



# CEREAL RYE. NATURE'S BEST SOIL BUILDER AND DEER FEED

should have known better and been frustrated by the results. Truth be told, I did know better. The ground targeted for a 1-acre alfalfa patch hadn't been previously broken. Going from an overgrown meadow to alfalfa is a really big lift, particularly in an area that does not offer good soils. I knew better, but the owner asked that I try my best. So, I did.

By late summer, it was painfully obvious that the alfalfa plot wasn't happening. In fact, I was mildly surprised that I had close to 10% of a stand growing, especially with the weather being so uncooperative that year.

Luckily, I had a plan, which greatly reduced the frustration factor. On Sept. 1, the alfalfa plot was turned under and cereal rye hit the dirt. Jump to mid-November and I honestly lost count of how many different bucks I saw exit the nearby standing corn and enter the three parts Antler King Fall-Winter-Spring, and one part Antler King Lights Out Forage Oats plot. The reason that the owner had wanted alfalfa was because he believed it could draw the deer out of the sea of corn and beans in the area to feed on the alfalfa. All along, I knew if the alfalfa failed, cereal rye would do the trick, and it did.

About an hour before dark one evening, the buck I was after travelled through the corn, popped into the woods and walked into the cereal rye, at about 12 paces from me, when my SEVR-tipped bolt vanished into his boiler room.

If there was only one crop that I could ever plant again for deer, narrowing it down to the top two would be instantaneous. There's no question in my mind that it comes down to clover and cereal rye. The cereal rye — specifically Antler King's Fall-Winter-Spring — would win after a few moments of analysis. It truly is nature's soil builder and all-around deer food. Here's why.

# IT STARTS IN THE SOIL

When it comes to thriving food plots, the soil is the foundation upon which they are built. In the most simple terms, plants can thrive in good, healthy soils, yet never reach their growth and nutritional potentials in poorquality soils. You want healthy plants? The soil must provide them with their needs or you will be using a lot of foliar fertilizers that are sprayed directly on the plants. If the plants don't get what they need they simply can't produce, and improving the soil is almost

always the most effective way of providing those necessities. Out of all of the plantings available, cereal rye is the one that I use that benefits the soil the most.

It all happens because cereal rye is a very effective builder of OM (organic matter) in the soil. OM is plant and animal residue that breaks down in the soil to form humus. In turn, humus is organic material that has been converted by microorganisms to a resistant state of decomposition. Once in its stable state, those materials are done breaking down and are viewed as OM.

According to The Noble "Organic Research Institute, matter is a reservoir of nutrients that can be released to the soil. Each percent of organic matter in the soil releases 20 to 30 pounds of nitrogen, 4.5 to 6.6 pounds of P2O5 and 2 to 3 pounds of sulfur per year. The nutrient release occurs predominantly in the spring and summer, so summer crops benefit more from organic-matter mineralization than winter crops."

At the same time, OM acts like



the soil's sponge. We all know that traditional food plots need water to grow. In fact, rain and the lack of it probably causes farmers and food plotters more stress than any other factor.

Generally speaking, the higher the OM levels in the soil, the more precipitation is absorbed into the soils and the less runs off. That moisture is then stored in the soil comparatively longer the higher the OM levels are. At the same time, OM is improving soil structure, which also enables the soil to take up and hold more water, as well.

Finally, higher OM levels help reduce erosion. Again, from The Noble Research Institute, "This property of organic matter is not widely known. Data used in the universal soil loss equation indicate that increasing soil organic matter from 1 to 3 percent can reduce erosion 20 to 33 percent because of increased water infiltration and stable soil aggregate formation caused by organic matter."

The reason that cereal rye is such a powerful OM builder is because of its robust dicotyledonous root system, with a very deep tap root and a vast network of smaller offshoots, with the root system looking much like an upside-down Christmas tree, minus the decorations. Its ability to dig very deep is the key behind cereal rye going dormant when temperatures are below freezing, then to immediately spring to life during a thaw. It also is why cereal rve is able to mine nitrogen and potassium from deep in the soil, bringing it close enough to the surface for future plantings of shallow-rooted plants to benefit from.

Add it all up and if there is another planting that draws deer like crazy that can touch cereal rye's abilities to improve the soils, I don't know what it is.

### FEEDING DEER

As impressive as cereal rye is at building soils, it's equally

impressive as a deer feeder. Planted in late summer or early fall, it offers a pretty darn stable 15% protein until it starts kicking into grain production, the following summer. That's not bad at all.

