weed-control strategy for major crops.

In food plots, the instinctive herbicide-first solution prevails, just as it does in conventional agriculture. The consequences of the herbicide-first mindset are the same with conventional agriculture and food plots, along with the need for a balanced weed-management system. However, a balanced weed-control system in food plots is crucial for an additional reason: There are only a few herbicide solutions for weeds in food plots. The diversity in possible weed species infesting a food plot is far greater than the control spectra from available herbicides, and some weeds are simply not controlled. That forces us to take a different approach to successfully manage weeds.

The 10-cent term for a balanced weed-control system is integrated weed management, which is defined as a blended system to manage weeds that's based equally on cultural, mechanical and chemical weed control. There is not and never has been a prescription for weed control in food plots that will work in all cases. Integrated weed management in food plots is customized, based on knowing the nuances of your forage crop, weeds infesting the site and resources available to manage the infestation. By resources, I mean budget, equipment and time. To take integrated weed management from a concept to an ef-

fective plan for a specific food plot requires careful thought and action. The one-size-fits-all approach does not apply for integrated weed management in food plots, and it never will.

### **Cultural Weed Control**

The foundation of an integrated weed-management system is cultural weed control, which captures the innate competitive ability of crops to suppress weeds. Any crop production practice that improves forage growth and the ability of the crop to compete favorably with weeds is cultural weed control. This is also the most cost-effective means to manage weeds. Common forms of cultural weed control include forage crop selection, planting date, seeding rate and soil fertility management (which includes liming). Each of these factors directly affects forage growth and the ability to compete with weeds. Plants, weeds and crops compete for limited resources, such as sunlight, nutrients and water. Weeds obviously cause crop losses because of competition for those limited resources. However, crops can be equally competitive with weeds for the same resources, so why not stack the odds in favor of the forage crop? That's the basis for cultural weed control. Many of the pre-planting decisions related to establishing a food plot are de facto cultural weed-control decisions. Seek expert advice about what forage species to plant at your location and how to manage those crops for optimized growth. Try to avoid significant deviations from proven forage production guidelines to ensure maximized crop potential.

Cultural weed control is not a stand-alone weed-control practice. It's the starting point for a balanced weed-management system — the foundation. Even in established food plots, the foundation needs to be repaired. For example, last summer, I frequently advised customers with severe weed infestations to overseed (or frost seed in Northern regions) additional forage seed in the upcoming late winter to rejuvenate the existing forage stand in their food plots. I suspected the stands were spotty or overall sparse, allowing weeds to heavily infest those plots. Weeds are opportunists, and an improved forage stand complements other weed-control efforts. The point to this example is that cultural weed control is more than just the food plot establishment practices. Cultural weed control must be engaged throughout the life of the food plot. (With that said, performing a professional soil test is one of the most important cultural weed control measures you can take.)

### **Mechanical Weed Control**

Sometimes the simplest solution is the most effective. This is the case with mechanical weed control, by which weeds are physically cut or removed. The most elementary form of mechanical weed control is simply pulling weeds by hand. This is manual labor in the purest sense; miserable, dirty and physically taxing. In modern times, we can do better than that. Yet my experiences with controlling dog fennel, a tall perennial weed, painfully illustrate that hand-weeding is the only effective method of controlling some troublesome weed species in food plots because of the limitations of other control options.

The most common and practical forms of mechanical weed control are tillage and mowing. Tillage, usually with a disk harrow, destroys weeds while the seedbed is being prepared for planting. If weeds are large, it will usually take two or more passes with a harrow to adequately chop the weeds enough to prevent regrowth. In those cases, harrowing in perpendicular passes enhances the cutting effect. If time permits, repeatedly harrowing seedbeds at biweekly intervals during fallow periods will simultaneously kill emerged weeds and stimulate additional weed seed germination. Repeated at regular intervals through several weeks, this regimen will systematically deplete numbers of viable weed seed in the soil. This is called stale seedbed weed control and is a commonly recommended form of mechanical weed control in food plots.

Mowing is another type of mechanical weed control and a mainstay of food plot management. Mowing is recommended to shred the tops of tall weeds and allow sunlight to penetrate to low growing forages below. To be clear, mowing tall weeds is a temporary, short-term fix, not a stand-alone weed control solution. However, there have been many situations where mowing saved an established food plot from tall weeds and rescued forage productivity — at least for the following hunting season. Although mowing is just a short-term fix, it's better than abandoning the food plot because of tall weeds.

### **Chemical Weed Control**



Herbicides are wonderful tools and make weed management easier and more effective. To that end, all of us at Whitetail Institute spend significant time explaining how to use herbicides safely and effectively. Herbicide choices in food plots are limited, and there are some weeds that simply are not controlled by available chemical tools. Further, multi-species forage blends are commonly planted, which limits herbicide use because tolerance varies among forage species. Despite these limitations, herbicides such as Arrest Max for grass control and Slay for broadleaf weed control are frequently recommended and used in food plots. When herbicides are used correctly, they provide a convenient solution with great benefit, which is one reason why the herbicide-first mentality prevails.

For all the benefits of herbicides, their overall performance is boosted when used in a balanced system that also uses cultural and mechanical weed control. This is the case in conventional agriculture and food plots. For weeds that can be easily controlled, an integrated weed-management system makes the overall effort more sustainable through time compared to herbicides alone by lessening selection pressure toward herbicide-resistant weeds. For troublesome weeds with few herbicide choices, a carefully crafted integrated weed-management system is the only way to stay ahead of the infestation and protect food plot productivity.

# Minerals: For Far More Than Just Antlers

By Matt Harper

Photos by the Author

To stunny how people easily form bad habits but must make a concerted effort to develop good habits. For most of us, it's far easier to slip into a Netflix addiction than to habitually exercise. My brother and sister are rare specimens who enjoy running, but I'll only run if being chased. Occasionally, I'll try to muster some drive to work out, but probably for the wrong reasons. This typically occurs when a look in the mirror shocks me regarding my self-image versus reality. Of course, exercise is not just for vanity, as it also can make you healthier and feel better. But if many people were honest, their motivation to exercise is driven more by the desire for a good physique rather than good heart health.

That can be said for the motivation behind nutritional management hunters. They can make a strong, steadfast man shake so uncontrolfor whitetails. What's the first thing most hunters envision as the delably they almost fall out of a tree stand. sired result of deer nutritional supplementation? If you say anything So it's little wonder the first thing someone thinks of regarding deer other than antlers, I'd accuse you of being delusional. Without quesmineral is how it will produce huge, heavy-beamed antlers, and there's tion, growing big antlers is the underlying goal of nutritionally manlittle thought about other benefits. At least with food plots, there's aging deer. I understand folks argue it has more to do with overall some connection between food herd quality, and although that might be part of the reason, I challenge and herd quality, but with minerals, it seems to be all about the idea that herd quality is the driving force. If bucks didn't grow bigger antlers, most people's enthusiasm for spending time and headgear. That's likely bemoney on their deer herd would wane. After all, antlers swim in cause most people don't our dreams, asleep and waking. Tell me your heart doesn't beat know how minerals work faster when a large-antlered buck rather than a doe strolls into your in a deer's body and the nutritional benefits that occur shooting lane. You might say it shouldn't, but that doesn't change the fact that antlers have a mesmerizing pull to other than just growing antlers.

Minerals provide many nutritional benefits that translate to physiological benefits.

### Minerals Defined

Minerals are defined as naturally occurring inorganic substances in the soil and derived primarily from subterranean rock layers. Essentially, minerals are rock or part of a rock composition, and the amount of naturally occurring mineral found in the soil of a property is influenced by the naturally occurring rock in that area. Wind and water erosion, depletion rates based on vegetation usage, and the presence or lack of decaying vegetation can also affect a soil's mineral profile.

Nutritionally, minerals are generally divided into two main categories: macro minerals and trace minerals. Macro minerals tend to be of higher concentration in the soil and also have a higher nutritional requirement for deer. Examples include calcium, phosphorus, magnesium, potassium and sodium. Trace minerals are needed in smaller quantities but are still nutritionally vital. They include zinc, iron, copper, manganese, cobalt, selenium and iodine.

# **Antlers and Body Health**

I would be remiss if I didn't at least talk briefly about the role minerals play in antler growth and how it relates to and is affected by body health. Antlers are essentially bone that grows outside a deer's body and when hardened are about 55 percent mineral. When the antler is in the growing velvet stage, it's mostly protein with a collagen structure that acts as a framework. During antler growth, minerals are deposited via the blood stream onto the collagen framework. Antler mineralization progression increases as antlers near the end of the growing phase. But if you see a buck neck deep in a mineral lick, it doesn't mean the mineral he's consuming is going directly to the antlers. The calcium, phosphorus, magnesium and other minerals are pulled from the buck's skeletal system and redirected to the growing antler. The dietary mineral consumed by the buck is used to replenish the skeletal system.

Antlers are a secondary characteristic, meaning a buck's body health will never be sacrificed to grow bigger antlers. If there are not enough minerals in the diet to maintain a healthy skeletal structure and overall body condition, less mineral will be transported to the growing antler and result in smaller, less dense antlers. That's why good antler growth is a visible indicator of the overall nutritional plane of the deer herd. A healthy buck with adequate mineral and other nutritional elements in the diet will have better antler growth.

# **Body Weight**

When someone implements a mineral supplementation program with a quality product, the first thing they notice is that body weights of all deer classes increase. In general, that's related to an improvement in nutrition that leads to body-weight gain and/or body-weight maintenance. But specific nutritional and digestion functions make that occur. Almost all minerals are involved in some type of enzyme activity that's vital for proper digestion and metabolism. That's likely why hunters and managers see increased body weights when using a quality supplemental mineral product. Similar results have been seen for years in domestic ruminants.

For example, along with being a component of bone and antler



growth, magnesium is an enzyme activator. Enzymes are catalysts that regulate chemical reactions involved in the digestive system. They help break down and digest nutritional components such as protein and carbohydrates. Proper enzyme activity is vital for nutritional health, and in turn, good mineral nutrition helps maintain enzyme activity. Zinc, a trace mineral, is also a component of or cofactor in several enzyme activities. Manganese, also a trace mineral, plays an important role in bone and antler formation but is also a critical player in metabolism. Manganese is involved in amino acid metabolism. Amino acids such as lysine, methionine and threonine are the components that comprise protein. Manganese is also involved in fatty acid synthesis and cholesterol metabolism. Fatty acids are the energy source that helps power a deer's bodily functions. In general, minerals are involved in many facets of the metabolic and digestive system. The availability of proper levels of minerals in a deer's diet leads to proper digestion and body-weight gain.

# **Other Mineral Functions**

Aside from antler growth and their role in the digestive system, minerals are involved in many other vital functions. Calcium is also involved in blood coagulation, muscle contraction and nerve function. Sodium is a major cation of extracellular fluid and is involved in maintaining an osmotic balance at the cellular level. Potassium is the counterpart, being a major intracellular cation. That relationship between sodium and potassium makes deer become "salt hungry" in spring and summer. In spring, green, lush vegetation is high in potassium but almost void of sodium. The osmotic balance shifts, and deer crave sodium in any form, salt being the most readily used.

Minerals are also involved in the production of B vitamins by rumen microflora. Specifically, cobalt is used to produce vitamin B12. Iron is involved in cellular respiration and hemoglobin. Copper is also involved in hemoglobin synthesis and several functions, including hair pigmentation and immunity. Selenium is involved in vitamin E absorption and retention.

This is only a snapshot of the roles that minerals play in a deer's body. The critical thing to remember is they are all needed at appropriate levels to achieve maximum nutritional and bodily health. Deficiencies in one will lead to subpar results.

