

*A brief description of the four major food plot forage types can help managers decide which plantings might benefit them most.*

■ by Gerald Almy

# THE ABCS OF FOOD PLOT FORAGES





**T**his past season, I had the opportunity to take a nice buck with my bow as it walked through a PowerPlant field, another with my muzzleloader as it fed on a Winter Greens plot, and a third with my Melvin Forbes Ultralight .30-06 as it chased does in an Imperial Whitetail Clover field. Then, as the season neared its close in January, I had a final chance at a dandy buck munching Whitetail Oats.

I won't describe what happened in each case. The scenarios illustrate what a tremendous variety of plants whitetail managers have to attract deer and improve their health and antler growth. Each of those deer was in a different type of forage. And each of the plantings represents one of four major groups deer managers have to plant for various seasons and the different needs of animals. All are available as generics. But take it from someone who has tried them: The few dollars more for Whitetail Institute versions are absolutely worth it. Haphazardly mixing generics on the tailgate of a UTV will never match the quality of seeds or the precise blending of plants that make Whitetail Institute offerings so dramatically superior.

Let's look at the ABCs of food plotting and examine the major groups of plants food plotters have to choose from and their uses. All were planted on my land in western Virginia, as they are every year to help whitetails and my hunting success. I do that because each of the groups addresses specific needs of whitetails in ways that others do not, and at specific times of year and with varied taste appeal. Another reason? If I don't, chances are my neighbors will.

The major groups of forages include warm-season annuals, brassicas, cereal grains and perennials.

Most food plotters know a little bit about this plant or a little about that one, but they often lack a complete understanding of the major forage groups, and how they attract bucks and hold them on a property. A deeper knowledge of these plant groups will help you formulate a plan that will offer a continuous buffet of varied food for deer on your land year-round.

As mentioned, you can find these offerings in generics, but you will likely come back to Whitetail Institute products in each of the groups. These will typically be blends, for optimum appeal, and in most cases, they include proprietary offerings that were scientifically created through years of selective crossbreeding.

Whitetail Institute considers many factors

when creating food plot offerings, including high protein content, palatability, resistance to overbrowsing, length of time available, size of forage leaves, ease of growing, digestibility in a deer's rumen, cold tolerance, benefit to the soil, drought hardness and positive effects on antler growth.

## THE GROUPS AND SPECIFIC PLANTS

When you delve into the major plant groupings, you'll find about 15 plants that are used regularly in food plots. Warm-season annuals hunters turn to include cowpeas, lablab, soybeans, corn, sunflowers and sunn hemp. Brassicas used most often include rape, kale, radish and turnips. Popular cereal grains include wheat, oats, rye and triticale. Perennials deer managers plant include ladino clover, intermediate white clover, alfalfa and chicory.

Those are the main plants. Here are important details about each of the major groups and the plants in each.

### WARM-SEASON ANNUALS

These plants can go into the ground as soon as the soil temperature reaches 68 degrees. They yield tons of forage until frosts arrive but must be replanted each year. Most do best in high-quality soils or those amended with proper ratios and amounts of fertilizer. They tolerate summer's dry, hot conditions well, and have high protein levels. Warm-season annuals fill a crucial role in whitetail nutrition during a period when brassicas and cereal grains aren't available. (Only perennials also offer forage then.)

The vulnerability of young plants to heavy deer feeding pressure is a potential negative for some of these annuals. But there are ways around this, as Whitetail Institute knows. The company includes hardy nurse forages that grow faster and taller and take pressure off more vulnerable low-growing plants, such as cowpeas and soybeans.

**Corn:** With its high nitrogen needs, the difficulty to grow it, the brief time when it's available, large acreage requirements and young-plant vulnerability, corn is a poor choice as a food plot forage. It's low in protein and not particularly nutritious for deer. WINA does not use corn in any forage blends.

**Cow peas:** Originating in Ethiopia, cow peas rate high for palatability and pack plenty of protein, at 20 to 28 percent. This legume tolerates mediocre soil but requires liming if the pH is lower than 5.8. Cow peas are a major component of PowerPlant and bounce back strongly from deer feeding pressure.



■ Some brassicas have bulbs deer dig up and feed on after the animals eat the green tops.

**Lablab:** This bean, originally from Africa, is drought tolerant and first became popular in Texas for that quality. Whitetail Institute does not include lablab in PowerPlant because cow peas and forage soybeans, also legumes, are easier to grow, withstand grazing pressure better and produce just as much high-protein forage.