Better still, it's how coldfriendly cereal rye is that really nudges it over the line. That same, deep and comparatively expansive root system that is so fantastic at building OM, also allows the plants to merely go dormant when the temperatures dip below freezing. When the temps rise and the soil thaws, the plants kick right back to growth mode, until mature.

The importance of that can't be stressed enough on quite a few levels. For those that experience intermittent winter thaws, you can often get new growth spurts while almost all of the other plant life is still dormant.

For as great as that can be during the winter, it's really in the spring when cereal rye's ability to jump to life can be worth its weight in deersaving gold. That late winter, early spring period also happens to be when bucks and does need highly digestible protein the most, due to growing antlers and fawns.

Those of us that live in areas experiencing legitimate winters tend to stress how hard the winters are on deer, and for good reason. Whitetails in regions that deal with truly tough winters typically run negative energy balances all winter long. That means it takes them more calories to live than they are able to derive from their comparatively poor-quality winter food sources.

Here's the rub, though. For as hard as winter can be on deer, it's very often the period between thaws and eventual spring green up that can be the true kiss of death to struggling whitetails. Those two- to four-week periods between snow melt and spring green up are great for us not having to walk through snow, but sticks, buds and dead grasses and weeds are still negative energy balance foods

for deer. That delay before spring green up is the final straw for a lot of "winter-killed" deer.

Cereal rye plantings nearly eliminate that stretch. Rather than talking weeks to more than a month before kicking back to life, cereal rye is talking days. The ability to have a 15% protein, easily digestible food source within days of the thaw, as opposed to weeks or more, can be a really big deal, in addition to all of those feeding windows during winter thaws. Cereal rye can be a deer's best friend when it experiences a tough winter.

An added bonus, as revealed by the parade of deer that I saw on my opening hunt, as well as countless others hunting over cereal rye, deer don't wait until winter to start feeding heavily on it. Although I've seen deer feed on it from its emergence on, I'd really consider it to be a prime midseason draw for deer feeding.

Deer like greens for a bunch of different reasons. One of which is that a diversity of food helps their stomach biology break down other foods, as well. I very easily could be wrong about this, but I suspect that's why cereal rye really starts getting hot as other greens mature and die. Whether my speculation around the motive is correct or not, by mid-October, I expect the cereal rye plots to start heating up, sooner if one travels north, a bit later as one goes south.

From then on, I expect cereal rye to draw as well as corn, beans, brassicas or just about any other prime food plot plantings. Sure, one day they'll want beans more than anything else, another day corn or brassicas, but cereal rye will hold it's own with all of them. As a bonus, when over-browsed it merely grows more, unlike those other popular plantings.

# **BEST USES**

For as much as I love cereal rye, I next to never plant it alone. To start with, I am always mixing

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three parts cereal rye with one part oats. I do that because the oats are a slightly better early-season draw. To get the maximum from the soil building and weed control we'll be mentioning next, I go with a heavy seed rate. When planting as a stand-alone crop, I'll go 150-200 pounds per acre of the 3:1 mix of cereal rye and oats.

Due to how ridiculously easy cereal rye is to grow, along with its tremendous soil-building qualities, it's almost always my planting of choice for the first two to four years of a new plot's life. When transforming meadows, CRP fields and other previously unbroken ground, including clearing plots in

the woods, planting cereal rye the first few years helps build the soils to the point where more delicate crops can then follow.

Planting at the higher rate also helps take advantage of cereal rye's abilities to allelopathically suppress weed growth by releasing its own form of herbicide. At the same time, the cereal rye offers the impressive ability to create physical barriers that the weeds can't get through. Added up, and it's a fantastic choice for new plots with seedbanks of weeds and grasses that are just waiting to take over the plot.

The other major use that I have for the 3:1 mix of cereal rye and oats

is top seeding into other plantings, specifically corn, soybeans and brassicas. For the corn and beans, as they start to turn colors, I'll walk down the rows with a hand seeder, tossing about 100 pounds per acre of the 3:1 mix right on top of the dirt.

For the brassicas, I wait until the they grow 4 to 6 inches tall and top seed at the same rate into them. So, because cereal rye germinates so easily, I can consistently, successfully get away with merely throwing the seeds on top of the dirt into those annual plantings. With that being said, it's always a good idea to top seed before a day long soaking rain shower.

The beauty of this method is multifaceted. We are getting both the soil-building and weed-control benefits of the cereal rye. At the same time, we're jacking up the tonnages of food production from the plot, and as our initial planting is consumed by deer, the cereal rye fills in the gaps, continuing to feed them. Finally, it adds a diverse food offering to the plot, further increasing its drawing powers.