# **Doe Lactation and Fawn Development**

The success of a fawn crop is affected by the health and vitality of the fawn and doe. For the fawn to be healthy, the doe must be healthy to produce the amount of life-supporting milk the fawn needs for rapid growth and body development. Because fawns are the future of your deer herd, fawn health can arguably be one of the most important factors of your deer herd quality today and especially in years to come. For the first several weeks of life, a fawn's ruminant digestive system is not developed enough to use the food source its mother eats. They rely on the milk produced by the doe. Inadequate milk supply will lead to slow growth and weakness. In some cases, it can cause death soon after birth.

Doe milk is very high in nutrients such as protein, fat and minerals. In fact, it's far more nutrient-dense than cow milk. A doe must have high levels of nutrients in its diet for its mammary system to produce this high-octane fawn fuel. If nutrition is lacking, it doesn't necessarily change the composition of the milk, as the milk will maintain the

same percentage of nutrients. However, less milk will be produced, so fewer nutrients will be provided to fawns. Protein and energy nutrition are vital for good milk production, but so is mineral nutrition.

In particular, calcium and phosphorus play major roles in milk production. Similar to how bucks transport mineral for antler growth, does pull mineral out of the skeletal system to use in milk production. Mineral from the diet then goes to replenish that mineral that was used. Inadequate mineral nutrition leads to lower milk production and decreased health of the doe. Unlike with antlers, milk production is a high biological priority, and a doe's body will try to produce the milk needed for her fawns even if it harms her health. Unfortunately, that normally means a doe will produce inadequate levels of milk, and the doe's health suffers as well.

After fawns are weaned, mineral nutrition is still important. Fawns exhibit rapid skeletal and muscle growth, and both are affected by mineral availability. In that first spring, summer and fall, the faster the fawn grows, the more likely it will survive its first winter. Even when fawns become yearlings, they're still growing. In fact, bucks typically grow skeletal structure until they're three and muscle structure to four. Minerals are used for part of that growth, and if they're deficient in the diet, it will lead to smaller body size and lower body weights.

# **Supplementation**

If you want proof that mineral nutrition is important to deer herd health, take a map of the United States showing the mineral content of the soil and overlay it with a map showing the Boone and Crockett and Pope and Young numbers. You will find the highest concentrations of both are in almost identical areas. If you consider that large antlers are a sign of herd health, it makes sense that minerals are vital for optimal nutritional health.

The question, however, is the need for supplementation. Many propose that mineral needs are met by natural food sources in a deer's diet. Without question, browse and other food sources consumed by deer supply certain amounts of mineral. Still, the question remains about whether natural foods supply adequate amounts of minerals for maximum production, whether antler growth, body weight or milk production. When you analyze soil samples from across the country, you will find many — if not most — are deficient in at least one mineral. Several factors, such as farming practices that have depleted soil mineral levels through the years, cause that. Even unfarmed ground will slowly be depleted of mineral by the uptake of minerals by natural vegetation. Another factor to consider is the digestibility of the mineral found in natural vegetation. In some cases, compounds are formed in a plant that can make the mineral less digestible.

The word *supplement* means supplementation of minerals. You're supplementing the diet to ensure deer receive adequate amounts of all minerals so there are no deficiencies and maximum production can occur. Can deer still proliferate without adequate mineral nutrition? Certainly. They will and have for years. But can supplementing a certain mineral lacking in the deer's diet lead to bigger antlers, heavier body weights, healthier animals and an overall higher quality herd? Research by Whitetail Institute and testimonies from thousands of mineral supplement (such as Imperial 30-06) users indicate it can indeed.

Essentially, mineral supplementation can be viewed as an insurance policy to ensure deer on your property are receiving the nutrition they need for maximum production.

# Antler Building

# from The Whitetail Institute

Like the protein found in Whitetail Institute food plot products, minerals and vitamins are also an essential part of the growth matrix of any deer, especially a buck. Hardened antlers are comprised largely of mineral, approximately 55 percent, and most soils in North America lack one or more of the minerals vital to antler development. When you consider that a buck re-grows antlers each year, you can understand why they require such high levels of minerals in their diet.

If you want your deer to thrive and help them reach more of their genetic potential, then mineral and vitamin supplementation is vital, 30-06 mineral and vitamin supplements are extremely attractive to deer. They are also designed by nutrition experts and are professionally formulated to provide the best nutrition possible for your deer. 30-06 is an extremely attractive and nutritional product, not a glorified salt product.

Caution: Because 30-06 products are so attractive to deer, some states consider them bait. Check your local game laws before using or hunting over 30-06.





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performance and longevity of your perennial food plots you would be well advised to do a little maintenance each spring and summer after planting. One of the most important maintenance steps you can take is to control grasses and broadleaf weeds. While mowing is an important part of weed control, don't forget that the Whitetail Institute offers Arrest MAX<sup>TM</sup> and Slay<sup>TM</sup>, two selective herbicides that are highly effective tools in your grass and weed control arsenal.

Why is it important to control grass and other weeds in perennial food plots? There are a number of reasons. Weeds and grasses generally tend to establish in areas that are bare or where a food plot stand is thin. By keeping grass and other weeds under control, you free up root space for your perennials to take over. Grass and other weeds also utilize soil nutrients and moisture that otherwise would be available for use by your food plot plants. And the problem's not limited to just competition for resources. It's the fact that grasses and other weeds can win the competition and take over even the most robust food plot planting if left unchecked. This is especially true of grass. Controlling grass and other weeds in perennial food plots is usually easy. Make sure you do it in a timely manner each spring to help ensure that your perennials stay lush, thick, nutritious, attractive and last for as many years as possible.

Arrest MAX and Slay — Generally. Arrest MAX and Slay are selective herbicides specifically designed by the Whitetail Institute for controlling grass and other weeds in food plots. Arrest MAX is designed to control most kinds of grassy weeds, and it can be used in any Whitetail Institute perennial forage stand, and in many other nongrassy crops (Arrest Max can also be used on PowerPlant). Slay is designed to control a few types of grassy weeds and most kinds of broadleaf weeds, and it is labeled for use in Imperial Whitetail Clover and in any other clover or alfalfa stand. Like Arrest MAX, Slay can also be used in other types of forage stands, but not all, so if you are planning to spray Arrest MAX and/or Slay in a forage stand other than the types specified above, check the herbicide label to make sure the forage is a listed crop, or call the Whitetail Institute for advice at (800) 688-3030 before you spray!

Surefire Crop Oil PLUS. Surefire Crop Oil PLUS is an agricultural

oil of the type that the Slay label says must be added to the Slay spray tank in order for Slay to work. Surefire is also highly recommended for use with Arrest MAX to help it control grassy weeds that are perennial or mature.

Like Arrest MAX and Slay, Surefire Crop Oil PLUS is specifically designed for use in food plots. For instance, it is vegetable-based, not petroleum-based like some other agricultural oils. Surefire also contains an anti-foaming agent to help food plotters mix the spray tank correctly.

Timing the Arrest MAX Spray Application. Since Arrest MAX is a foliar-uptake herbicide, it should be sprayed only when grassy weeds are actively growing. And since Arrest MAX is a small-weed herbicide, it's best to spray Arrest MAX before grasses reach 6-12 inches in height. Arrest MAX can still control or suppress most grassy weeds after they mature, but it may take multiple applications several weeks apart to do so. Arrest MAX can be sprayed even on newly planted labeled crops that are still very young without harming them.

For best results, weeds to be treated with Slay should be sprayed while they're still young, before they reach a height of about 6-12 inches. However, DO NOT SPRAY SLAY ON NEWLY PLANTED FOOD PLOTS UNTIL THEY ARE ESTABLISHED. Clover, for example, should not be sprayed with Slav until all the leaves are unfolded, which generally happens once the clover plants reach about 3 inches in height.

Arrest MAX and Slay can be tank-mixed together. You can find an easy-to-follow mix rate sheet at whitetailinstitute.com. To find it, go to either the Arrest MAX or Slay webpage, and click on "Recommended Mix Rates" link near the middle of the page.

Cleaning the Sprayer After Use. Mix one quart of household ammonia per 25 gallons of water, and run it through the sprayer after use. This helps ensure optimum sprayer performance and minimizes the risk of herbicide contamination that might injure desirable plants on a subsequent spray trip.

Put Safety First! All herbicide labels provide solid advice about the importance of wearing protective clothing when handling and applying herbicides. The most basic important items include chemicalresistant gloves, eye protection, long-sleeve shirt, long pants, and boots. Even though Arrest MAX and Slay are among some of the least toxic herbicides, be sure to follow the label's advice about protective gear - they're on the label for a reason.

That's why the Whitetail Institute's Weed and Herbicide Scientist, Dr. Carroll Johnson, takes along what he calls his "possibles bag" any time he sprays herbicides. His kit includes several gallons of potable water for clean-up, and emergency bathing in the event of a spill or exposure due to a ruptured spray line, as well as soap, household ammonia, an eye-flushing kit, and extra personal protective clothing.

Final Thoughts. Hopefully, this article has helped clear up any confusion you may have had about herbicide use in maintaining Whitetail Institute perennial forage stands and helped explain the benefits of having better weed and grass-free plots that can last several years longer. Again, the herbicide label is the only official source of information about Arrest MAX, Slay or any other herbicide. The Arrest MAX and Slay labels and a FAQ are available at whitetailinstitute.com. And remember, if you still have questions after reading the Arrest MAX or Slay label, call the Whitetail Institute for advice before you spray! The Whitetail Institute's in-house consultants are available to assist you at (800) 688-3030, 8:00am to 5:00pm Central Time, Monday through Friday.



# IT'S A FACT

Imperial Whitetail Clover is The Most Important Food Plot Development of All Time!

about Imperial Whitetail Clover and truly do the product justice? After all, the introduction of Imperial Whitetail Clover in 1988 spawned a whole new industry, it has remained the industry's gold standard and performance benchmark ever since, and it is proof that the Whitetail Institute's entire business philosophy works.

"The birth of the nationwide commercial food plot industry unquestionably began in 1988 with the launch of Imperial Whitetail Clover by the Whitetail Institute." Perhaps no more unambiguous acknowledgement of Imperial Whitetail Clover as the genesis of the entire food plot revolution exists than this statement, which appears in the Introduction to the Quality Deer Management Association's book, Quality Food Plots, Your Guide To Better Deer and Better Deer Hunting.

Imperial Whitetail Clover also stands in absolute validation of the Whitetail Institute's forage-development process and, in fact, its entire business philosophy. Development of Imperial Whitetail Clover began with the selection of over 100 clover varieties worldwide to be used as breeding stock. These candidates were then crossbred, and the resulting offspring analyzed for defined traits specifically important to use in food plots such as rapid stand establishment and growth, sustained palatability (especially important for whitetails!), resistance to disease, tolerance of heat, cold and drought, high nutritional content and, of course, exceptional attractiveness to deer. Only the offspring best exhibiting these traits were retained for further crossbreeding, which continued over seven years until only one clover variety remained - a new clover variety specifically and scientifically designed for deer.

This process has continued until the present day,

resulting in additional new clover varieties that have been added to Imperial Whitetail Clover as the Whitetail Institute completed development and testing. This same dedication has been followed in developing all Whitetail Institute food plot products and has resulted in the development of new varieties of other types of plants also developed specifically for food plots for deer, just one example being Tall Tine Turnip.

During initial and continuing development of Imperial Whitetail Clover, testing has been performed on wild, free-ranging deer from the Deep South to the far northern states and Canada to ensure that it is attractive as the Whitetail Institute can make it, and that it will perform well in a wide range of climates. The Whitetail Institute continues to follow a rigorous real-world testing process to this day when improving existing forage products and developing new ones.

Imperial Whitetail Clover continues to serve as the gold standard for both the entire food plot industry and for the Whitetail Institute itself. Imperial Whitetail Clover continues to set the bar by which all other food plot plantings are measured. As stated by the NRA in American Hunter, magazine, "The Whitetail Institute of North America is the preeminent supplier of wildlife seed products that help hunters attract and grow healthier deer" and "To meet the whitetail's need for protein, some seed companies have developed high-protein clovers and mixtures geared especially for wildlife. At the forefront of this research is the Whitetail Institute."

