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Establishing Wildlife Food Plots

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Wildlife food plots are commonly used in Arkansas to attract deer, wild turkeys, bobwhites, doves[1], cottontails, waterfowl[1] and songbirds to a particular location for hunting or viewing purposes (Figure 1). Food plots are comprised of annual or perennial, native or non-native plants that are sown to provide palatable and nutritious food and cover for wildlife. Cultivated food plots are introduced plantings that typically have been imported from another country for their agricultural value. Native food plots are naturally occurring plants that provide value for wildlife.

Figure 1. Northern bobwhite quail populations are declining in Arkansas. Habitat practices that establish cover and food can help improve bobwhite abundance.

Food plots oftentimes provide a temporary food source but rarely sustain a wildlife population. Sustaining a wildlife population requires a significant investment in food plot materials that often is unnecessary, given the native plants available to wildlife in Arkansas.

So, why are food plots valuable? Food plots implemented as part of a wildlife management plan may fill a nutritional gap even in good habitat. For example, a food plot may help improve antler growth for deer by providing a year-round, sustainable food source in concert with native plants, especially when combined with a harvest strategy that balances the herd with food supply. Bobwhites and wild turkeys may lack adequate nesting and escape cover that can be provided with the right plantings, such as native warm-season grasses. Using minimal insecticides will encourage high insect populations for young chicks to feed and grow (Figure 2). Migratory waterfowl are hungry for seeds and invertebrates present in flooded, decomposing rice stubble along the Mississippi flyway.

Figure 2. Cowpeas are legumes that provide forage for deer while its seeds are food for bobwhites and mourning doves. Seeing insect holes is an added bonus – insects are an important food source for bobwhite and wild turkey chicks.

[1]Using cultivated food plots to bait doves and waterfowl is illegal. Check FSA9082, *Hunting Waterfowl and Doves on Agricultural Lands in Arkansas*, which is available from your local county Extension office or online at *www.uaex.edu*.

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Getting Started

A common question from hunters, farmers and landowners is what should I plant? Before answering that question, it is best to assess what is already present on your land. You could be destroying perfectly good native wildlife habitat and replacing it with something that offers less nutritional value, little cover or is less productive, not to mention the additional expense of maintaining a cultivated food plot.

We recommend checking your habitat first before taking action. Conduct an assessment of the current habitat and how well it matches the habitat requirements of the wildlife species you are interested in managing. The Arkansas Game and Fish Commission has information, publications and private lands biologists who can assist with developing species-specific management plans (1-800-364-4263, *www.agfc.com*).

Another common question is when are food plots most beneficial to wildlife? Typically, the critical nutrient time for many nonmigratory wildlife species is late summer and late winter/early spring. White-tailed deer eat the most in late summer/early fall and are nutritionally stressed by late spring. In late summer, bucks are growing antlers and laying down fat in preparation for the rut. Does are lactating (i.e., producing milk) or weaning their fawns, and their fawns are shifting from a milk diet to solid foods. Does are trying to nurse fawns in late summer when it is difficult to digest foods. The doe needs a good food source in September and October to rebuild her body.

For many wildlife species, late winter/early spring is a critical time after the winter fat reserves are depleted and food resources are scarce, just before the spring greening. For deer, extra energy is required for lactating does, giving birth to young and for bucks growing new antlers. Some wildlife professionals may encourage food plots in the winter; however, a Texas study indicated deer reduce their intake in winter even if feed is readily available. Although deep snow can be a problem in northern states, deer die-offs due to winter conditions are rare in Arkansas. Probably the main benefit of fall food plots for deer is to lure deer in the open for an adequate deer harvest.

Plant Selection

Food plots can be used to "fill the gap" when plant availability and nutrition is poor. Cultivated plants can be classified as annuals or perennials. Annuals must be planted each year and, if conditions are right, may reseed from the seed produced the year before. Perennials grow from their roots year after year for several years.