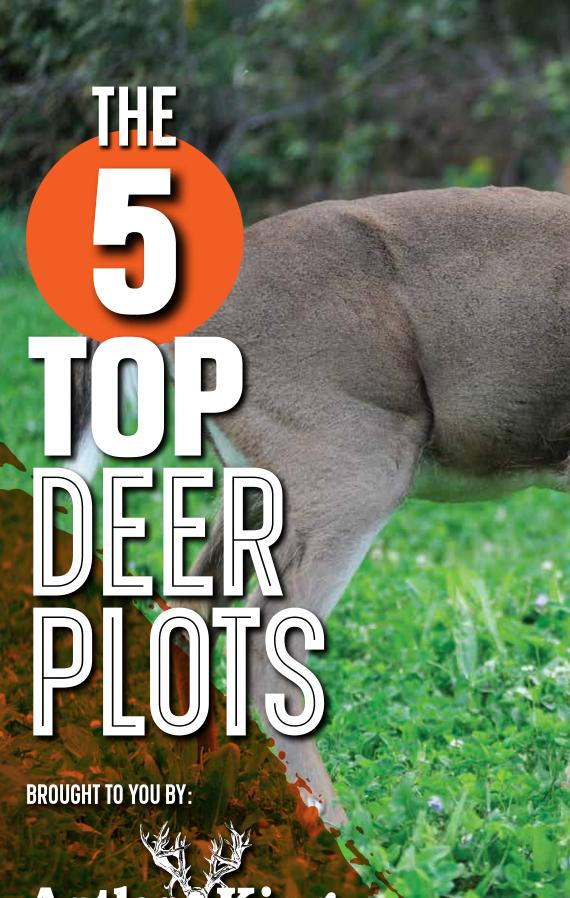
# CONCLUSION

If I had to choose just one planting for food plots, it would be cereal rye. When you add together its abilities to draw in deer, feed them during their most critical time periods and do wonders for the soil, what more could you truly want? It even works great to let it grow all of the following summer, then spray it in fall, top seed more of the mix into the old plot and drag last year's cereal rye down flat. Do that and you can cut way down on seed, as last year's crop will germinate from its own seed production, as well.

— Steve Bartylla has been a D&DH contributor for more than 25 years. He is cohost of Grow 'em Big-TV on Pursuit Channel.



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After frost seeding clover into cereal rye, the author leaves the plot alone until the following late August, a few weeks after this photo, when he mows it for the first time that summer.

That applies to food plot plantings to a great extent, as well. Go to the northwoods of Minnesota, the Upper Peninsula of Michigan or any other large, exclusively wooded area. The same plantings that are ignored in the farm belt can be true deer magnets in the big woods, simple due to a lack of better options.

Go to the dry, sand country of the Southwest and try growing clover in the desert-like conditions without irrigation. It really doesn't matter that the deer would love it — if it simply won't grow.

There are a whole bunch of factors that play into these types of things. Still, the longer that I focus on habitat improvements, I keep coming back to the same five crops that find their way into my various food plots. No, I don't have any great solutions for the desert, but these will do well for almost everyone else, as they are easily my top five deer plantings.

# **CEREAL RYE**

Cereal rye is such a backbone of my food-plotting methods that I recently wrote an entire article on it. If you're not well versed on the benefits of cereal rye, I strongly recommend reading that piece carefully. Cereal rye truly is a food plot and deer-feeding workhorse.

The highlights are that it does extremely well at building the health of the soils, while being very easy to grow, offering superior weed control properties and it merely goes dormant during temperatures. The freezing dormancy is important since not only is cereal rye a powerful draw during deer season, it also is during any portion of winter that snow depths allow deer to paw through the snow to the feed. At the same time, any temperature thaws result in a near instant snap back to growth mode. This 15% protein source that's highly digestible two to four weeks before spring green up can be a tremendous aid to whitetail survival and health, as well as a big antler builder.

Rather than go any deeper on the subject, please read the entire article. Basically, cereal rye is a tremendously productive planting for both deer and soil health.

# **CLOVER**

My second choice really depends on one's latitude and the severity of the region's winters. If it's in Wisconsin and points north, clover would actually drop to my third choice. With that being said, for Iowa, Illinois, Indiana and states experiencing similar winters, clover is a solid #2. Due to their comparatively mild winters, clover is a year-round food source in such states.