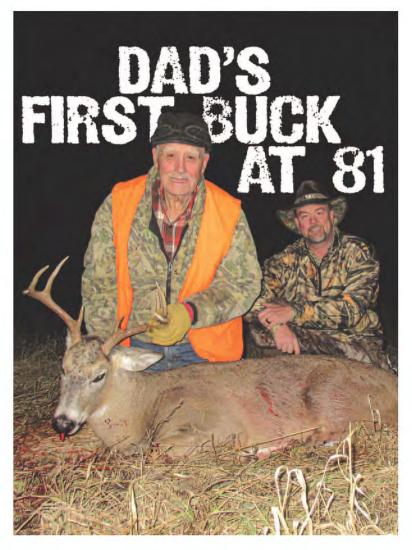
Imperial Whitetail Clover contains the only clovers genetically designed for whitetail deer. Deer love the taste and will travel long distances to feed on Imperial Whitetail Clover. It's also extremely high in protein content for antler, muscle and bone growth, and doe lactation, and it thrives in extreme cold as well as hot, dry climates. Imperial Whitetail Clover seeds are also coated with White-

> tail Institute Rainbond™ to maximize seedling survivability. If you want to attract more deer to your property, hold them there and make sure they receive optimal nutrition for good health and antler growth, plant Imperial Whitetail Clover.

Imperial Whitetail Clover is designed for good soils that hold moisture, and can last up to five years from a single planting. Planting and maintenance instructions for Imperial Whitetail Clover are on the product bags and also available at www.whitetailinstitute.com. You can also call the Whitetail Institute's in-house consultants at (800) 688-3030 with any questions. 🕪







By Matt Harper
Photos by the Author

unting stories are the stuff of great memories especially when they are about kin and fall on receptive ears like mine. That describes the following multigenerational tale told by my father about his own father. In his own words:

My dad hadn't hunted whitetails in more than a generation. And the hunting he had done wasn't even in his home state of Iowa, where he'd spent his entire life.

"I talked my dad into taking me out to Montana to a relative's ranch to go deer hunting," my father said. "My older brother, Don, decided to go, and we took Dad's 1949 Chevy. Mom and my Uncle Dimy stayed at home to keep up with the chores. When we got to Cousin Otis' ranch in Montana, we found out that we couldn't get a tag for

that area, so we packed up and headed for Jordan, Montana, where we knew we could get a deer tag.

"Of course, we didn't really have any place to hunt when we got there, but we bought tags anyway. After a couple of days of driving around, we met an old rancher named Rek. I can't recall his last name. He asked what brought us all the way from Iowa, and we told him we were doin' a little deer huntin'. Rek asked if we were having any luck, and we told him no and that we hadn't seen a deer. He said that we could go hunt on his ranch if we wanted to, and he'd even show us where the deer were. He asked if we had a place to stay, and we told him we were just sleepin' in the car. He said he had a couple of cots in the barn and that we might as well stay at his place. We could even eat with him and his family.

"When we got to his ranch and were unpacking, he must have noticed we only had one gun — an old British .303 that none of us had hardly even shot. Rek told Dad that he could borrow his dad's old rifle, so we would at least have two chances at killing a deer. The next morning, we all went out and high up in a patch of timber, we jumped up some does. They went running down through the trees, and dad and I both shot. They kept running down the hill with Rek chasin' right after them. We didn't figure that we even touched a hair, but then Rek yelled up at us that we got one. By the time we got to the deer, Rek already had it gutted. We never knew who actually hit the deer, and you know what? I still don't to this day."

I've heard that story many times through the years, and although the details varied from time to time, I never got tired of the telling. As a youngster, I thought it must have been a great adventure — going to Montana to hunt deer. At that time, Montana seemed as exotic and distant as the plains of Africa, and I could not imagine the thrill my dad must have sensed to shoot that deer. Except Dad would always tell me he thought Grandpa hit it because Grandpa was a better shot with a rifle, and that old British .303 Dad used couldn't hit the side of a barn if you were 10 feet away from it. I don't think it really mattered to Dad who brought the deer down, as he was just excited to hunt deer.

You might wonder why someone from Iowa would go to Montana to hunt deer. If that story occurred today, I would agree that leaving southern Iowa to hunt deer should require psychiatric analysis. In 1957, however, deer were scarce in Iowa. In fact, finding a deer track would evoke countywide excitement and instant fame to the spotter. To see a live deer was almost like seeing Bigfoot and would produce about the same level of skepticism.

Although deer were scarce, there wasn't a shortage of squirrels, rabbits, pheasants and quail. As a young boy, Dad would take his fox terrier, Spot, out and hunt those species. My grandpa hunted but loved to farm. My Dad farms but loves to hunt. As Dad grew to manhood, he continued to hunt small game and upland birds, often with a cast of hunting buddies that would require a novel to describe and an imagination to believe.

When I arrived, deer were prevalent on our farm. But because Dad had spent most of his formative years hunting upland game birds and other small game, he was accustomed to kicking up cackling roosters. Therefore, my first hunting experiences involved pheasants. I carried a BB gun at 8 years old, and because we didn't have a hunting dog, I was sent walking through sloughs and ditches to kick out birds for Dad. I was 12 when I shot my first pheasant, and I will never forget that. I can walk to that spot today and show you where that rooster jumped. I remember the cackle and the colors of feathers that seemed



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lit from within. I recall raising an old pump 12-gauge that was so big and heavy it should have been mounted on the deck of a battleship. Dad's words — "Take him" — still ring in my ears, as does the blast of that old gun. As I staggered back a step or two, I saw that bird miraculously fold up and fall from the sky.

Unquestionably, my dad planted the seed that grew into my deep passion for hunting. I never grew tired of hearing Dad's hunting stories, which always seemed to be paired with the smell of gun oil and old leather. Those stories captured my every sense, and as a young boy, when I heard about days of hunting birds, rabbits and squirrels, I believed I could hear, see, touch and smell every detail. But as I grew older, I heard my friends talk about the big deer drives they went on, filled with yelling men, shotgun blasts and deer running everywhere.

They would describe how their uncle shot a "big 8-pointer" or how their dad hit a deer at 100 yards on the run. Undoubtedly, there were some exaggerations, as with hunting stories from all youngsters. Regardless, the effect they had on me was overwhelming. It sounded like the most exhilarating adventure, at least for a 14-year-old boy, and I had to give it a shot. Dad let me go with a group of guys he trusted, and the first morning of season, I was shivering at the end of a hedge row, no doubt put there by someone who thought that was the least likely place I might shoot a deer or, more important, someone in our group.

Sure enough, I soon heard shouts and then guns firing. Each blast sounded closer. Three does busted from the timber about 400 yards away and headed straight at me. Just like the rooster pheasant, the does ran from my right to left about 30 yards away, and I raised that big shotgun and pulled the trigger. I was stunned to see a doe flip over and lay still. I was hooked.

I couldn't wait to tell Dad what had happened, and I think he was just as excited — or maybe he faked it pretty well. I knew that Dad had never shot a deer, or at least one he could call his own, and I was equally sure he would jump at the chance to go deer hunting the next season. He went for two years, but I don't even know if he shot his gun. He enjoyed the camaraderie, but the hunt didn't seem to spark the same core-rattling reaction it did in me. During the next two to three years, something always arose to preclude dad from deer hunting. Some were likely unavoidable, but others were probably convenient excuses. I also began to drift away from deer hunting during my later years of college and the first few years of my new career. In fact, Dad and I didn't hunt much for a while, which is sad in hindsight, knowing we lost a few precious years of making hunting memories together.

My college degree is in animal science with a focus on ruminant nutrition. For the first few years after college, I worked as a feed formulator and technical service representative for a large national feed company. I didn't dislike what I was doing, but I always wanted to work in the hunting and outdoors industry. In 1999, I got that chance when I went to work for the Whitetail Institute of North America. That sparked several critical occurrences and helped rekindle the passion for hunting Dad and I held. Whitetail Institute is a food plot company, so naturally, I had to start planting food plots to familiarize myself with the products and the concept of managing and hunting deer using food plots.

At that time, I didn't own land or equipment, so guess who got the call? Dad graciously let me pick a few acres on the farm to set aside for food plots and said I could use the tractor, disk, plow and whatever I needed to get them planted. Of course, Dad couldn't stay away from



the project, and there were soon two tractors in the field, as Dad and I worked the land together. It had been several years since we had worked together on the farm, and although we weren't planting an 80-acre cornfield or baling 40 acres of hay, we were still working the soil together.

One late afternoon that first year, Dad and I were trying to get a field planted before a rain. I had finished seeding, and Dad was dragging the harrow over the field to finish things up. I was getting ready to head home, but then my eyes drifted to Dad on his tractor. I'm not sure why it hit me so strongly, but I couldn't look away from Dad, the tractor, the harrow, the cloud of dirt rising from the ground and the scene in its entirety. It probably only took him 20 or 30 minutes to finish the field, but I remember wishing it would go on for hours. It was my dad — a farmer doing what he had done his entire life; doing what Grandpa had done for his entire life on a farm on which he'd lived his entire life. Dad had worked this farm with Grandpa and might have sat in that spot years earlier watching his father do the same thing. Now I sat there watching my dad at his craft, feeling blessed in ways that cannot be recounted in words.

Before then, we had only hunted upland birds and other small game at the farm together. We'd hunted deer at farms owned or accessed by the main family of the hunting group I had thrown in with. We didn't even have any hunting stands or blinds on our farm, so I began putting them up around the farm as I could afford to buy them, and Dad helped put almost every one up. During the next few years, Dad continued to help me with plots and the never-ending game of tree-stand shuffle, but he didn't deer hunt. If I shot a deer, he was excited to help me load and hang it, and always wanted me to stop by after each hunt to tell him the story of that day. He even went on hunts with my daughters when they started to hunt deer, most of which were not successful, because he had them giggling so loud, which often spooked most of the game. But he still rarely hunted deer himself and had yet to officially fill a tag.

For the past few years, I have followed a tradition of asking Dad where he would like to go hunting and what he would like to hunt. Dad loves to travel, especially if it involves hunting, and most years, he said he'd like to go shoot a turkey somewhere, which makes sense, as turkey hunting has been his passion for the past 25 to 30 years. Occasionally, he'd throw a curve ball at me like, "Lets go hog hunting," and this past year, he threw me more of a change-up.

"You know," he said, "I would really like to shoot a deer."

That was all that had to be said, and we didn't even have to travel to make that happen.

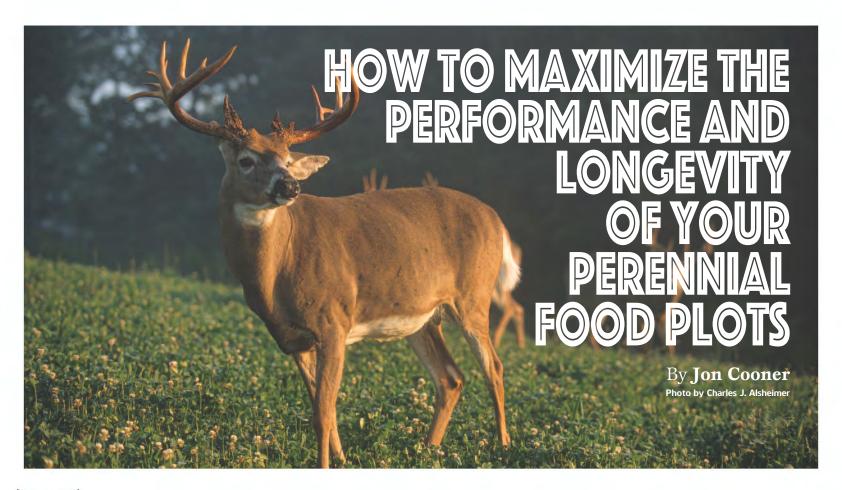
The quest began during early bow season by creating several popups and bale-blind sets at my plots to provide the best chance at a 40yard or closer shot. Dad has had a bad shoulder since falling through the havmow a few years ago, so he can only shoot a crossbow. This was to be Dad's first deer, so I decided he needed an upgrade. I went with Mathews' new Sub-1, which boasts 100-yard accuracy. I knew Dad would never take that long of a shot, but if he had a good deer at 50 yards, I wanted him to have the confidence to take it. We hunted hard in October, and when November rolled around, Dad said I needed to do some bowhunting on my own and didn't want me to waste my season sitting with him.

