

Food Plot Plantings

FOR WHITE-TAILED DEER IN LOUISIANA



introduction

Hunters and land managers are always seeking new and more innovative ways to improve the quality and attractiveness of their hunting areas. Wildlife biologists and other experienced personnel who deal with the management of deer are often asked the one question that relates to how these same hunters and land managers attempt to improve the quality and attractiveness of the areas they control: “What should I plant to attract and hold deer on my hunting area?”

As with any management decision, consideration should be given to what is already available on the area before making any changes to the habitat. Management of native browse species is many times overlooked when hunters and sportsmen want to improve habitat conditions. Fertilizing Japanese honeysuckle (*Lonicera japonica*), blackberry and dewberry (*Rubus*) and other forbs and vines normally found in open timber stands will greatly enhance the food and cover that Louisiana upland wildlife depend on. In some cases, individuals fail to plan and prepare when it comes to planting food plots and actually destroy large areas of these native browse species. The critical step is to plan before you plant.

Properly planted food plots can be a tremendous benefit to white-tailed deer. Before you plant food plots, consider these factors.

The total acreage to be planted in food plots, along with the size of individual plantings, must be decided before planting begins. There is always considerable debate when trying to determine the correct amount of acreage to devote to food plots. The answer to this question is best provided by closely examining the natural habitat conditions surrounding the area to be planted. When native habitat provides adequate food and cover for deer, look at food plots as a supplemental management option that can improve the forage quality of an area. As mentioned earlier, however, these plantings should never be done at the expense of managing for high quality native foods. Where habitat conditions and finances allow, planting up to 10 percent of an area in various types of supplemental food plots could be considered a management option, while planting as little as 1 percent of the total area may benefit deer as well as attract them to the area for viewing or harvest opportunities.

In considering the size of the openings to be planted, managers should first look to existing openings such as power line or pipeline rights of way or existing open fields. Food plots should be wide enough to allow for adequate sunlight to reach the ground and at least one-half acre in size. In areas with high deer densities, planting plots smaller than this will generally be of little value since deer will quickly “eat down” these small plots with no long-lasting benefits. Where manipulation of the native habitat is possible, establishing long narrow food strips in a “wagon wheel” fashion can be of maximum benefit in getting the highest amount of food plot acreage established on a minimal amount of total area. In this planting arrangement, the deer stand or viewing platform is the hub of the wheel, with food strips coming off at various angles and lengths as the spokes of the wheel. In many cases, over-hunting a food plot by continual usage in morning and evening will cause deer to avoid use except nocturnally.

The forest habitat type is a second factor to consider when deciding how to establish food plots for white-tailed deer. Various forest habitats and the soils upon which they exist play an important part in determining the carrying capacity of deer and other wildlife on an area. Pine and mixed pine/hardwood forests of Louisiana cannot support the numbers of deer that our state's bottomland hardwood forests are capable of supporting. Regardless of the forest type, regular manipulation of the native habitat by timber management is necessary to keep a forest productive for deer. Clear-cutting, regular thinning and prescribed burning are forest management activities that land managers can use to accomplish this task. With the forest habitat type considered, food plots have the potential to be more beneficial where soil and timber types are not as productive in providing the necessary food and cover for white-tailed deer.

Figure 1 and 2: Prescribed fire and regular timber thinnings are two of the most important management tools that land managers have to manipulate native vegetation to benefit white-tailed deer.

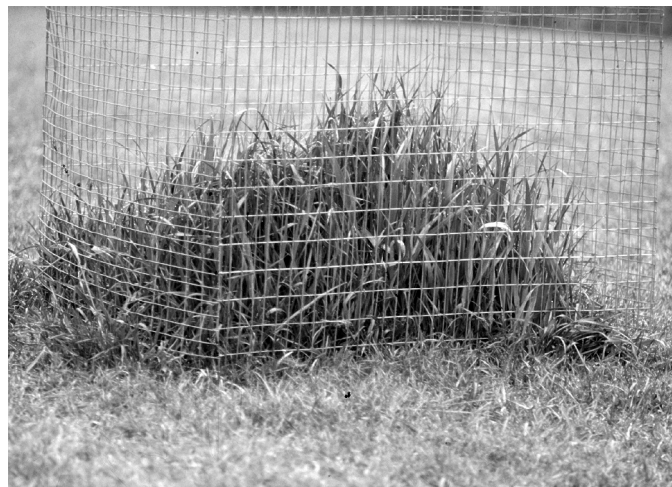


The availability and types of agricultural crops grown on farms located on or adjacent to hunting leases have an impact on the decision of what and how much to plant in food plots. In areas where corn or soybeans are grown close to wooded tracts, the potential for these crops to be a tremendous supplemental food source for white-tailed deer should not be overlooked. The same is true for many cattle operations where fields of winter wheat and rye grass established as part of improved pasture operations provide white-tailed deer with a readily available source for winter foods. Studies have shown that these types of agricultural operations, when done on a large scale, can increase body weights and improve the overall condition of deer in the surrounding area. The absence of these farming operations should make the establishment of permanent food plots a more critical management decision in most cases, particularly in intensively managed pine plantations where long-term hardwood control is practiced.