A really nice thing about clover is that it's easy and low maintenance to grow. You'll notice that in all but two of these seed types, I am not mentioning product names. With that being said, in both the clover and brassica sections, I feel

that I have to. While working as a Sunflower Breeder's Research Assistant for a large seed company for three years while in college, I learned fast that there are all sorts of different types of sunflowers. There are the general varieties, such as dwarfs, multi-headed and the standard, tall sunflower, but you can breed strains of each for virtually any trait imaginable.

I explain this because many food plotters realize that deer tend to prefer white clover. The catch is that every white clover available has been bred for varying traits. Some are more desirable to deer than others and their hardiness will vary wildly.

For that reason, I feel the need to point out that when I'm talking about clover, I'm specifically referring to Antler King's Trophy Clover. I have conducted many field trials with this seed, as closely as I could to those that I conducted for the seed company in college. Antler King's Trophy Clover, as well as their Honey Hole brassica mix, consistently come out on top for the criteria that I value the most. So, when discussing clover and brassicas, those are the specific seed blends that I'm referring to. This is important to note, as results with others may vary.

With that in mind, here is how I consistently get more than seven years of production out of my clover plots.

It all begins with soil testing and properly amending the soil for clover. I usually plant cereal rye the fall before in the selected plot. Doing so enables me to return in late February or March to frost seed clover into last year's annual crop. When doing so, I seed at 125% the suggested rate and the cereal rye serves as its cover crop. Its ability to allelopathically control weed competition helps combat grasses and broadleaf weeds, but doesn't impact the clover.

Ilet that grow until late summer, when I mow the crop for the first time. After that, I merely frost seed each late winter, now at 50% of the suggested rate, spray a grassonly killer once in late spring/early summer, then mow several weeks later and once again in late summer, and apply fertilizer every second year. I continue repeating that cycle until I swap the plot out for something else or when too many weeds start taking over.

When one considers its highly digestible protein levels, the raw tonnage of forage it produces, its comparatively low cost and

# HELPFUL HINTS FOR PLANTING IN THE FALL

Planting food plots for wildlife is the singlemost effective way to attract, hold and grow deer on your property, and providing food on a year-round basis is critical. One of the most common times to plant food plots is in the late summer or fall of the year. This is a great time to plant for a variety of reasons: less weeds for your plots to compete with, allows fall plots to mature at the perfect time for hunting, predictable weather patterns, etc.

In the Northern U.S., typically the best time to plant a fall food plot (Honey Hole, Slam Dunk, Lights Out, Fall/Winter/Spring, Trophy Clover or No Sweat) would be during the months of July, August and the first half of September. In the middle U.S. and South, the best times to plant are August, September and October. This ensures that the plants can become established and achieve their full potential before a killing frost. Trophy Clover, Red Zone and No Sweat are often planted in the spring as well, but can also be very successful if planted in the summer or early fall and provide excellent fall nutrition sources and hunting plots.

A couple of things to keep in mind when planting in the fall:

### LIMING

- Test your soil's pH and take the proper steps to neutralize your soil to create an optimum growing environment.
- Spreading the necessary amount of lime prior to tilling will not only benefit your fall food plot, but it is also very beneficial to your spring plot as well.
- Raising your pH is not an overnight process; lime takes a variant amount of time to break down and react in the soil.
- The amount of time depends on how much rain you receive and the type of lime you use.
- Pelletized lime will break down faster, but you will have to lime more often.
- Pulverized aglime takes longer to break down but lasts much longer (six to 10 years).

time; keep an eye on the weather and try to time planting right before a rain.

- If you plan to hunt over this food plot, be sure you are planting food sources that are coveted by deer during the time you will hunt it.
   In the early season, deer will seek high protein sources such as these Antler King forages:
  - •Red Zone
  - •Trophy Clover
  - •Mini Max
  - •No Sweat

As the weather turns colder, deer will seek higher energy sources like Honey Hole, Slam Dunk, Lights Out and Fall/Winter/Spring.

- It is best to lightly cover seeds in case it does not rain immediately after planting, as the soil will protect the seeds from the heat of the summer sun, and they will wait to germinate until it rains.
- Test your pH and take the proper steps to neutralize your soil to create an optimum growing environment.
- A great way to help your plants survive a dry spell is to spray Antler King® Plot Max. It raises the pH, creates organic matter and unlocks nutrients in the soil. It will also help your soil retain more moisture and ease stress on your plants.