Consider these factors before planting your food plot:

- If you don't own the land, be sure the landowner, timber company or other entity approves of planting locations and plant varieties. Failure to get approval is a quick way to lose a good hunting area.
- No single plant species is nutritious, palatable (i.e., tasty or acceptable flavor) and available year-round for wildlife.
- Food plots with a variety of plant species or seed mixtures provide wildlife with choices. Keep in mind that a food plot wildlife ignore initially may be of value later in the season.
- Encourage native plants alongside cultivated plants.
- Is there access for a lime wagon, a tractor or an ATV?
- Plant consumption in food plots may vary from season to season and year to year because of the availability of other food sources. For example, 2002 was a bumper year for acorn production in Arkansas. Predictably, a fall food plot would be of limited value for wildlife species that prefer acorns as a food source.
- The overall land management practices (e.g., controlling shade) are far more important than food plots.

You may hear friends, neighbors or commercial seed vendors talk about a new seed or mix that will do wonders for wildlife. Keep in mind that what may be "a miracle forage" at one location may be of limited value in another. Wildlife can be selective in what they consume, even within a single field. Why this is the case is not fully understood, although factors such as soil fertility (which affects the nutritional quality of the plant material), stage of plant growth and availability of escape cover may be factors. Also, some parts of a plant are more palatable during a particular growth stage or season than other parts of the plant.

Wildlife Nutrition

Plants contain essential nutrients for wildlife, including protein, carbohydrates, lipids or fats, vitamins and minerals. The optimal forage plants are those that are very digestible, low in fiber and high in protein and energy. For deer, a lack of protein, energy and minerals (phosphorus and calcium) most often limits weight, antler development and reproduction. Plant nutrient levels tend to be highest in the spring and fall and to decline in late summer and winter months. Ironically, the forage quality of plants declines in late summer when deer need energy for continued lactation and antler production.

In many instances, the limiting factor for wildlife is protein. A deer needs at least 6 to 7 percent crude protein, while 13 to 17 percent or more of crude protein is required for maximum growth, antler development and reproduction. Levels of protein in plants change depending on the time of year. In an Arkansas study, the crude protein content of native and cultivated wildlife plants ranged from 4 percent to 39 percent, depending on the vegetative structure (e.g., leaf or twig/stem) and season. Protein tends to concentrate in the growing parts of plants and their seeds. Legumes, because of their ability to fix nitrogen in roots, are generally high in protein.

Types of Plantings

Legumes are low in fiber, high in energy and protein and are very palatable to deer, wild turkey, bobwhite quail, rabbits, songbirds and other wildlife species. Legumes include a variety of plants classified as clovers, lespedeza and cowpeas. Legumes have the unique property of being able to fix atmospheric nitrogen in the soil, which benefits other plant species as well. Protein content is from 20 to 30 percent in growing plants. Seeds of legumes need to be inoculated before planting to stimulate nitrogen fixation. (See FSA2035, *Forage Legume Inoculation*.) A soil test will determine whether phosphorus, potassium or lime needs to be added to the soil to ensure its establishment and to maximize the plant's nutritional value for wildlife. (For details about collecting and interpreting soil samples, see FSA2121, *Test Your Soil for Plant Food and Lime Needs*, and FSA2118, *Understanding the Numbers on Your Soil Test Report*.) Select legumes that are appropriate for grazing. For example, plant a grazing type of soybean as deer will probably graze out the seed type before plants become established.

Cool-season annual grasses such as oats, wheat, rye and ryegrass are typically used for fall and winter food plots for deer. These grasses provide high-quality forage (crude protein of 15 to 20 percent) from November through March or May, depending on the variety and time of planting. To find out more about optimizing growth of these and other agricultural plantings, ask your local county Extension agent for fact sheets and advice. (For details about planting and establishment from a livestock production perspective, see FSA3066, *Winter Annual Grasses for Livestock in Arkansa*s, and FSA3064, *Using Cereal Grain Forages and Mixtures with Annual Ryegrass for Grazing*.) For example, wheat can benefit from planned applications of nitrogen during certain growth stages. These "tricks of the trade" gleaned from production agriculture can result in more food availability for wildlife with relatively little effort while maximizing your initial investment in the food plot.