Another factor to consider when initiating a food plot program is deciding what species will be planted. The most successful operations involve plantings that are available for deer more or less year-round. To achieve this objective, plant cool and warm season plots. In this type of operation, quality food is available to deer during the two most critical periods — late summer and late winter. Normal Louisiana weather provides little rainfall during late summer. Native vegetation under these conditions develops into browse that is low in nutrition and palatability. Lactating females and bucks in the later stages of antler development depend on quality forage for maximum body performance at this time of the year. Late winter finds some deer habitat devoid of the hard and soft mast crops and deciduous browse species that they started with the previous fall. Food plots at this time of the year may provide deer with the necessary energy to carry them through until spring green-up takes place.

Mixing various seed items is often a good way to provide deer with a variety of food items to choose from. This mixing also saves time and money by using the necessary equipment to prepare and distribute all seed to be planted at one time rather than making repeated trips into the field. Land managers can often decide on what food items they want included in a mix and buy the necessary ingredients to achieve the desired results. Buying different food plot items that are premixed and bagged is more convenient for use but also more costly. In whatever items are chosen for planting, wire enclosures over a small portion of the food plot can serve to document the amount of use that occurs. (Figure 3)

Figure 3



The importance of inoculating legumes with the proper *Rhizobium* bacteria should not be overlooked in the seed preparation phase of establishing any warm or cool season food plot. Even though some bacteria will remain in the soil for several years after a legume crop was grown in a food plot, inoculants are inexpensive and provide cheap “insurance” that proper nitrogen fixation will be obtained.

This list represents some of the warm and cool season plantings that can be established as part of a food plot operation, along with the necessary management procedures. Before planting any food plot, perform a soil test to determine fertilization and lime requirements. Soil test results will determine rates at which fertilizer and lime are actually needed. It is recommended that any seed be lightly covered following planting to increase germination success.

Warm Season Food Plots

American jointvetch	Planting Dates: April 1 – June 1
Jointvetch is a reseeding legume that will grow on sites too wet to support most other food plot items. Plant at the rate of 10 to 20 pounds of seed per acre on a well-prepared seedbed. Jointvetch requires fertilization at the rate of 200 – 300 pounds per acre of 0-10-20, and soils should be limed if pH is 5.0 or lower. Established plots produce quality grazing from June through November.	
Soybeans and cowpeas	Planting Dates: May 10 – July 15
Soybeans and cowpeas are among the most preferred food items that deer will use where available. Their high use potential is evident by the fact that small plantings have almost no success for establishment on areas with high deer densities. Seeds can be row planted or broadcast at the rate of 15 – 25 pounds per acre for cowpeas and 30 - 50 pounds per acre for soybeans. Varieties have maturity dates ranging from mid September to late October. Maturity dates are not of tremendous importance, however, because of the use of both vegetative and seed portions of the plant. Fertilization requirements should be based on a soil analysis; liming is required when pH falls below 6.0.	
Corn	Planting Dates: April 1 – May 1
Corn is a high carbohydrate food item that deer will readily use upon maturity. It has the added benefit of providing cover for deer late in the summer when standing stalks are “worked over” to obtain seed from the mature ears. Plant at 10 to 12 pounds per acre in 36-inch rows or broadcast at the rate of 12 to 15 pounds per acre on a well-prepared seedbed. A balanced blend of fertilizer such as 13-13-13 is recommended on poorer soils; liming should be performed to bring soil pH between 6.5 and 7.0.	
Alyce Clover	Planting Dates: May 1 – June 15
Alyce Clover is a warm season legume that is used by deer in the summer and early fall. It holds up well to grazing pressure, unlike most other warm season forages. Alyce Clover provides supplemental nutrients to benefit doe lactation, fawn production and antler development in bucks. It can be drilled at 16 pounds per acre or broadcast at the rate of 15 to 20 pounds per acre. Fertilize at the rate of 200 pounds per acre with 0-14-14 after planting is established. For best results, soil pH should range from neutral to slightly acidic (6.5 - 7.0).	
Lab Lab	Planting Dates: April 15 – June 15
Lab Lab, a warm season legume, is noted for its tolerance to extremely dry conditions. It is a fast-growing erect plant that is a perennial even though it does not readily reseed. Newly established plantings are extremely sensitive to competition, which makes weed control necessary to achieve desired results. Seed can be drilled at the rate of 5 to 10 pounds per acre or broadcast at 10 to 20 pounds per acre. Fertilize at the rate of 300 pounds per acre with 0-20-20, and establish a soil pH in the range of 6.5 to 7.0.	
Milo	Planting Dates: April 15 – June 15
Milo or Grain Sorghum is a hardy warm-season annual that white-tailed deer along with many upland game bird species feed upon once seed has established on the plant. Dwarf varieties producing seeds of low tannin content should be chosen for wildlife food plots. Seed should be drilled at 8 pounds per acre in 24- to 36-inch rows, or broadcast at the rate of 12 to 15 pounds per acre. Seed production can reach 5,000 pounds per acre on fertile soils and seed are used over extended periods, making this an excellent planting choice.	