Of course, "waste" was the farthest thing from what I was doing, but one day in early November, I sat for a couple of hours. About an hour before dark, I received a text from Mom saving, "Well, your Dad got one." My heart sank, as the only thing that I could think of was that I wasn't there. I felt physically sick when I met Dad at his front door. I sucked it up, said congratulations and gave him a hug. As he took a sip from his coffee cup, he casually said, "Well it's a pretty good doe." Shooting a doe as his first deer did not diminish Dad's accomplishment, but I know he wanted to shoot a buck, so maybe I hadn't missed my chance. He would not go out again that season without me by his side.

Dad didn't connect with a buck during bow season, so we waited for the late muzzleloader hunt, layered up with clothes and continued to search for a buck for Dad. It was a tough season, and we were not seeing much for buck activity, but that didn't stop us from going out at every chance. One afternoon between Christmas and New Year's, we headed out early to sit in a new Redneck shooting house I had just put up. We wanted to get an early start because the day was cold, and we knew deer would move early. A dozen or more does poured into the field, and about 30 minutes before dark, we saw the first buck. Dad focused on him, as I kept an eye on the tree line and saw three more bucks coming to the field. With 15 minutes of shooting light remaining, Dad settled the cross-hairs on the largest of the four bucks that stood 100 yards in front of us. At the shot, smoke and fire blazed from the barrel, so I didn't see the hit. But as the buck ran off, he started to wheelbarrow over the ridge and went of sight. Dad said he believed the hit was good, and he was right. We found the buck within 60 yards of where we last saw him, hit perfectly behind the shoulder.

Dad's deer was not a monster and wouldn't make any record books. But none of that mattered to me or to Dad. It was his first buck, and he had hunted hard for it and had made a great shot. As I write this, he's already enjoying the summer sausage and jerky that deer provided. Grabbing that buck's antlers was several decades in the making, and seeing the excitement and expression on Dad's face was worth far more than antler size. But ultimately, even the buck wasn't that important. Dad and I spent more time hunting together that season than probably we ever had. It might sound cliché, but that time was worth more to us than the deer. But the deer provided the reason. Dad was with me when I shot my buck the final day of the season, concluding one of the best years I'd had, not in terms of buck size, which was small in comparison, but in memories created with a man I respect more than any other. He has given me so much, and I'm so thankful and blessed to have been part of a deer hunt that was 81 years in the making.





o make sure you get the best possible performance from your perennial food plots, make sure you control the factors you can, and minimize the potential negative impact of what you can't control. In this article, we'll break down how to do that. As you'll see, the Whitetail Institute has already done the hard work for you.

# **Preliminary Matters**

The "Hard Work", and the Good News. The hard work in ensuring top performance from your perennial food plots is determining what factors affecting food plot performance need to be addressed, and how and when to address them in the planting and maintenance process. The good news is that the Whitetail Institute has already done the hard work for you by providing forage-selection guidelines, planting-date maps, seedbed-preparation and planting instructions, and perennial-forage maintenance guidelines right on its product bags as well as at whitetailinstitute.com.

**Don't Skip Steps or Cut Corners.** To understand how critical it is that you not cut corners in the recommended planting dates and in-

structions for the product(s) you've chosen, consider the Whitetail Institute's point of view. First, we want you to have superb results with Whitetail Institute products. It does you no good to have a bad experience with our products, and because Whitetail Institute relies heavily on repeat business, it does us no good either. Second, it does neither you nor us any good if you find the instructions printed on our product bags excessively complex or lengthy. If you understand these two facts, then you can see why the Whitetail Institute has put such great effort in designing its planting maps and food plot instructions so that that you can ensure your planting has an optimum growing environment, and you can do so in as few steps as possible. With that being the case, you can also understand that every step in the instructions is crucial to food plot performance and, therefore, why skipping steps or performing them out of order can negatively affect food plot performance. So, don't cut corners. Follow the planting dates, and follow all the steps in the instructions in the order shown.

Whitetail Institute Laboratory Soil Testing. Most high-quality food plot products for deer grow best in soils with soil pH between 6.5 to 7.5. Most soils have a lower pH and are deficient in one or more nutrients plants need to grow optimally. Knowing exactly what your existing soil pH and soil-nutrient levels are, and if they're low, how much lime and fertilizer to add to the seedbed can only be accurately determined by performing a professional laboratory soil test. If possible, you should also decide what forage you'll be planting before you have the lab test your soil. If you tell the lab what you'll be planting, the lab can also make very precise recommendations as to what blend of fertilizer and how much of it you need to add to the soil for optimum fertility. Again, only a qualified soil-testing laboratory can scientifically analyze your specific soil, which is required to reach highly

accurate lime and fertilizer recommendations. The Whitetail Institute soil-testing lab processes samples and sends reports out very quickly, usually in just a day or two.

# **Major Factors Affecting Perennial Food Plot Performance and Longevity**

There isn't enough room in this article to list every single factor that might possibly affect food-plot performance, so I'll cover the major ones:

- 1. Forage Selection (making sure you select the optimum forage for the conditions of the site)
- 2. Seedbed Preparation (including soil pH)
- 3. Seedbed Planting (including fertilizing the seedbed)
- 4. Yearly Maintenance
- 5. Mother Nature

# **PART A: MAJOR FACTORS YOU CAN CONTROL**

First, let's look at the major food plot performance factors you can control. As you'll see, most such factors are in this category.

# **Forage Selection**

The road to optimum food plot performance begins with making sure you select food plot product(s) that are optimum for the unique conditions presented by each site you plan to plant. These include soil type, slope, whether or not you have equipment accessibility to the site and whether or not you can mow and spray perennials each spring. To make it easy for you to choose the right product(s) for each of your food plot sites, we've put a short, simple product selection guide on our website. Just go to whitetailinstitute.com, and click on the link that says, "PRODUCT SELECTOR" in the header of the home page. Again, each site presents its own unique factors, so be sure you go through the Product Selector for one site at a time.

# **Seedbed Preparation**

Your ultimate goal of seedbed preparation is to ensure that your seedbed is in a specific state by the time your planting date arrives. That state, which I refer to as a "ready-to-plant seedbed", means that two physical characteristics of the seedbed have been brought to the following optimum conditions:

Soil pH: 6.5-7.5 (Neutral soil pH)

Seedbed Surface: Existing vegetation removed, and the soil

sufficiently smooth and level Soil pH of a "Ready-to-plant" seedbed: Neutral Soil pH (6.5-

7.5). Soil pH is the most important factor you can control to assure food plot success. For high-quality food plot plantings to flourish, soil pH must be within a range of 6.5-7.5 (neutral soil pH). Most fallow soils, though, are acidic, meaning that soil pH is below 6.5. When soil is acidic, some of the nutrients in the soil are bound up in the soil in a way that the plants can't access them. That's true of nutrients already in the soil and nutrients you add as fertilizer. And the lower soil pH is, the worse it gets. As an example, if you bought \$100 worth of fertilizer and planted a high-quality food plot product in a seedbed with a soil pH of 5.0, the plants wouldn't be able to access about half the fertilizer. In other words, you would have wasted about \$50. And even worse, your plot will not perform nearly as well. That's why part of making sure the seedbed is "ready-to-plant" is to make sure soil pH is within neutral range at the time you plant. If soil pH is low, then lime should be added to the seedbed to raise soil pH.

Surface of a "Ready-to-plant" seedbed: Weed Free. Another important aspect of making sure your seedbed is "ready-to-plant" is to make sure you eliminate competition from existing weeds as much as possible. Doing a good job of that allows as much root space as possible for your forage plants and keeps them from having to compete with weeds for soil nutrients. This can usually be accomplished by repetitive disking or tilling a few times at two-week intervals, although spraying a glyphosate herbicide can also help when the seedbed being prepared is fallow or in a heavily weed-infested area.

# Seedbed Planting

Unlike seedbed preparation, getting the seedbed in ready-to-plant condition before your planting date arrives, Seedbed Planting covers what you do on planting day.

Soil Fertility. Many folks consider fertilization of the seedbed part of seedbed preparation, and in a way that's correct: Adding fertilizer to the seedbed is best done before you put out the seed. I personally categorize it as part of the planting process because some fertilizer dissipates over time, so it's optimum to fertilize the seedbed just before you plant. That way, the fertilizer will be at full strength as the crop begins to grow.

Seedbed Smoothness (Before Seeding). Make sure the seedbed is at optimum smoothness before you put out the seed. How smooth the seedbed must be depends on whether you'll be planting large seeds such as oats, or small seeds such as clover, chicory or brassica. For large seeds, you can put the fertilizer and seed out on the disked or tilled seedbed, and then LIGHTLY drag over the seed and fertilizer to LIGHTLY cover it. DO NOT DISK OR TILL THE SEED INTO THE SEEDBED. For small seeds, drag or cultipack the seedbed before seeding to smooth and firm it up.

Broadcast the Seed. The Whitetail Institute recommends planting small seeds with a shoulder-type broadcast spreader because we have found it to be the most foolproof way of making sure you end up with broad, even coverage with no gaps.

And here's a trick to using shoulder seeders I learned from those who have been with Whitetail Institute for longer than I have: Start by setting the gate in the seeder by eye. Specifically, open the bag of seed, look at it as you set the width of the "gate" (the opening at the bottom of the seeder), and try to set the gate so that it looks like some seed will go through, but not nearly enough. That's usually right on the money. Then, close the gate, and put HALF the seed allotted for the plot into the bag. Next, try to cover the whole seedbed with the seed in the bag. When you're through putting out that half of the seed, adjust the gate if you need to, and put the other half of the seed into the bag. Then, repeat putting it out but this time walking across your old path. This helps ensure uniform coverage.

Finishing the Seedbed After Seeding. Rather than just following a set of rules, I think it's best to consider your goal: You want to leave the seeds at the proper depth relative to the surface of the seedbed. Large seeds such as oats and beans should be left just under a light layer of loose soil. Small seeds should be left on the surface of the soil.

Here's how to accomplish that. If you planted large seeds, then drag over the seeds to lightly cover them. If you planted small seeds and you used a cultipacker to smooth the seedbed before seeding, then cultipack once more after seeding. Do not disk or till any seed into the seedbed. Do not drag over small seeds. If you used a drag to smooth the plot before putting out small seeds, do nothing further after seeding. The Whitetail Institute's planting instructions for each of its food plot products will tell you exactly how to finish the seedbed for that particular product.

# **Yearly Maintenance of Perennial Food Plots**

Like any asset you plan to keep in top shape for years, perennial food plots require a little annual maintenance. Again, the maintenance steps for each Whitetail Institute perennial food plot product are set out in the Maintenance Instructions you'll find on the back of the product bags and posted at whitetailinstitute.com.

As is the case with the seedbed preparation and planting instructions, the maintenance instructions are not the same for all Whitetail Institute perennials, so be sure to read the instructions for the product(s) you planted, and follow them exactly. For example ...