**Forage soybeans:** These are grown for their tender, high-protein leaves. They thrive even in the hottest, driest summer weather. They also offer bedding cover when they climb up and entwine plants such as sunn hemp and sunflowers, creating a thicket of food and cover.

**Sunn hemp:** This plant came from India and dates to 600 B.C. It grows up to 11 feet tall and is high in protein. Sunn hemp, included in Power Plant, is drought-tolerant, and acts as a nurse crop and structure for cowpeas and forage soybeans to climb and grow taller.

Sunn hemp is beneficial as a soil builder that recycles nitrogen, potash and phosphate, drawing them up from deep levels and leaving them closer to the surface and more accessible for future crops. It also secretes chemicals that suppress weeds and harmful nematodes.

**Sunflowers:** This annual is attractive to deer as forage, but it also acts as a

nurse crop when planted with soybeans and cowpeas. Its tall, sturdy stalk provides structure for those plants to climb. It's an important component of Power Plant.

## BRASSICAS

These plants have been used for many years by farmers for cover crops, soil conservation and forage for domestic animals. The best brassicas are components in many seed blends offered by Whitetail Institute, and the company has also created several proprietary plants, including Tall Tine Turnips and WINA 210 Kale. Those forages have been joined in recent years by exclusive radishes, called Ravish.

Brassicas are popular as deer forage because they grow easily, have high protein content, produce lots of food tonnage and have low planting costs. They also grow tall enough that they protrude through all but the deepest snowfalls. Brassicas work well in small, semi-shaded kill plots in woods, combined with annual clovers and cereal grains in products such as BowStand and Secret Spot.

For best results with brassicas, conduct a soil test, or use a 20-20-20 type fertilizer. Then apply 46-0-0 or a similar treatment a few weeks after the

plants emerge.

Palatability is good early and becomes excellent after cold fall temperatures increase the plants' sugar content. As deer learn about brassicas, they'll often feed on them even before cold weather.

**Rape:** Brassicas developed by the Whitetail Institute can produce more forage with better palatability and resistance to insect damage than this plant. But a very small percentage of the best quality rape is included in some Whitetail Institute products because it's a hardy plant, is high in protein and is easy to grow in the poor soils in most small-woods kill plots.

**Kale:** This brassica is extremely attractive to deer, with leaves that offer 18 to 25 percent protein. The Whitetail Institute developed its own variety of kale, WINA 210, to appeal to deer, with leaves that are more tender and better able to withstand cold. It's a major component in several brassica blends, such as Winter Greens.

**Turnips:** These plants produce a bulb that deer can dig up and eat after they devour the green tops. Leaves have 15 to 25 percent protein; bulbs 12 to 15 percent. Turnips tolerate drought well and are easy to grow. A fertilized stand of turnips can grow 2 feet tall, but make sure you plant enough. Deer love them. Whitetail Institute developed a proprietary variety – Tall Tine Tubers.

**Radish:** This plant has become a popular deer forage in recent years because of its hardiness, ease of growing, palatability, high protein level and soil-enhancing characteristics. Radishes can aerate compacted soil, their deep taproots can break up hardpan soil like a drill, leaving holes for water and roots of future plantings to penetrate.

Radishes are great crops for rebuilding the soil's fertility and productivity. Whitetail Institute Ravish Radish is unique to the company and was developed by crossbreeding to create a forage specifically to appeal to white-tailed deer.

Radishes absorb nitrogen and leave it at higher levels after they die, where it can benefit future plantings. They also release biotoxic compounds that reduce harmful pests and fungi, and drill deep holes with their taproots that aerate the soil.

## CEREAL GRAINS

When natural wild foods decline in fall with colder weather, deer will feed more and more heavily on cereal grain crops, such as oats, rye and wheat. The more deer eat them down, the more the plants produce fresh, tender growth. If the plants turn yellow or struggle, a shot of nitrogen (46-0-0 or 34-0-0) will bring them back strong, turning them a deep rich green again.

These are some of the earliest plants food plotters used to entice deer into the open for a shot. If they grow too tall to be palatable, mow them down, preferably in strips on various dates to produce a variety of tender regrowth stages. Cereal grains start producing days after being planted in early fall and produce forage right through winter.

Whitetail Institute offers one high-quality cereal grain blend, featuring oats as its main ingredient. These are not just any oats, though. The company found out about this product in a research study conducted to find forage for cattle. This oat was removed from consideration in the study because deer liked it so much they decimated the test

plantings. Whitetail Institute saw that and bought exclusive rights to the oats. Like most Whitetail offerings, Whitetail Oats Plus contains a blend of plants, with oats as the major component. The newest improved version also contains triticale for its unique palatability and ability to withstand cold.