Cool Season Food Plots

Austrian Winter Peas	Planting Dates: Sept. 1 – Nov. 1
Austrian winter peas, a cool season forage, rival warm season plantings of soybeans and cowpeas in their attractiveness to white-tailed deer. Inoculated seed should be drill planted at 40 pounds per acre or broadcast at 40 to 60 pounds per acre. These plantings are better adapted to heavy clay soils with moderate to heavy fertility. Fertilize at 250 pounds per acre with 0-14-14 and maintain a soil pH between 6.0 and 7.0.	
Crimson Clover	Planting Dates: Sept. 1 – Nov. 15
Crimson Clover is one of eight or more clovers that can be planted for deer in Louisiana to provide a high protein source in the winter. Clovers are generally planted in a mix with other cool season annuals. Clovers are rather expensively priced per pound, but this cost can usually be justified when one looks at the small amount of seed required to cover an area. Clovers are one of the items land managers can save money on by mixing chosen species themselves rather than buying premixed bags. In planting any variety, take care to maintain pH at recommended levels. Most clovers are very site specific. The big advantage of Crimson Clover is its high tolerance to acidic soils. With any species of clover chosen for planting, reseeding can be enhanced by disking or mowing in the fall after initial establishment. After soil disturbance, apply 0-20-20 fertilizer at the rate of 300 pounds per acre and maintain soil pH between 6.5 and 7.5. Seed should be inoculated and drill planted at 15 pounds per acre or broadcast at 20 pounds per acre.	
Subterranean Clover	Planting Dates: Sept. 1 – Oct. 15
Subterranean Clover is a cool season annual legume that can tolerate shade quite well, making it an ideal choice for plantings on narrow logging roads and small loading decks in thinned timber stands. Fertilize at the rate of 200 pounds per acre of 0-20-20 and maintain soil pH between 6.5 and 7.0. Inoculated seed should be drill planted at the rate of 8 pounds per acre or broadcast at 15 pounds per acre.	
White or Ladino Clover	Planting Dates: Sept. 1 – Nov. 15
White Clover or Ladino Clover is another popular cool season annual legume that provides excellent high protein deer forage. Plantings can be established by seeding as little as 4 pounds per acre when drill planting and 5 to 6 pounds per acre when broadcast planting. Fertilize with 400 pounds per acre of 0-20-20 and maintain soil pH between 6.5 and 7.0. Ladino Clover varieties include Osceola, Tillman, Regal, Louisiana S1 and California.	
Elbon Rye	Planting Dates: Sept. 1- Nov. 15
Elbon rye is a small grain annual plant that is similar to wheat and heavily used by deer in its early growth stages. It is very cold tolerant and can survive fairly frigid conditions later in the year although as it matures it loses a portion of its protein levels. Plantings established in the fall begin to die back the following summer. Elbon rye should be drilled or broadcast at the rate of 80 pounds per acre with 200 pounds per acre of a balanced fertilizer blend such as 13-13-13 applied at planting. Soil pH should be maintained between 5.6 and 6.5. Elbon rye makes its best growth on well-drained, light-textured soils.	
Oats	Planting Dates: Sept. 1 – Nov. 1
Oats are a cool season annual grain that has the disadvantage of being less cold tolerant than rye or wheat. Established plantings are browsed heavily by deer in their early growth stages. Seed should be drilled or broadcast at 80 pounds per acre, and 200 pounds per acre of 13-13-13 should be applied at planting. Top dressing with a blend of ammonia nitrate fertilizer such as 34-0-0 in January or February is recommended to give added growth later in the year. Maintain soil pH between 5.5 and 6.5.	
Ryegrass	Planting Dates: Sept. 1 – Nov. 1
Ryegrass is able to grow under such a wide range of soil and light conditions that it is one of the most common plantings to establish for white-tailed deer either planted alone or more often as part of a mix. It is a cool season annual grass, but repeated stands can be achieved by allowing plantings from the previous year to mature and go to seed. Disking such areas the following fall will almost always show some ryegrass returning. Seed can be drilled or broadcast at the rate of 20 pounds per acre. Fertilize at planting with 250 pounds per acre of 13-13-13 followed by top dressing with 150 pounds per acre of 34-0-0. Ryegrass grows best in soils maintained at a pH of 6.0.	
Wheat	Planting Dates: Sept. 1 – Nov. 1
Wheat is a cool season annual small grain that is widely used by deer in the early stages of growth. It, along with ryegrass, is a staple food plot item that represents some of the most used food plot ingredients for white-tailed deer. Establish plantings by broadcasting seed at the rate of 80 pounds per acre. Fertilize at planting with 200 pounds per acre of 13-13-13 and top dress later in the year with 150 to 200 pounds per acre of 34-0-0. Soil pH should be maintained between 5.5 and 6.5.	

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