### **ROUNDUP**

- If you are NOT planning on putting in a fall food plot but have an area picked out for next season (spring or fall), it would be beneficial to spray with Roundup this fall.
- This will kill all of the plants and allow these plants to break down into usable organic material over the winter.
- Next spring, your soil will be easier to till and much more fertile!
   Good luck this fall and happy planting!
  - Todd Stittleburg, Founder, Antler King

PLANTING

• It is usually pretty dry during this

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maintenance, as well as its yearround ability as a food source, and even its eight to nine month production in the harsh winter regions, clover is a heck of a good choice.

### **BRASSICAS**

The differences in varieties are significant in the brassica family of plants, as well. This large family of plants has the reputation as being a great late-season option, as frosts bring the sugars up from the roots of many of its members. When that occurs, the deer can go from ignoring them, to wiping out brassicas in the time that it takes for a hard frost to hit.

But, for as good as brassicas

can be as a late-season option, the right mix of strains can result in season-long drawing power for a brassica plot.

This was made painfully obvious to me than when managing ground in southeast Minnesota. Within a half-mile of a 2-acre food plot location, deer could find corn, beans, alfalfa, clover, acorns and a surplus of apples, just to name the bigger draws. Still, the 2 acres of Antler King's Honey Hole that I planted was completely wiped out by before the first week in October. With the germination and growth rates being optimal, I was shocked.

When troubleshooting the situation with the owner, he suggested the brand that he'd

always used, as the deer didn't touch them until after a couple of frosts. When I planted 1/2 acre in that same location the following year, the plot wasn't touched before November and lasted beyond the end of the season.

The reason for that stark difference was merely the specific brassica strains used. Most brassica mixes contain varieties that peak in desirability after frosts, whereas Antler King's Honey hole was specifically designed to offer highly attractive early-, mid- and late-season varieties.

Honey Hole also tests extremely well all winter long. As Todd Stittleburg, founder and developer of Antler King Products



To get maximum growth from most members of the brassica family, including volleyball-size turnips, the plants need plenty of elbow room — and going heavy on the nitrogen fertilizer is a good idea, too.

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As you can see in the date on this photo, brassicas can be a good early-season draw, assuming the mix contains desirable, early-season varieties.

for the last 30 years recently told me, "I sent random samples of Honey Hole that I collected from a farm in Wisconsin in February to be tested. If you can offer added energy and protein in January it is important, but it is critical in February. If we can turn deer on to a food source with energy close to and with protein three times higher than corn, that's a really big and helpful deal! That can make a big difference in animal health, survival, reproduction and rack sizes — and we have just that with Honey Hole."

In fact, it tested at 25.4% protein, in February, well after the plants fully matured.

To get added production in brassica plots, once they reach 4 to 8 inches high, I top seed about 100 pounds per acre with a mix of three parts cereal rye and one part oats into the brassica plot. Since those seeds will just be spread on top of the dirt, timing this before an all-day soaking rain is best.

By letting the brassicas germinate first, they have a head

start on growth, allowing them to stay ahead of the mix. That is, until the deer start hammering the brassicas. Then, as the brassicas are browsed down, the mix of rye and oats continues feeding the deer.

Finally, although I'll go higher than the suggested seed rate on most all other plantings, I won't on brassicas. The brassica family has a high tendency for preferring elbow room. If you want to grow big brassicas they need space. It's the one seed blend that I'd rather plant light than heavy, as production really suffers when planted too thick.

### **CORN AND SOYBEANS**

Frankly, I use as little corn and soybeans as I can get away with each year. As often as not, I'm buying corn and beans back from farm renters at their input costs. Depending on the quality of the crop produced, the input costs per acre of corn range from \$300 to \$450 an acre. For soybeans they run from \$150 to \$300 per acre.

That right there is why I plant and/or buy back as little corn and beans as needed to reach the property owners' goals. They are expensive crops to plant for deer food plots, considering that I can plant any of the other crops listed in this article at a small fraction of those costs.

With that being said, soybeans are good at feeding deer from a few weeks after emergence until the pods are finally wiped out by deer, hopefully in the middle of, or later in winter. Beans and their greenery offer good nutrition that entire time.

Corn is high in energy, which can be very important to prep for the rut and then survive winter, but otherwise it's rather low in nutritional benefits. At the same time, corn isn't nearly as consistent of a deer food source. They'll feed on the young stalks, but lay off as they mature. Then, they hit the dried corn again.

The biggest reason that I plant corn and soybeans is to allow the deer to feed on both, without the



# A WEED-FREE FALL FOOD PLOT

During my 25+ years of planting food plots, I have found that I enjoy planting food plots just as much as I do hunting over them. That's why I eagerly await getting my fall food plots started each year!