**Rye:** Rye rates high for its ease of growing and cold tolerance. It also does well in acidic soils but doesn't like wet areas. It suppresses weeds with its dense mat growth and by producing allelopathic chemicals. Its protein level, however, is low (12 to 14 percent), and it lacks the taste appeal of the other major cereal grains. It's included in Whitetail's kill plot offerings because it grows well in poor-quality woods soils and resists disease.

**Oats:** Originally from Europe and Turkey, oats rate high for palatability and are easy to grow. They do best with a 6.0 or higher pH, occasionally necessitating liming the soil. The protein level is 15 to 25 percent. Whitetail Institutes exclusive oats are extremely high in sugar and very cold tolerant.

**Triticale:** This grain was created in lab-

oratories in Sweden and Scotland in the late 19th Century by crossbreeding rye and wheat. The goal was to combine the disease-tolerance and vigor of rye with the yield potential of wheat. Triticale rates high for digestibility, protein, drought-resistance, cold tolerance and yield.

**Wheat:** This grain is easy to grow, cold-hardy, tasty to deer and drought tolerant, with good protein content (14 to 20 percent). After producing through fall and winter, wheat continues to nourish deer in early spring.

## PERENNIALS

Perennials used for whitetail food plots include plants such as ladino clover, intermediate clover, chicory and alfalfa. They can last three to five years, depending on soil preparation, the type of seed, rainfall and management of the stand. One of the greatest strongpoints of perennials is they don't have to be planted every year. They have superb protein, mineral and vitamin levels. And they taste good to deer and are highly digestible.

Soils generally need to be close to neutral in pH (6.5 or higher), and a

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mixture of 0-46-0 and 0-0-60 or 5-10-10-type fertilizer can do wonders for the plots, but the plants fix their own nitrogen. As always, a soil test is recommended. Mowing and spraying to kill grasses and competing weeds is extremely valuable for maximum production and attraction. Perennials can offer succulent forage nine to 12 months per year, depending on the location and varieties planted.

**Chicory:** This perennial thrives in drought conditions with its deep taproot. Whitetail Institute has developed its own product, WINA Chicory, included in mixtures such as Fusion and also sold as a solo planting called Chic Magnet. Whitetail Institute's proprietary chicory attracts deer better than other chicories because its leafage is more tender and palatable. It grows well even through dry, hot summers and tolerates slightly acidic soil. Protein level can range up to 40 percent.

**Alfalfa:** The common variety of this farming favorite is stemmy and used for cattle forage and hay. But the forage variety used in Alfa-Rack Plus is more palatable and grows more leaves and

less stem for greater use by whitetails. Alfalfas are especially appropriate for drier hills and upland type soils.

**Intermediate white clover:** This perennial has a smaller leaf than the well-known ladino clovers. It spreads with above-ground roots called stolons, making it more stemmy.

**Ladino white clover:** No plant has captured the minds of deer managers like ladino clover, first popularized by Ray Scott with his Imperial Whitetail Clover in the late 1980s. Since then, Whitetail Institute scientists have pioneered the development of several additional new improved ladino clovers for this blend, engineered specifically for use by deer.

With ladino white clover's large leaves, high protein content (20 to 35 percent), excellent digestibility, drought resistance, ease of planting, palatability and persistence through three to six years, it's no wonder food plotters throughout the country turn to this product. It can yield 3 to 5 tons per acre. It's a year-round producer in most areas, and grows nine to 10 months a year in colder climates.

Deer cannot destroy ladino clover. In fact, they stimulate fresh, tender regrowth every time they take a bite. It sometimes requires lime, phosphorous and potassium, plus a bit of spraying or mowing for grasses and weeds. Other than that, ladino clover requires little care, fixing its own nitrogen. An Imperial Whitetail Clover plot can last up to five years.

Besides these major perennials, Whitetail Institute also includes some forbs. Persist burnet is a Whitetail Institute proprietary evergreen forb, which is a perennial available in Edge and Extreme for difficult planting situations.

## CONCLUSION

A greater understanding of these major groups of forages should help you form a plan for your property that offers whitetails variety, taste appeal and high nutritional content 12 months per year. From my experiences through 40 years of food plotting, I've found that's the recipe for healthy deer, heavy racks and great hunting.



# SOIL TEST KIT

Whitetail Institute Soil Test Kits provide the data you need for great food plots. Professional laboratory soil testing is one of the most important things you can do to ensure food plot success. The Whitetail Institute offers professional results and recommendations for all Imperial Whitetail products, as well as other crops. Accurate fertilizer and lime recommendations are provided.

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