Additional Nitrogen Fertilization After Germination. Some Whitetail Institute products should be fertilized again about 30-45 days after germination, and some do not need it. For those that do benefit from it, the recommendation calls for 100 pounds of 33-0-0 or equivalent high-nitrogen fertilizer per acre. Again, check the instructions for the product you planted.

Maintain Neutral Soil pH and Optimum Fertility. Over time, soil pH will return to its natural level, and levels of important nutrients in the soil will be depleted. Check soil pH and fertility levels at least every couple of years by performing a laboratory soil test, and to add lime to the surface of the soil every year or so as needed to maintain soil pH. Add fertilizer each year according to the recommendations in your soil-test report or from the general recommendations provided on the product bag and at whitetailinstitute.com.

**Mowing.** We recommend that you mow Imperial Whitetail perennials a few times in the spring and summer as part of normal maintenance. There are several reasons: Mowing helps promote new growth at the lower levels of most Whitetail Institute perennials, and it helps keep the forage plants lush and nutritious, since flowering takes huge amounts of energy and nutrients. Also, mowing also helps control weeds.

Generally speaking, you want to mow as soon as you see the forage plants or any weeds or grasses starting to flower (make seeds). Just shave the top off the plot — just enough to stop the flowering process. Don't mow below about 6-8 inches, and don't mow when the plants are stressed, such as during times of excessive heat and/or drought. Usually, a couple of mowings are sufficient. Also, don't take off too much – just enough to take off most (not necessarily all) the flowers off the forage plants.

Arrest MAX and Slay Selective Herbicides. Arrest MAX is a selective grass herbicide (controls most kinds of grass) for use in any Whitetail Institute perennial forage stands. [Note: Arrest MAX can now also be used on PowerPlant.] Slay controls most kinds of broadleaf weeds and is labeled for use in established stands of Imperial Whitetail Clover and any other clover or alfalfa. Be sure to follow the label instructions before using Arrest MAX or Slay. You can find the labels at whitetailinstitute.com. If you have any questions about Arrest

MAX or Slay, call the Whitetail Institute's in-house consultants at (800) 688-3030 before you spray.

# Not Required Maintenance But Certainly a Beneficial Step

**Frost Seeding.** In the late winter/early spring when the soil in your perennial food plot is freezing at night and thawing during the day, some seeds can be spread right on top of the ground or snow if present. This will give a significant boost to the performance of your plot and can add a few extra years of performance as well. (See page 5 for a detailed article on frost seeding.)

# PART B: THE MAJOR FACTOR YOU CAN'T CONTROL

### **Mother Nature**

We've covered a ton of factors affecting perennial food plot performance in the "controllable" section. And as you've seen, the planting maps, seedbed preparation and planting, and perennial maintenance instructions cover almost everything. Even so, there is one major factor you can't control: Mother Nature. Sometimes, despite our best planning and efforts, she throws us an unexpected curve ball that simply could not have been anticipated, for example inordinately hot, dry weather right after planting. The good news is that although we can't control Mother Nature, we can definitely plan for her tantrums and take measures to minimize the risk they pose to our food plots.

One way you can do that is by planting Whitetail Institute products. They've been developed to better withstand unexpectedly bad weather conditions. First is Whitetail Institute's Rainbond seed coating, which maximizes seedling survivability in multiple ways — by keeping a seed from germinating when insufficient moisture is present in the soil to sustain the seedling and by soaking up moisture from the soil and keeping it right next to the seed as it germinates and the seedling starts to grow.

Another way is just a repeat of something I said above: Plant during the Whitetail Institute's recommended planting dates for the product(s) you've selected. Like the planting instructions, the Whitetail Institute has made a great effort to recommend planting dates that minimize the risk that the product will succumb to a climatic curve ball right after planting.

### **Conclusion**

I could have said all the foregoing in one sentence: "To maximize perennial food plot performance, choose Whitetail Institute food plot products, don't cut corners in the seedbed preparation, planting and maintenance instructions, and plant during the Whitetail Institute's recommended planting dates for the product(s) you've chosen." Now, I hope you understand the reasons why it's so important to follow the Whitetail Institute's recommendations and instructions for its products without skipping steps or otherwise cutting corners. By doing so, you'll reap the benefits of better quality food plots and more and better quality deer.

If you have any questions about Whitetail Institute products, or anything else related to food plots, deer or deer hunting, call the Whitetail Institute's in-house consultants at (800) 688-3030.

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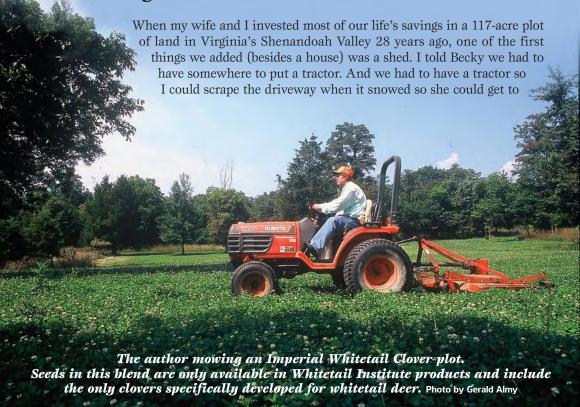
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# Why Quality is Your Rest Bargain

By Gerald Almy

y shed was shot. Anyone who lives in the country or suburbs knows the value of a shed. If you buy or lease land and get into food plotting, a shed — call it a utility building or even small barn — becomes even more crucial for storing equipment, seed, fertilizer, implements and other gear.



town. (The cultipacker, tiller, mower and sprayer would come later.)

But through the years, time and nature took a toll on that shed. A bear ripped the double doors off trying to get food. Recently, a huge dead ash limb fell like a javelin through the roof, lodging on the shed floor and protruding 30 feet out the top. The insurance company tried to suggest that I repair it. Repair a 28-year-old shed with a tree sticking through the roof? I pointed out that we had a full-replacement-cost clause in our policy, and after some heated exchanges, we settled that.

That's a roundabout way of explaining why I was greeting a man delivering our new utility building recently. But instead of talking about sheds or deer, when he wasn't blocking and leveling the shed on the gravel pad, he wanted to talk about our house. It's a modestsized but attractive western red cedar Lincoln Log home. Brent asked how I kept the home up so well after many years. He wanted a log home, but said he saw many of them when delivering sheds, and almost every owner complained about the problems they have with cracking, chipping logs, rot and uneven settling.

That's when those almost \$100 gallons of paint I'd applied every three to four years seemed like a great investment. Initially I thought the stain sealant the log home company recommended was outrageously expensive. But I sucked it up and plopped down the \$70 or \$75 per can, which gradually neared the century mark through the years. I couldn't deny that the finish made the logs glow with a gorgeous golden luster. And from what the shed man said, it had obviously done a better job of protecting the structure than most log finishes. I never did anything other than apply the best coating every few years. And it paid off with no cracking, chips, holes, rotting or splintering.

That log-home sealer popped







into my mind when I started this assignment, which deals with the cost of food plot seeds. Whitetail Institute seeds might cost a bit more than the average brand, like my paint. But you get what you pay for. They perform with perfection, like the sealant.

That's true with almost everything in life, including food plot seeds. You can't be the best and the cheapest. The Whitetail Institute, under founder Ray Scott and sons Steve and Wilson, decided early it would produce only the best food plot seed. The company's success has been demonstrated many times and it started before my wife and I bought our current land, when I owned a much smaller parcel and used a garden tiller and later a UTV with a disk to clear my plots.

I was just out of college, breaking into free-lance outdoor writing, with a high four-figure income. I was eager to try the newest and best seed mixtures from the Whitetail Institute but my low income made me stretch things by planting some small plots with Imperial Whitetail Clover and others with generic cereal grains and clover from the local

farm co-op.

Those were good learning experiences because they showed how much faster and more lush the Imperial Whitetail Clover grew. It also became clear it tasted better to deer, which would walk through the generics to reach the superior-tasting forage.

After we moved to the larger 117-acre property, I was again tempted to try lower-cost seeds. It was easy to justify. I had more expenses, with more equipment to buy and maintain and more fields to plant, which required more seed.

Again, it was a mistake. But that time, it proved the conclusions I'd reached earlier, and it proved them more emphatically and on a larger scale. Deer ignored fields of inferior seed plantings or ate them only after they'd demolished the Whitetail Institute plots.

The lesson was clear: Don't skimp on seeds. Don't cut the corner that can help you have more deer and better-quality deer. Having multiple shooter bucks in my plots with the best forage has made the few



extra dollars spent on Whitetail Institute seed blends more than worthwhile. During one memorable hunt at a field I had planted in various sections with Imperial Whitetail Clover, Winter-Greens and Whitetail Oats Plus, I had to decide which of three mature bucks to try for.

I didn't shoot any of them that morning, but a few days later I harvested the largest — a tall 9-pointer in that large multi-forage field. Other times, I've had up to five shooter bucks move in and out of that field of Whitetail Institute forages during a day. I'm confident that would not have happened if I'd continued using generic or lower-quality seeds using false economics.

# **Not Really a Great Cost**

It's funny when hunters and land managers consider the costs of our passion. For some folks, the expense of seed jumps to the forefront. But what we spend on seeds, whether cheap versions or the best, is a tiny fraction of what we invest in our multi-faceted passions of hunting and managing land for deer and other wildlife.

Whether you lease or buy land and make payments, the cost of land dwarfs what you'll spend during a lifetime buying top-notch seed (consider taxes, fencing, security and upkeep). And you'll need equipment for growing plots, whether it's a small tractor or an ATV or UTV. Add the implements — at least a disc or tiller, mower and sprayer, and then probably a spreader and cultipacker. And add fertilizer and lime, or the food plot probably won't be worth much.

We won't go into what we spend on hunting, with guns, scopes, binoculars, blinds, ammo, clothing, boots, trail cameras, tree stands etc, etc. You work hard and deserve to spend money on things you care about. And don't think twice about spending a few extra dollars on seed after spending thousands — even tens of thousands — on other must-haves. Compared to those expenses, the small cost for the best seeds is an investment, not an expense. It's an investment in wildlife, the land and your enjoyment of it through hunting and watching deer on your land become better animals, with healthier does and fawns and bigger-racked bucks.

Let's be honest. Most of a whitetail's diet typically consists of various natural foods on most properties, such as stems, acorns, vines, mushrooms, forbs, weeds, soft mast and the leaves and buds of shrubs and saplings. Many of those are not high in protein, digestibility or nutrient content — three vital elements for a healthy animal. That makes it even more important that the food we plant and grow for deer is the best, with the highest protein and nutritional benefits. You want to make sure the mediocre food deer often get from nature is compensated for and balanced with the highest quality nutrition from your food plots.

# Why Does Whitetail Institute Seed Cost A Little More?

Some people believe you can get the same thing the Whitetail Institute offers from other sources. No, you can't.

You can find seed blends of varying quality, from the lowest-cost generics to slightly better mixtures that take some of the better agricultural seeds, blend them and put them in a fancy package. They might be better than base-level generics. However, they lack one thing: exclusive seeds created through years of selective breeding, crossbreeding and culling of inferior plants — the process used for the creation of Imperial Whitetail Clover, the first deer food plot seed exclusively for whitetail deer. That same method is also used in developing other Whitetail Institute products.

The Whitetail Institute tested hundreds of clover types for the ultimate qualities the company wanted in a whitetail plant — high protein, palatability, nutrition, longevity, digestibility, cold and heat tolerance, and resistance to feeding pressure. Researchers then selected the top plants and cross-pollinated them to produce clovers that best exhibited these traits. Researchers continued that process for years until the ultimate clover variety was developed and incorporated to make Imperial Whitetail Clover even better.

More recently, the company's research team developed other new exclusive clovers that were added to Imperial Whitetail blend: WT-170 and WT-177. These clovers were developed to increase the speed of growth and longevity of the forage, and make it more tolerant to cold winters and hot summers.