For me, when it comes to planting fall food plots, I do things a little differently than most people in regards to preparing the soil for a weed-free food plot. A few years back I was going crazy during the spring planting season. My food plot program consisted of 75% Antler King Trophy Clover and Chicory food plots, so I never had anything to do during the spring planting season. I couldn't take it anymore, so I started thinking of changes I could make for my fall plantings that would help make them more weed-free and would get me into the plots throughout the spring and summer months, so here is what I came up with, and for me here in central Illinois, it works out great.

1. My groundwork for my fall plots starts in April. During the month of April, my fall plots from the previous year will be all greened up with weeds, so at this time, I will be spraying to kill off my plots (along with Plot Max) and taking soil samples.

- 2. Two weeks after spraying Roundup and Plot Max, I will lime all my fall food plots and work it in while discing them as deep as I can, which for me is about 8 inches.
- 3. Around the second week of June, I will go in and spray all my fall plots to kill off all the weeds that have developed from pulling up the weed seeds from previously discing. This is important because any time you disturb the soil you will likely unearth weed seeds that have been lying dormant waiting for their opportunity to grow.
- 4. During mid-July, I will once again go back in and spray to kill off any new weed growth. (This sounds repetitive I know ...but I DO NOT LIKE WEEDS.)

5. During the first couple weeks of August is when I typically try to plant. At this time, I'm first going to spread fertilizer on all of my fall plots and then lightly disc them no more the 2 inches deep, so I don't pull up any more dormant weed seeds. Now for me, my favorite fall food plot mis Antler King Honey Hole, and like I have already said, I do things a little differently with most things food plot related; how I cover the seeds is no different. I never drag or cover any of my small seed mixes such as Honey Hole. Instead, I let Mother Nature do it for me with a timely rain shower. But if you prefer to cover it just do it lightly so you don't lose germination from covering them too deep (1/4 inch or less is ideal).

6. If there's anything else I could tell you that may help with your fall food plots it would be to only use the amount of seed that is recommended for the size of your plot and never put your fertilizer on your plots until you plant them. For many of your fall food plot mixes, the recommended fertilizer will call for a high nitrogen level. Weeds thrive on nitrogen, so I only put it down when I'm planting so my plants can get a good start, outgrow the weeds and eventually suffocate out any unwanted plants.

I hope my outside-the-box methods help you better prepare for your fall food plot planting this season or next. And even though it is already early July, this still gives you a month's worth of prep to till and kill and repeat prior to August planting. Thanks again for reading along and happy planting.

- Robie Pruitt, Sales Manager, Antler King

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Clover can truly be the land manager's workhorse, because it supplies high volumes of very nutritious foods.

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need to leave the property. When a property has a lot of acres of food plots to use, that's when I'm adding corn and beans.

When planting the beans or corn specifically for deer, my first step is to try to score free seeds. Various wildlife organizations often give them away. Another option is to become friends with the local seed co-ops. They can't or won't sell seed produced the year before. Get to be good enough friends with them and one can get lucky and have them save those seeds for you.

When the seeds are free or cost very little, it becomes much easier to do what I'm about to suggest. That's to double plant corn and beans that will be left for the deer. After doing the north/south rows like normal, go back over the same plot with east/west rows. If you put that in a good location for

deer, you can pretty much bank on them thinning out your crop. Double planting allows for smaller acreages to survive heavy deer browsing and still often produce an acceptable crop.

Then, as the cherry on top, top seed the same 3:1 ratio mix of cereal rye and oats right into the standing crops in late summer or early fall. Do that and you just greatly extended the life of and tonnages produced by the plot, while also building soils and offering more of a smorgasbord feeding option.

### CONCLUSION

Just as I mentioned at the beginning of this article, next to nothing in the habitat improvement or hunting worlds will work best for everyone, in every situation. After having personally broken dirt for food plots all over the Midwest and points north, these are the five plantings that I've found to work best for me, in my specific situations in accomplishing my specific goals. I sure can't promise that you will be as thrilled with all of these plantings as I have been. But, if you aren't happy with your plots' production rates, these are good places to start your search for something that will produce the results you are looking for.

— Steve Bartylla has been a Deer & Deer Hunting contributor for more than 25 years. He is cohost of Deer & Deer Hunting-TV on Pursuit Channel and host of two top-rated online shows: Grow 'em Big and Hunt 'em Big at www.deeranddeerhunting.com.



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