Native warm-season grasses are valuable to bobwhites, wild turkeys, rabbits, songbirds and other wildlife because their structure is analogous to an umbrella. The tall, upright stems and elevated leaves provide thermal and escape cover, while the "clumpyness" of the basal stems allows free movement along protected travel lanes underneath. Examples of native warm-season grasses are big bluestem, little bluestem, Eastern gamagrass, Indiangrass and switchgrass.

Native warm-season grasses produce fluffy seeds, with the exception of Eastern gamagrass and switchgrass. Seeding rates are based on pounds of pure live seed (pls) per acre. To calculate the percent of pls from the seed label, multiply the percent germination by the percent purity and divide by 100. Studies indicate that planting warm-season grasses on a tilled seedbed is the best planting method, and these grasses respond to fertilization. (However, avoid applying nitrogen the first year as this will encourage weed competition.) No-till seeding methods may be successful if herbicides are used to kill existing sod and control other grass competition.

For large acreages, planting fluffy seeds requires a special planter that may be loaned or rented through a local conservation district or private lands biologist. However, some seed companies are exploring different techniques for broadcasting fluffy seeds with commonly used farm machinery.

Seed Mixtures

Seed mixtures of companion plants (Table 1, page 4) will improve plant diversity and provide sustenance during critical nutritional periods. Small grain and clover mixtures provide deer and turkey with forage from fall through early spring. Wheat is a popular planting that, when left undisturbed, will mature, make seed and provide brood habitat for young turkeys and bobwhites. Mixing wheat with ryegrass results in a good year-round combination. Seed can be mixed and planted together or planted separately in strips in the same field. For example, a dove field may contain several rows of browntop millet, several rows of sunflower, several rows of proso millet, several rows of grain sorghum and bare ground. Planting depth should be taken into consideration when planting seed mixtures. For example, wheat seed could be broadcast and covered first, then clover could be broadcast and lightly rolled.

Where and How Much to Plant

Food plots can be located along field edges or on ditch banks, rights-of-way, logging roads or decks, fire lanes, abandoned fields, forest openings or marginally productive agricultural lands. An

irregular-shaped food plot is better than a straight or rectangular food plot because curves, bends and inclusions provide cover from predators. Think about the survival tactics of the wildlife you are managing. In larger food plots, leave "islands" of cover for hiding and escaping from predators. Just don't leave so much that islands compete with the food plot for shade, moisture and nutrients.

Food plots need to be large enough so they aren't grazed down too early in the season and small enough so wildlife can flee to protective covering. Optimally, food plots should be from 1 to 3 acres and an irregular shape with brushy edges. Grain food plots should be no less than 1/4 acre. When disking the soil to plant grain food plots, consider planting grain on only half the field and leaving the remaining half disked but unplanted. Native plants in the seedbed will furnish food and cover for wildlife and provide an additional measure of plant diversity that wildlife may need in times of feast or famine.

Several rules of thumb are reported in the literature about the percent of food plots on a tract of land. These range from 1 to 10 percent to have "any observable effect" on white-tailed deer or other wildlife. Another rule of thumb is 1 acre of food plot per every 40 acres of land. Ultimately, the optimal number of acres in food plots depends on the quality of the surrounding habitat. Landholdings with poor-quality habitat need more food plots, whereas land holdings with higher-quality habitat need fewer food plots.