The proprietary seeds in the Whitetail Institute's products are produced to meet the nutritional needs of whitetail deer, not farm livestock. These seeds aren't available anywhere else and the plants have been crossbred to be more palatable, with less stem material and thus more attractive to deer.

WINA-100 perennial forage chicory is used in Fusion, Edge and Extreme, and Vision. The unique cereal grain used in Whitetail Oats Plus was discovered in agricultural studies that showed deer damaged it so severely it should not be used for grain production. The Institute quickly bought the exclusive rights to the oat after further extensive testing proved its worth in cold hardiness and other qualities including the fact that the deer loved it. These are just a few of the examples of proprietary seeds the Whitetail Institute has developed.

And if proprietary seed types weren't enough, consider this: Almost all Whitetail Institute products are coated with Rainbond. This valuable coating enhances the viability of young plants by storing moisture near the seed like a tiny reservoir, optimizing seed-to-soil contact and delaying germination until enough moisture is present in the soil to sustain the seedling.

We've all had plantings of cheap seeds that emerge quickly after a shower only to wither and die when no rain comes for the next few weeks. Rainbond helps prevent that by delaying germination until the ground holds sufficient water to support the delicate young plant and provides a 'storage tank' to hold extra moisture around each seed and voung plant.

Hopefully this article helps explain why a bag of Whitetail Institute seed sometimes cost a bit more. Simple answer: Because it's the best. It's because of the expense, effort, time, experimentation, testing and hard work the company's employees and seed growers across the country put in to making sure it's the best possible. No production shortcuts are taken.

You can't be the best and the cheapest. Whitetail Institute decided long ago to be the best rather than the cheapest. Sometimes, I gulp a bit when I order my next bag of seed. Hey, I gulped when I bought my last gallon of stain for \$94, too. But after 28 years of owning a log house with zero troubles, I guess I've gotten my money's worth from a few hundred dollars of paint every few years. And when I see a field with multiple shooter bucks, that proves my investment in the best food plot seed was well worthwhile.

If you want a cheap off-brand watch, fine. But if you want the best, buy a Rolex. On an outdoor writer's income, I'll stick with the generic timepiece. But when it comes to stain/sealant for my home or seed for wildlife, I want the best.

# **Making My Dream A Reality**

By **Hank Tassitano**, Virginia

Photos by the Author



This third property was in the mountains and not the most ideal to work with as I found out. I didn't have any open ground or much in the way of flat land. So I had some equipment come in to clear two of the ridge tops in four different spots. The soil was thin on those mountain ridge tops with plenty of rocks. So, working the soil was a chore and also a bit rough on my rototiller.

Once I had my openings, I did some homework to see what might grow best in these new plots. I read some basic information about planting food plots and that a soil test was recommended as a first step. I bought one of those soil meters and followed the instructions for testing. The test showed all the soil in all four plots was fine, with a pH of 6.

I fertilized and seeded but had mixed results with how my plots grew. I had a feeling I did something wrong. So, I read as much as I could get my hands on and happened to get an issue of Whitetail News magazine from a buddy of mine. The amount of information in that one publication was a real eye opener for me. I decided to get the results I wanted with my plots I would need to follow the advice I read on creating better food plots.

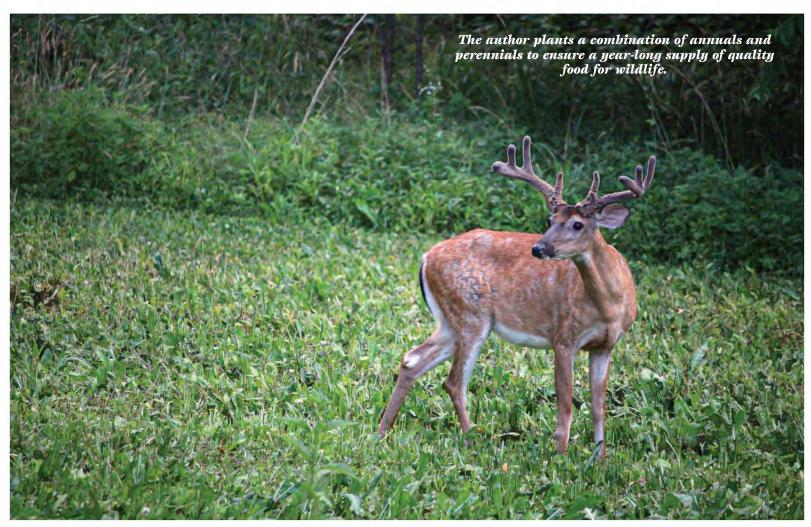
The first step I took was getting the soil test kits the Whitetail Institute sells and got the plots retested to see what their results showed. When I got the lab results back, they showed the pH of my plots was 5.5 which was the main reason my plants didn't grow very well. I got to work and replanted my plots based on the recommendations on the lab reports I got back from Whitetail Institute.

I was starting to realize there was more to planting good food plots than just throwing some seed on the ground. I decided to do some additional testing, so I bought seed from four different name brand seed companies, including Whitetail Institute, to see which brand grew better on my ridge top plots.

They all grew very well because of proper soil preparation. I put trail cameras on all four plots to monitor them. I found it interesting that one plot got hit the hardest, with deer in it all the time. I had one plot that I switched cameras on because I wasn't getting any photos of deer in it, but it wasn't a camera problem. The most active plot by far was planted with Whitetail Institute seed. That was eyeopening.

With this new understanding on how to plant effective food plots I was ready for my next land investment. I wanted to find a property that would be better suited to grow better food plots. The tract of land I found had plenty of thick cover and a water source, but lacked any open ground to plant. It also lacked much deer or turkey sign which had me concerned. But I felt confident enough that I could make the changes needed to make this marginal property into something good.

We closed on this property in December which was a great time of the year to start mapping out where my plots would go. I started by walking every square inch of my property making notes and looking at my land and the adjoining pieces of land on Google maps. I then met with my neighbors and got permission to walk some of the adjoining properties. This gave me greater insight on how to set up my



new hunting ground. My work was cut out for me and I also realized it would have to be done in stages because of my budget.

The first summer my budget allowed me to hire a company to come in to build a road system throughout the property. This would allow for easy access with equipment for future food plots and also for hunting stand access. There was an overgrown open lane that was wide enough to plant that already existed on the property, so I cleaned it up and did a soil test. I planted Imperial Whitetail Clover for my first plot on the property.

As I anticipated, I saw only one young buck and a couple of does the first season of hunting. I didn't anticipate seeing a whole lot, but it did make me wonder if I made a smart investment in this property. I was really hoping phase two of my plan, which was to open new ground for food plots, would start to pay dividends in the upcoming years.

That coming spring I got two 30-06 mineral sites established and the trail cameras showed a little more sign of life and gave me some encouragement. With the mineral sites done I contracted a company to come in and open up the areas for my food plots. This took much longer than expected so I didn't get as much land opened as I originally planned. As always it came down to dollars and cents. So, phase three of my overall plan was to plant more food plots and when the funds became available, I would complete it.

With the initial plots opened and cleaned up I was ready to get the soil test done. Once I got the lab reports back, I bought the proper amount of lime and fertilizer recommended and now was ready to plant. I decided on Whitetail Oats Plus, Imperial Whitetail Clover and Tall Tine Tubers for my plantings. Because I followed the instructions carefully, my plots came in great for newly opened up woodland. I was excited to see all this new lush growth where thick pines once grew.

Once we got into October, I noticed an increase in does and also some 2-year-old bucks that started showing up in my new plots. The deer were finding this new quality food source that didn't exist before. As the fall progressed so did the amount of deer sightings, including a couple of good bucks. I figured by next season the game would be on. Although there were many opportunities, no deer were taken the first two seasons to help let the herd build up. Proper management is not only planting but controlling our trigger finger.

One day while talking with the folks at Whitetail Institute I became aware of the value of planting for the spring/summer as well as rotating my plantings to avoid potential problems that can occur. This made me plan my plots out more carefully and I decided to split them up into sections.

Each plot would have a section of Imperial Whitetail Clover in it because it attracts game nearly all year and is the first thing to green up in the spring. The deer and turkey hit it hard from spring into winter which makes it the heart of all my plots. I also plant Chic Magnet in a couple of my plots with more thin soil because it will withstand the hot dry weather of summer better than clover does. Now, when I do my fall plantings, I will have sections of Whitetail Oats Plus, Imperial Whitetail Clover, Tall Tine Tubers, and Beets and Greens. My plots now have a yearlong supply of quality food for wildlife.

Getting into the third hunting season of my plan I saw even more deer showing up in my plots and at the mineral sites. Some of the bucks were looking very good. Now when I hunted, I was actually seeing more deer on my sits, including a decent number of young bucks.



The author's wall is evidence that Whitetail Institute products work well.

One rainy afternoon while on stand I saw a buck walk into the plot I was watching and started eating the oats. It took me a few seconds to realize I was looking at my first mature buck I would get to shoot on this new property. What a thrill to take this 8-point buck after all the work I had put into the property. This buck was a trophy to me because it proved my hard work was paying off.

Seasons four and five were when I really saw a real jump in the amount of deer and turkey using my property. The quality of bucks showing up was very exciting and some of them were very impressive. The deer were hitting the food plots and mineral sites on a regular basis now.

In the spring and fall I was seeing much more game and I was having great success hunting for deer and turkey. There is great satisfaction in knowing all the work and improvements you do on your land will make a difference in the quality of the experience you have in the outdoors.

Going in to season six I have high expectations and excitement to see what might show up this coming fall. With the past three seasons of success in killing mature bucks in the fall and big gobblers in the spring makes me feel good that my instinct to buy this place was correct. Better yet, knowing I have a resource of information from White-tail Institute at my fingertips in case I have a problem, makes what I do easier.

The real excitement I get now is seeing all the wildlife that benefit from the plantings I do. With trail cameras set up on my place and pulling the photos of deer, turkey, rabbits, and bears has become an addiction and a passion. As a landowner and manager, you realize how hard work and careful planning can benefit all the wildlife on a piece of property, especially a piece that was void of much before. This property was not in a prime Midwest location. It started out as a marginal smaller piece of land here in the East. Habitat and wildlife management can work in any location. Give it a try. You too can have your dream become a reality.

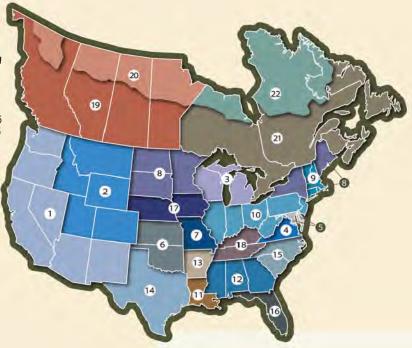
# Food Plot Planting Dates...