Consider planting a portion of your food plots annually. Rotating food plots not only increases plant diversity but also decreases the expense of purchasing cultivated seed and labor. Each year, fertilize and plant only a portion while the rest remains untouched. Three- to five-year rotations are recommended to give early successional plants ample time to establish themselves without allowing grasslands to become overly woody. For example, in a landholding with 30 small openings of 3 acres or less, plant 10 openings each year. The planted openings should be scattered (not clustered) throughout the landholding to improve accessibility to wildlife.

Alternatively, openings can be planted in strips with three- or five-year rotations. The recommended sequence of a three-year rotation is 1-3-2 to maximize the age difference between adjacent strips and enhance habitat diversity. The first year, planting occurs in the strip designated "1" without disturbing "2" and "3." The second year, plant the strip designated "2" while leaving "1" and "3," and so on. In the course of three years, every portion of the field has been planted once, while allowing adjacent plants to grow. This rotation sequence will provide a diversity of habitat in a relatively small area. In fields large enough for maintaining five strips (a five-year rotation), the recommended yearly sequence is 1-3-5-2-4.

Table 1. Seed Mixtures of Compatible Plants

Mixture	Pounds per acre, broadcast
Wheat or oats	40
Ladino white clover	4
Red clover	5
Chicory	2
Dwarf essex rape	1
Wheat or oats	40
Austrian winter peas	20
Crimson clover	10
Arrowleaf clover	5
Wheat or oats	30
Alfalfa	10
Red clover	5
Chicory	3
Wheat or oats	40
Alsike clover	5
Ladino white clover	4
Berseem clover	5

Mixture	Pounds per acre, broadcast
Egyptian wheat	8
Combine hegari	4
Laredo soybeans	8
Redripper cowpeas	8
Browntop millet	4
Grain sorghum	5
Soybeans or cowpeas	40
Grain sorghum	8
Soybeans or cowpeas	8
Browntop millet	2
Grain sorghum	12
Sunflowers	8

Mixture	Pounds per acre, broadcast*
Big bluestem	1 to 6 pls
Indiangrass	1 to 6 pls
	(Total = 7 pls)
Big bluestem	1 to 3 pls
Indiangrass	1 to 3 pls
Little bluestem	0 to 2 pls
Sideoats grama	0 to 2 pls
	(Total = 6 pls)
Big bluestem	1.8 pls
Indiangrass	2.0 pls
Little bluestem	1.5 pls
Sideoats grama	0.5 pls

*pls = pure live seed

Ready to Plant (Almost)

When planting a food plot, apply agricultural practices to your planting as much as the landscape and equipment will allow (Figure 3). Sometimes food plots can be several miles in the woods and inaccessible to tractors, so smaller garden tractors or ATVs designed to pull loads may be used instead. Hitching a disk or rigging a sprayer to a pickup truck also works. In locations where tilling is not possible, food plots can be established using herbicides to knock down competing vegetation and allow cultivated or native plants to grow. Regardless of your circumstances, there are "low-tech" and "high-tech" ways for establishing food plots, and both can be successful.

Figure 3. Applying agricultural practices will improve your success in establishing food plots.

The key to a successful food plot is preparing a proper seedbed to ensure maximum seed survival. This requires advanced planning, i.e., more than showing up on planting day with a tractor and a bag of seed. Take soil samples in the top 6 inches and have them tested. Following the test results assures your plants will have the nutrients they need to grow. Contact your local county Cooperative Extension Service office for assistance with collecting and interpreting soil samples. A basic soil test is available at no cost.

Follow recommendations from your soil test. Apply fertilizers and lime at the recommended rate and time. For example, soil pH needs to be between 6.8 and 7.0 for establishing clover in a food plot, though a pH of 6.5 may suffice. Some fertilizers can be broadcast while others may require being disked into the seedbed. Lime needs to be applied several months in advance of the planting season. Nitrogen may also be recommended for improving crops like wheat. Again, your county Extension agent is a good source of information for planting tips that will improve your chance of success.

Are fertilizer and lime **really** that important for preparing a wildlife food plot? Not only are they important for plant growth, research indicates a relationship between soil fertility with wildlife abundance and health. If you want to grow good wildlife, start with good soil. In areas with poor soil, wildlife show a preference for plants that have been fertilized and, thus, contain more of the nutrients wildlife needs for survival. Soil–plants–wildlife…it's all related, and it's important to use soil amendments if you are serious about improving wildlife habitat. If you must reduce costs, either don't plant or reduce the fertilizer rate. Don't skimp on lime; it is that important to plant growth.

Once the soil is ready, it's time to prepare the soil for contact with the seed. Many food plot plantings can be established in an area that has been mowed or disked a month or more before planting, but mowing or disking can also be done the same day as planting. Studies indicate planting on a poor or weedy seedbed results in emergence of only 33 percent of the seed. For small seeds, a firm seedbed is necessary to prevent the seed from being planted too deeply in the soil.

Next, plant the seed at the appropriate depth. Small legume and ryegrass seeds should be no deeper than 1/2 inch. Larger seeds such as oats, wheat, beans or peas can be planted 1 to 1 1 /2 inches deep. Most seeds are broadcast with a seeder mounted onto a tractor, truck bumper or ATV. However, in areas with high songbird or rodent populations, wheat or other seeds may be eaten before germination. Select less-preferred seeds such as oats, or perform some operation to cover the seeds. Rolling or dragging the plot after planting will ensure retaining soil moisture and good soil-to-seed contact and may protect the seeds from being eaten.

Some food plots can be overseeded in existing sod without plowing or disking. Overseeding annuals on grasses extends the utility of grasslands for wildlife. These include clovers, vetch and ryegrass. Mow the plot as close to the ground as possible at planting time to prevent other plants from shading out the seedlings. Drag the sod to make sure seed contacts the soil. A homemade drag can be fashioned by towing a section of chain link fence, old bed springs or the top of a cedar tree behind a pickup or ATV. Additional information can be found in FSA9083, *Managing Pastures and Haylands for Wildlife*, and in FSA2117, *Growing Clovers in Arkansas.*

Going Native

When it comes to wildlife, you can't go wrong going native. Native food plots are less expensive over the long term and can produce just as good, if not better, results compared to cultivated food plots. Often, all you need is a bag of lime and/or fertilizer or a tractor with a mower or disk to encourage growth of native grasses, forbs and shrubs.

- **Fertilize** patches of dewberry, blackberry, trumpet-creeper vines, American beautyberry or other plantings you observe wildlife eating. Many plants respond to a balanced fertilizer like 13-13-13. Use about 200-300 lb/acre on dewberry patches. If Japanese honeysuckle is in short supply (as a note of warning, it is very invasive in some regions of Arkansas), broadcast 150-300 lb/acre in February or March, when there is plenty of moisture on the ground and just before honeysuckle begins to put on new growth, and fertilize about six to eight weeks later with 100 lb/acre of ammonium nitrate. In natural stands, the protein content of honeysuckle is about 11 percent. Research in Alabama indicates this can be increased to almost 17 percent with fertilization. Fertilize patches of honeysuckle scattered throughout your landholding, and make sure the vines are within reach for deer to browse. To observe how deer are attracted to fertilized, naturally-occurring plants, only fertilize half of a patch and revisit in July.

- **Mowing** in August or September (after nesting and brooding seasons for ground-nesting birds) produces tender, native vegetation at a time when other native foods are less palatable. For deer and other wildlife, mow a foot or more from the ground so there is ample vegetation for consumption until regrowth starts.

- **Disking** removes the competition and exposes a seed bank of native plants to sunlight, causing new plants to appear. Results will vary, depending on the seeds present in the soil. Try disking in the fall for supplying wildlife with new plants into late winter and early spring. Plus, fall disking encourages the development of brood habitat for bobwhite quail the next spring and summer.