# PLANTING DATES FOR IMPERIAL CLOVER, **ALFA-RACK PLUS, EXTREME, NO-PLOW, FUSION, CHIC MAGNET AND EDGE**

- Call for planting dates
- Apr 1 July 1
- Apr 15 June 15 Aug 1 - Sept 1
- Coastal: Feb 1 Mar 15 Sept 1 - Oct 15 **Southern Piedmont:** Feb 15 - Apr 1 Aug 15 - Oct 1 Mountain Vallevs: Mar 1 - Apr 15 Aug 1 - Sept 15
- Feb 1 Apr 1 Aug 1 - Sept 30
- Feb 1 Apr 15 Sept 1 - Nov 1

- North: Mar 15 May 1 Aug 1 - Sept 15 South: Mar 1 - Apr 15 Aug 15 - Oct 15
- Apr 1 June 15 July 15 - Sept 5
- Apr 1 May 15 Aug 1 - Sept 15
- Mar 20 May 15 Aug 1 - Sept 15
- Sept 15 Nov 15
- Feb 5 Mar 1 North: Sept 5 - Nov 15 South: Sept 25 - Nov 15
- Feb 15 Apr 1 Sept 1 - Oct 30
- North: Sept 15 Nov 15 South: Sept 25 - Nov 15

- Feb 1 Mar 1 Coastal: Sept 25 - Oct 15 Piedmont: Sept 1 - Oct 5 Mountain Valleys: Aug 25 - Oct 15
- North: Sept 25 Nov 25 South: Oct 5 - Nov 30
- Mar 1 May 15 Aug 1 - Sept 15
- Feb 1 Apr 15 Aug 20 - Sept 30
- Apr 15 June 15 July 1 - Aug 15
- May 15 July 1
- May 1 June 15 July 1 - Aug 15
- May 15 July 1



# PLANTING DATES FOR VISION. PURE ATTRACTION. SECRET SPOT. WINTER PEAS, BOWSTAND, AMBUSH AND DESTINATION

- Call for planting dates
- Call for planting dates
- Aug 1 Sept 15
- Coastal: Sept 1 Oct 15 Piedmont: Aug 15 - Oct 1 Mountain Valleys: Aug 1 - Sept 15
- Aug 1 Sept 30
- Aug 15 Nov 1

- North: Aug 1 Sept 30 South: Aug 15 - Oct 15
- July 15 Sept 5
- 9 Aug 1 - Sept 15
- O Aug 1 - Sept 15
- M Sept 15 - Nov 15
- 12 North: Sept 5 - Nov 15 South: Sept 25 - Nov 15
- B Sept 1 - Oct 30
- 1 North: Sept 15 - Nov 15 South: Sept 25 - Nov 15
- Coastal: Sept 15 Oct 15 Piedmont: Sept 1 - Oct 5 Mountain: Aug 25 - Oct 15
- North: Sept 25 Nov 25 South: Oct 5 - Nov 30
- Aug 1 Sept 15

# **PLANTING DATES FOR** WHITETAIL OATS PLUS

Use the map below as a guideline for when to plant Imperial Whitetail Oats Plus in your area. For best results, wait to plant until excessively hot, droughty summer weather has passed. Imperial Whitetail Oats Plus is highly



- Aug 15 Sept 15
  - Sept 1 Oct 1
- Sept 15 Nov 15

# PLANTING DATES FOR WINTER-GREENS, TALL TINE TUBERS, **BEETS & GREENS AND RAVISH RADISH**

- Call for planting dates
- 2 Call for planting dates
- July 1 Sept 1
- Coastal: Aug 15 Sept 30 Southern Piedmont: Aug 1 - Sept 15 Mountain Vallevs: July 15 - Sept 15
- July 15 Sept 15
- Aug 1 Oct 1

- North: July 15 Sept 15 South: Aug 1 - Oct 1
- July 5 Aug 20
- 9 July 1 - Aug 30
- 1 July 15 - Sept 15 M Sept 15 - Nov 15
- North: Sept 5 Nov 1 Central: Sept 15 - Nov 15 South: Sept 25 - Nov 15
- North: Aug 15 Oct 1 South: Sept 5 - Oct 15

- North: Sept 5 Oct 30 Central: Sept 15 - Nov 15 South: Sept 25 - Nov 15
- Coastal: Sept 1 Oct 1 Piedmont: Aug 15 - Sept 20 Mountain Valleys: Aug 5 - Sept 15
- North: Sept 15 Nov 15 Central: Sept 25 - Nov 15 South: Oct 5 - Nov 30
- July 15 Sept 1
- Aug 1 Sept 30 July 1 - Aug 15
  - June 15 Aug 1

Aug 20 - Sept 30

July 1 - Aug 15

June 15 - July 15

July 15 - Aug 31

July 1 - Aug 15

July 15 - Aug 31

20

July 1 - Aug 15

\*Do not plant PowerPlant, Conceal or Sunn Hemp until soil temperatures reach a constant 65 degrees F.

# **PLANTING DATES FOR POWERPLANT. CONCEAL AND** TURKEY SELECT



# Safe Havens

Learn the ins and outs of whitetail sanctuaries and the roles they play in hunting.

By Darron McDougal

Photo by Dustin Reid

undamentally, a whitetail's long-term survival hinges on the availability of three necessities: food, water and shelter. Beyond these, whitetails are extremely versatile, which explains why they're the most plentiful and sought-after North American big-game species. From suburbia to the deepest forests, whitetails roam a diverse range of habitats.

For this article, let's focus on the third necessity: shelter. Food is critical for attracting and holding deer on your property. However, if your property doesn't offer safe, secure shelter, deer will dine on your property but bed elsewhere. I believe sanctuaries are one of the most important features a whitetail property can have. Sounds like a lot of work, right?

Maybe. Maybe not. Maybe a sanctuary already exists on your hunting grounds but you haven't recognized it. If one doesn't exist, creating a sanctuary might be simpler and less expensive than you think. Let's review the definition of a sanctuary as it pertains to whitetails and whitetail hunting before we dive into deeper specifics.

# **Sanctuary Definition and Purposes**

"A sanctuary is a hunt-free portion of a given property," said Kip Adams, a certified wildlife biologist with the Quality Deer Management Association. "When deer enter it, they feel safe because hunters don't impose pressure on that area."

According to Adams, deer sanctuaries are fairly new to deer hunting, and their intended purpose has progressed through time.

"Historically, folks shot primarily yearling bucks, and in those days, sanctuaries weren't even a concept," he said. "Just a few decades ago, in the early stages of quality deer management, select landowners thought, 'Hey, let's protect some of these young bucks.' Often, adjacent landowners didn't agree, so QDM-practicing landowners developed sanctuaries solely to provide yearling bucks a hiding place where they could survive. This worked very well.

"Today, the goal of sanctuaries has progressed. Many hunters are now practicing QDM and passing yearling bucks even if they're legal to shoot. Rather than being solely a safe place for deer, sanctuaries are also now utilized as part of hunting strategies. A sanctuary is a known bedding area, and hunters identify feeding locations nearby and place their stands in between the sanctuary and food source."

Habitat-wise, one whitetail sanctuary can appear different from another based on location. Thus, the ability to identify sanctuaries greatly depends upon your knowledge of regional habitats.

"A true sanctuary provides really good security cover for deer," Adams said. "Types of cover are very area-specific. For example, in a heavily forested area of New England, sanctuaries are often pockets of deep, dense brush and timber. In contrast, western Kansas is virtually treeless, so deer often feel most secure in cattail sloughs or warmseason grasses out there."



# **Establishment and Maintenance**

If you've recently acquired a new property and want to optimize it for deer hunting, creating a sanctuary makes great sense. And it might be easier to accomplish than you think.

"If your property offers little cover," Adams said, "you can usually add it. In the East or Midwest, for example, hinge-cutting in wooded areas can provide security cover. Regular timber management is another avenue. The goal is to allow the forest to regenerate and produce exceptionally thick cover within a select area of your property.

"In early successional habitats, you can create the same level of security with a mix of brush, warm-season grasses and native cool-season plants. You're not limited to certain species. Everywhere in the whitetail's range are vegetative components that can provide extremely good sanctuaries.

"It really boils down to habitat management. Once you establish a dedicated sanctuary and work to make it thick and secure, stay out of

there, such that deer feel safe and secure to bed there at any time."

Adams believes annual maintenance is rarely required after a sanctuary has been properly established.

"Depending on the type of cover in your sanctuary, it usually takes care of itself for seven to eight years," he said. "Some of the ground cover might thin out as trees heighten, and you may need to return and address it. In early successional habitat, maintenance might be required every three to five years. Here, controlled burns or disking are usually the most effective means to prevent the habitat from advancing to the next successional stage."

Conceal from the Whitetail Institute is also a great way to create thick holding areas that can be used for a sanctuary. Conceal is an annual but it can be ideal for this situation until the more permanent cover is created.

# **Does Size Matter?**

You might be wondering if sanctuaries must be large. According to Adams, size is relatively unimportant.

"Suppose you have a small property in the Midwest," he said. "All of your neighbors are practicing QDM and passing up young bucks. A dense but small sanctuary could be equally as effective as a much larger but more open sanctuary.

"At the end of the day, size somewhat matters, but bigger isn't necessarily always better. It's far more important to consider the security benefit, which is often a direct function of cover thickness."

You might also wonder if there's a ratio that determines how many sanctuaries are needed relative to property acreage.

"There isn't," Adams said. "I know some property consultants and wildlife managers who try to say you should have X number of sanctuaries per X number of acres, but I honestly don't buy into that. Hunting pressure determines this for you. In sparse habitat with heavy hunting pressure, the need for safe havens rises. In heavy cover with light hunting pressure, the need for sanctuaries is far less significant.

"Also, consider goals for specific properties. If you're unable to move deer into the older age class, add a sanctuary and see if you can make that happen. There isn't a magic number of sanctuaries needed on a per-acre basis. You just have to see what works best for your property."

# Is Location Everything?

Although the most obvious sanctuary location is at the heart of a property, Adams believes other options exist.

"Let me provide a personal example," he said. "I grew up on a northcentral Pennsylvania farm, and I currently live there, so I'm able to hunt right where I grew up. About 16 years ago, when we first began practicing QDM, we established three sanctuaries. One was in the center of the property, and the other two were near our property borders. They bordered adjoining properties whose landowners weren't necessarily buying into the QDM philosophy at that time. Our sanctuaries created great safe zones for deer being pressured on those surrounding properties.

"When folks question if sanctuaries should be located in the middle or along the edges of a property, I suggest that there are merits to having both. From a hunting end, interior sanctuaries often provide greater hunting opportunities around the sanctuary perimeters. But that doesn't mean border sanctuaries are less important or effective. Have both if possible."

# **Do Sanctuaries Exist on Public Lands?**

"There is some really cool data based on a research project done in Pennsylvania," Adams said. "GPS units were placed on hunters to track where they hunted. Likewise, radio collars were placed on deer to determine where they were relative to the hunters. The results showed that sanctuaries do, in fact, exist on public lands.

"A lot of public lands, particularly in rugged terrain or roadless areas, are hunted very little or not at all. Because of that, these locations, by default, become sanctuaries. Most wildlife agencies today provide hunters with maps of public hunting areas, plus we have access to smartphone apps. Once common access points are identified, it's often a matter of walking as far from them as possible to reach these sanctuary areas." That can make for a difficult hunt, Adams said, but the rewards can be tremendous.

"Take Pennsylvania, for example," he said. "Some of the largest bucks killed each season are taken on public lands. I'm talking about bucks that score 180 to 200-plus inches. It's an incredible testament to the deer-management programs here, the amount of public access the state provides and the rewards available to hunters who're willing to hike in deep and work hard."

Of course, stealth and common sense are welcome attributes when pushing deep into public-land parcels in search of solitary safe zones. Just like private-land sanctuaries, avoid tromping in and blowing deer out. Instead, put on the brakes when you identify where habitat becomes denser, and always approach these types of stand locations from downwind. Hunt the fringes of these sanctuary areas, and you might encounter a legend.

# **Walk-Through Exceptions**

Sanctuaries are the forbidden fruit of whitetail habitat. Invade them, and deer are liable to vacate the property in search of solitude elsewhere. However, at select times, you must enter sanctuaries.

First, if you or someone else shoots a deer and it runs into a sanctuary, it's your duty to exhaust every effort to recover it, even if that means blowing other deer out of the sanctuary during the middle of hunting season.

The second example when I believe it's OK to walk through a sanctuary is during spring to look for sheds. Bucks that don't shed antlers on food sources often shed them in bedding areas. The only way to find them is to go looking for them.

"It's very important to go into sanctuaries once or twice each spring so that you can assess them," Adams said. "You might find that cover is growing too high and that some work is required to re-establish denser lower growing cover. I believe you absolutely must go in at least once annually during the off-season.