- In some circumstances, **prescribed burning** is an option for revitalizing forbs and warm-season grasses in forest understory or open grasslands. Research indicates a prescribed burn can do more to revitalize habitat for bobwhite quail, rabbits and other wildlife that rely on early successional plants than other practices. It is also a key practice for regenerating oaks and improving forest health in some regions of the state. Contact the Arkansas Forestry Commission (501-296-1940, *www.forestry.state.ar.us*/) for assistance with prescribed burning.

- **Herbicides** can remove plant competition so that native plants can thrive. An example is eliminating fescue by applying an herbicide such as Roundup® in the spring and fall. To eliminate fescue, mow or burn the field in February, and after regrowth (about 6 to 8 inches), apply one quart of Roundup® mixed with 10 gallons of water per acre. Apply herbicide again in the fall when fescue is 8 to 12 inches tall and growing vigorously. Plant native grasses the following spring, or repeat the herbicide treatment again if fescue continues to grow. Hexazinone (Velpar®) products control unwanted hardwoods, like sweetgum, in pine forests and allow growth of choice turkey foods. Always follow label directions.

- Several types of native plant **seeds** can be purchased and sown to produce a food plot. Or perhaps your neighbor has some desirable native plants and will give you permission to transplant, propagate or harvest the seed. As a word of caution, however, some naturally occurring plants can be invasive and difficult to control once becoming established, such as Japanese honeysuckle, kudzu and autumn olive (source: *www.invasivespecies.gov*). Bicolor and sericea lespedeza are considered invasive plants by some professionals. Ask your county Extension agent or visit the library or the internet to learn more about a particular plant or seed source before establishing it on your property.

Try a combination of fertilizing, mowing and disking to maximize native plant growth. For example, International Paper's "The Wood's Edge" newsletter reported how an Arkansas hunter encouraged native plants in a shooting lane he hunted for deer. He fertilized the shooting lane annually and added lime every three years. He mowed one-half of the shooting lane about a foot high. The other half was mowed then disked lightly. (He had to mow before disking because there was so much vegetation that disking was difficult with a small tractor.) Each year, he reversed his practices and disked the other half. He grew plenty of native deer forage for a lot less work and money compared to a cultivated food plot.

Depending on the characteristics of the native plant species, there may be several options for establishing a particular plant on your property. American beautyberry (Figure 4) is an example of an often ignored native plant that attracts wildlife. White-tailed deer, bobwhite quails, squirrels, raccoons, opossums, turkeys and foxes relish the fruits of the native American beautyberry, also called French mulberry. Additionally, deer consume the new leaf growth in the fall. In forest settings, this plant thrives after treating open pine forests with herbicides containing hexazinone. Hexazinone works on sandy soils with little organic matter. Another option is collecting seeds in the fall and sowing them in the field or nursery. Nursery plants grown from seed can be transplanted the next winter. Stem cuttings can

be rooted and transplanted. Or with the permission of a landowner, the entire plant can be dug up and transplanted to another site.

Figure 4. American beautyberry is a native plant that benefits many wildlife species. This pale green shrub has small clusters of berries which turn purple in October.

Measuring Success

Many land managers don't keep records on their food plots. However, these records can be very beneficial as you begin experimenting with various plantings, seed mixtures and/or techniques for encouraging native plants. These records may contain location and identity of food plot, types of native plants, variety of cultivated plant(s), seedbed preparation technique or native plant enhancement method, planting dates, seeding rate, information from soil test, type and rate of fertilization and liming, planting method, maintenance and management of planting, rainfall and temperature during planting and growing season, use by wildlife, cost of establishment and maintenance, wildlife harvest in vicinity of food plot and evaluation of the food plot's success.

Figure 5. Setting up a cage can visually demonstrate the value of your food plot for wildlife.

To discover how much your food plot is being utilized, install a caged exclosure after planting seed (Figure 5). The cage is simply a small fenced-in area, usually 4 to 5 square feet that protects plants from being eaten by wildlife. A woven-mesh fence can be constructed with fence posts. To protect against rabbits and rodents, a smaller mesh size (e.g., chicken wire) can be added to the bottom half of the fence. The height and density of plants inside the cage can be easily compared to the surrounding food plot. Be sure to measure the height of plants in the center of the fence, as those along the outer edges are accessible to wildlife.

Digital or video wildlife cameras, also called scouting cameras, can be used to visually measure wildlife utilization of food plots (Figure 6). These cameras can be purchased in many sporting goods stores and catalogues or a homemade version can be constructed. When something crosses a laser beam, ambient heat is detected and the camera is triggered to take a picture 24 hours a day. An array of camera features (such as recording the date and time on the picture) is available.

Figure 6. Wildlife cameras installed at key locations provide visual evidence of wildlife using food plots.

If scientific protocols are followed, these pictures yield information about wildlife populations, in particular for white-tailed deer. Studies at Stephen F. Austin University and Mississippi State University placed wildlife cameras over prebaited areas for five days during the winter and photographed 75 to 100 percent of the deer population. Buck-to-doe ratios and age structures were determined to assist a hunting club with designing harvest management strategies for improving the deer herd.

Use the following procedures to assess wildlife utilization of food plots using wildlife cameras.

1. Grid the land area into blocks of 100 to 160 acres.
2. Set a camera station in the food plot located closest to the center of the block.
3. Look for a trail or location where wildlife are sure to cross while coming to or from the food plot.
4. Select a tree for setting up the camera, or install a suitable post.
5. Face the camera either north or south to avoid sun glare and "false triggering." Some infrared cameras detect ambient heat from sunlight and will take a picture. This problem can be resolved by placing the camera out of direct sunlight or activating the camera only at night.

6. Look from the angle of the camera and determine whether you could identify wildlife up to 50 feet away.
7. Install and set the camera to record the date and time.
8. Place a reference point (e.g., number on a sign) in view of the camera. This will help determine the camera location for taking pictures annually and for later review of each photograph.
9. Set the camera to trip at the desired height for photographing wildlife of interest. For example, for photographing deer, set the camera to trip at 20 to 30 inches above ground level. Set the camera lower to capture raccoons and other wildlife.
10. Check the camera daily, particularly after it is first set up, to gauge picture frequency and replace memory card if necessary.
11. Leave the camera at the location for five to ten days. If not many wildlife are photographed, consider moving the camera to a different location.
12. Once establishing a suitable camera location, implement this procedure annually at about the same time and place each year. For analyzing buck-to-doe ratios, the recommended time to collect camera images is August to September.

Food Plots – The Big Picture

Food plots cannot substitute for sound wildlife and land management. Food plots are one of many tools that can lead to healthier, sustainable wildlife populations. To be effective, food plots need to be used with other practices, such as wildlife harvest strategies, prescribed burning and forest stand improvements, as part of a broader wildlife management plan. In dense deer herd situations, food plots may not even grow well until the deer herd is reduced.

Cultivated food plots may help sustain a wildlife population through careful planning and a large investment in time and financial resources. Alternatively, encouraging native food plots or rotating natives with cultivated plantings is less expensive and provides a diversity of plantings that improves wildlife survival when other food sources are unavailable.

Successful land managers are willing to be creative and experiment with native and cultivated food plot designs, keep records of plant successes and assess wildlife use. This may entail sowing plant species that offer delayed nutritional value for critical times of the season when surrounding native plant species are less abundant. Another option is placing electrical fencing around food plots to keep out wildlife until plantings are able to sustain heavy grazing pressure or until nutritional shortages occur.

There is no limit to the number of combinations and techniques for establishing and maintaining food plots. Developing a wildlife management plan and keeping records is necessary for understanding what works best for achieving your particular goals in attracting or sustaining wildlife on your land.

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