"I've had folks tell me they've never walked into their sanctuaries. I don't think that's a good idea. One or two minor disturbances in the springtime will have zero impact on your hunting the next fall, and the intel you'll gain by going in is invaluable."

# **Credit Roll**

If your property has food and water, deer probably frequent it daily. But if it lacks security cover and a swath of land that's restricted from hunting, perhaps the only thing left to do is create that safe haven.

# The Ones that Got Away

Some of our most memorable bucks aren't mounted on the wall. Sometimes, it's the ones we didn't get that are the most memorable.



Lewas the first day of your typical lovember in north-central lennsylvania — cold, windy and raining. After helping put the children to bed and a good luck kiss from my wife, I had a late start getting out the door, but nothing could dampen my spirits. After two-and-a-half hours on the road, I made it to camp as the clock struck midnight to begin my two-week residency during the thick of the rut. I started a fire, quickly unloaded and climbed into a cold bed just before 2 a.m.

Some might consider it crazy, but a few hours later I snuck through the woods in a freezing rain and climbed into a maple tree before dawn. When the dreary, muted grays of the landscape finally awoke, I couldn't help but admire the sight of a thick stand of Pure Attraction — one of my favorite Whitetail Institute products.

By mid-afternoon, 30-degree snowfall eventually turned back to cold rain as I recounted the action I'd seen — or lack thereof. A lone doe wandering through the plot earlier in the morning provided the only excitement. My imagination began painting pictures of better weather and mature bucks squaring off in the plot. It seemed appropriate. I was overlooking the food plot my dad, brother and I had appropriately named Dreams many years ago.

At 4:50 p.m., a squirrel sounded off a few hundred yards to the east in an old, mature stand of oaks. After a few minutes, several others joined the cacophony, announcing their displeasure with something in the area. Or maybe they weren't thrilled with how the weather was affecting their seasonal plans of gathering acorns and beechnuts.

As I tried to shake the chill that crept deeper into my bones, imagining the warmth from the woodstove and aroma of venison chili that awaited me at camp, I became more curious about the source of commotion when something made me turn around.

There in the rain stood one of the tallest-tined bucks I'd ever encountered. It was "Highrise," the massive 8-point we'd kept track of that year, with G2s that had to be measured with a yardstick. As he stood 20 yards away staring directly toward me, I assessed the situation. I was confident my outline was hidden and my scent was controlled, but my bow was hanging from a nail on the other side of the tree behind me.

After a quick flick of the tail, the buck resumed feeding on the Pure Attraction, and I began the dance (reach for the bow or wait). When his head came back up, now 11 yards away, my bow was still behind me. I considered my next move.

"It doesn't feel right," I thought. "He snuck right in on me. I wasn't prepared, I'm still not prepared and I'm completely sure I'm going to give this deer an education he'll not soon forget if I try pulling this off. I'll get him next time."

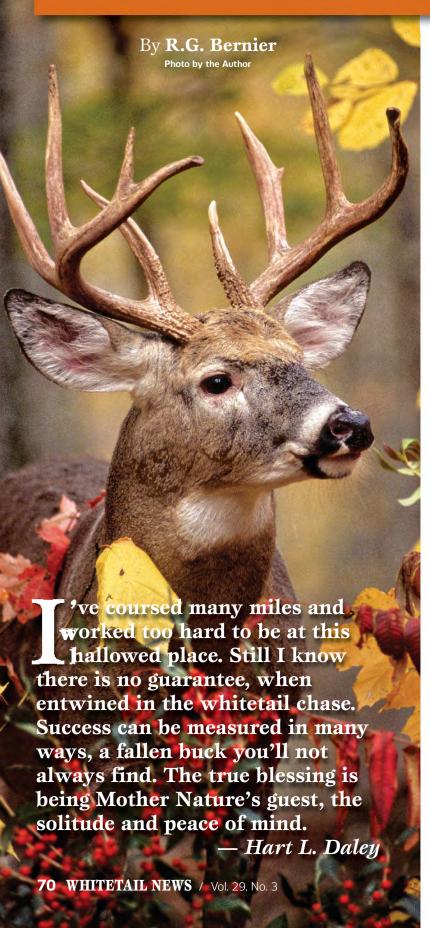
So, at peace with my decision not to rush a shot, I hit record on the video camera beside me the next time the buck's head briefly disappeared into the plot.

For the next 2 minutes, 35 seconds — what seemed like an eternity — I enjoyed an experience deeply engrained in my memory. In fact, I don't think I'd even treasure it as greatly had I sent an arrow flying on that cold, dreary day.

Later, when I shared details of the hunt with family and friends, the razzing that ensued was good fun. When I pushed play on the video, the goading and banter intensified even more. I'll never forget my uncle and others in camp crying out in laughter and disbelief: "Oh my gosh, kid."

Although some would have pursued the shot — especially when the deer stood quartering away at 20 yards (yeah, that's on the video) — it isn't always about trophy deer or tagging out. Many times, the simplest things make memories and seasons. I decided not to shoot, and I don't have antlers on a wall from that hunt. However, I have three minutes of video and memories of a deer I'll never forget. Why? It's often those we let walk that we remember most.

# Success is Not Guaranteed... So Enjoy the Journey



In the dying embers of a deer season, I sit in reflective thought asking, "What could I have done differently? Should I have taken the buck on opening day? It seemed so easy — too easy, in fact — but he was not the caliber of animal I was hoping for. At least not during my first morning out."

I'm convinced no hunter sets out to fail. Regardless of how many trophies line our walls or the number of animals we've taken, each time we set out to capture another, it's with the attitude of fulfilling that desire. If this were not true, why would we carry a rifle? John Madson expressed this in his article The Hunters: "Remove the conscious intention of shooting something, and a hunt is simply a walk in the country." Although there will always be people who prepare for the hunt with more precise detail, envision loftier expectations, plant better plots, endure greater hardships and spend considerably more time pursuing their prize compared to their counterparts, the ultimate goal remains the same: to bring home venison.

For many, the season will end with no buck on the pole, no venison in the freezer, no trophy to place on the wall and no story to share with pals. The unfortunate hunter facing that dilemma finds little comfort in words of encouragement, because of a cloud of disappointment. That disappointment can be a bitter pill. Many of us can probably still remember the Saturday afternoon ABC program Wide World of Sports. It began each week with footage of extraordinary athletic performances and then switched to the painful misfortune of a ski jumper falling off the ramp. I have never forgotten the verbal monologue accompanying that clip: "The thrill of victory and the agony of defeat."

Make no mistake, winning is a thrill. Achieving what you set out to accomplish is gratifying. When you shoot an animal that surpasses the norm, it creates an even higher level of excitement. Rising above mediocrity attracts attention, and if left unchecked, it can even indulge our vanity. People naturally gravitate toward successful people. We only need to visit the newsstand to recognize that fascination with triumph. Hero shots dominate the covers of most outdoor publications. Why? When the consumer sees such a portrait, it stirs the imagination into thinking, "That it could be us." We're a society of stargazers fixated on hero worship.

Nobody is looking to photograph a slump-shouldered, dejected hunter who only has a tired body and a weary mind to show for his efforts. Equally dubious will be the sympathetic ear of any interested party hearing our woeful excuses. Hunting whitetails has become a paradoxical activity. It will always be a solitary effort, yet in our quest to gain recognition, intentional or otherwise, we set ourselves up for the eventual fall. When we excitedly show off the rewards of our labor — a feat that understandably was not so easy — the door of judgment is opened, and everyone can comment on our efforts. Initially, well-wishers will be genuinely happy for your success. In time, and you continue a string of successful seasons, the sentiment changes from congratulatory to one of expectation. Knock over a couple of exceptional bucks and you're classified as a professional or viewed in suspicious contempt.

No matter what plateau we reach in our deer hunting career — green neophyte or insightful seasoned veteran — each of us will face

the reality of being skunked. Our level of maturity, intensity and selfesteem, and the emphasis placed on the outcome, will directly affect how we handle defeat.

### The Rewards

There are far worse things that can happen than going home emptyhanded. It might not seem like it at the time, but trust me, it's not the end of the world. That's not intended to trivialize the matter, nor is it written out of passivity. Disappointments are inevitable — no more so than in hunting a wild whitetail deer. But ultimately, are we satisfied with how our hunt was experienced?

In Col. Michael A. Abell's recent piece Detour on Public Roads, he expounded on our modern hunting culture: "... The new whitetail hunting culture where we build our hunting areas from the ground up. We cut timber. We landscape. We plant food plots. We hang multiple stands to hunt the best spots in any wind conditions. We use minerals and bait to attract deer and inventory them on camera. We even put up blinds so well built we don't even have to sit out in the elements anymore."

Look and sound familiar? Many die-hard deer hunters ascribe to most of the above and find great resolve and satisfaction in the process and result. Abell continues, not to lament this culture but extol its virtue: "I have no problem with our new whitetail culture. I have no problem with using every possible legal advantage to help win, in every endeavor. I understand it. I get it. I have done it. Yet, [for this season] I wanted to get away from it. I wanted to see if I could still get it done with just the woodsmanship I learned as a boy." In reality, he needed, required and yearned for a new and much different challenge.

I believe the sentiment of Henry David Thoreau: "Many men go fishing all of their lives without knowing that it is not fish they are after." Or hunting, in this case.

With our maturation as hunters, we experience times when changing things up and viewing them from different angles can sharpen our senses and provide new insights and fresh experiences. These accumulate into deeper whitetail wisdom and add adventure, as Abell wrote: "He was only 12 yards away when I sent an arrow through his chest. ... I heard him fall. He was dead in seconds. I had just taken my first public land whitetail buck. Woodsmanship, calling, knowledge of deer behavior, aging deer on the hoof, playing the wind, reading deer sign, reading terrain, being willing to hike deep, knowing when to draw and making a good shot were all required in some measure, large or small, to harvest this buck. I was so proud."

### **Not A Job**

Hunting whitetails is not a job, although it can seem like it at times. Most of us go to work because we have to; all of us hunt deer because we choose too. That should mean that deer hunting, though challenging, should be fun. Don't get into a rut. Leave that for the deer. Make each hunt exciting.

We often get caught in the trap of getting to the end of our hunt, trip or goal and lose sight of the enjoyment to be had along the way. We become so focused on the outcome that we miss subtle high points in the journey.

The most successful hunters are not necessarily those that we hear or read about. They are those that can plant a food plot, hang a stand in the right tree, locate deer in the wilderness, "run one down" or wait patiently at the best trail in suburbia. They are hunters who derive the greatest insights and the most pleasure from their hunts despite the lack of a guaranteed opportunity to shoot a big deer every year.

In his book, Whitetail Magic, the late Roger Rothhaar described what I believe to be the proper temperament for each of us on our deer hunting quests: "All the attributes normally accredited to good hunters such as patience, perseverance, and knowledge, while important, do not seem to be the real key to which level of success one achieves. Instead, all these seem to be the end result of another more important aspect of hunting which is, once again, the attitude with which it is undertaken. In my opinion, the desire to hunt should be the result of fascination, curiosity, and deep respect for the natural things and how well one does at it is directly dependent upon those things."

## In the End

Regardless of what is or isn't riding home in the beds of our trucks, enjoy the memories. Sometimes, even the best-laid plans do not come to fruition. We did everything possible to make deer season a success, from supplemental feeding, the perfect food plots and scouting every inch of our property. But sometimes, it doesn't work out. There are numerous variables in the whitetail woods. We think we can manage some, but we'll never be able to control others. Weather, time off work, equipment failures, health limitations, family matters and other factors can affect our days afield. Never forget to enjoy the journey. Though every hunter's dream is to kill the buck of a lifetime every season, it's just not reality. Sometimes, you have to tip your cap to Mother Nature and thank her for the journey, and "the solitude and peace of mind."

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