

2007 Wildlife Forages for North Florida - Part I: Cool Season Food Plots¹

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Introduction

One of the primary considerations when managing habitat for wildlife is maintaining **vegetative diversity**. Encouraging a large number and interspersion of different plant associations such as mature bottomland hardwoods, mixed pine/oak uplands, pine plantations, swamp and marshy areas, young brushy growth and permanent openings, all increase the spatial and temporal availability of wildlife foods. Large monotypic areas may produce abundant food, but only for a portion of the year, and when they fail to produce, alternative food sources may not be available. Seldom does a wildlife species rely on one type of food. Therefore, supplying a broad diversification of habitat components should positively impact a wide variety of wildlife with different nutritional requirements.

The Habitat

It is important to consider early-successional habitat when developing a comprehensive management plan for a wildlife area. Typically, extensive forested areas lack a strong early-successional component to their habitat. Many game and non-game species require this component to fulfill at least a portion of their nutritional diet. For example, wild turkey, which were once thought to require extensive tracts of unbroken mature or climax forest, can reach substantially higher densities where early-successional habitat is available for nesting cover and brood rearing. The insects attracted to the forest openings are an invaluable protein source for poult development through the summer. Production of quail and rabbit is also increased in early-successional habitats. White-tailed deer are known to utilize a wide array of different habitats throughout the year.

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Clear-cut areas do not provide the best quality early-successional habitats. Succulent herbaceous vegetation is only available for the first few years after a clear-cut, until new tree seedling growth shades out the understory. Rarely are tree seedlings spaced widely enough to support vigorous understory growth for an extended period of time. Consequently, clear-cuts serve only as temporary openings. Large clear-cuts are often a case of overkill because most wildlife utilize only the edge or border areas of the clear-cut. Only far-ranging wildlife species will migrate from one clear-cut area to another. Finally, many desirable native plant species require several years to become established and produce seed or fruit in recently disturbed sites. Therefore, small, well-distributed clear-cuts best supplement permanent wildlife openings or food plots in a comprehensive habitat management program.

First Considerations

There is great interest in wildlife forages nationally. Florida poses different challenges for successful food plot plantings. Light, sandy soils, hot and humid summers, and distinct seasonal droughts make selection of forages for wildlife unique and challenging.

There are several rules of thumb to develop successful wildlife foodplots:

1. Use forages and native plant species adapted to your area. IFAS publications are available which give up-to-date, recommended forages and forage management strategies for production in Florida. (Remember that some products marketed locally for "wildlife food plots" **ARE NOT ADAPTED FOR FLORIDA**. These forages are generally expensive and will not necessarily perform as well as their claims suggest.)
2. Many (not all) forages that are recommended for Florida livestock will work as forages for wild game. These forages have been tested by University of Florida and have a history of good performance under Florida growing conditions.
3. Proper soil testing (liming is critical), as well as appropriate planting conditions and weed

control, is often necessary to grow successful food plots.

Food Plot Amount, Size, Shape, and Location

Two distinct categories of food plots exist. First is the attractant plot that brings wildlife to a specific location, but does not necessarily supply long-term or a dependable food source. Rather, the attractant is exactly as it is named, it is a highly preferred food source, planted in small plots (generally less than 1 acre) that often will be rapidly consumed when wildlife populations are high (example: soybeans, small grains).

Second, is the foraging plot, the forage source that should impact the nutritional standing of the wild game in the area. These plots are generally large plots, greater than 1 acre in size and are capable of contributing long-term nutritional advantages to wild game.

Foraging plots will support wildlife for an entire season if the plot acreage is large enough to serve the wild game population in the area. In the Florida Panhandle, large soybean and small grain farming contributed greatly to supporting the wildlife in the area. The crops supplied highly nutritious, nearly year-round available forage and grain (and the insect complexes that accompany these crops which are a significant protein source for many wild bird species). Acreage in the Panhandle has declined dramatically, and now less than 10,000 acres are grown of each of these crops state-wide (Florida Agricultural Statistics Service, 2000). Because of this, it may be necessary to plant large foraging areas to maintain good, available food sources that supplement existing native forages which support wild game.

Amount of Food Plot

The amount or percentage of total area necessary in openings, particularly when considering cultivated crops, is controversial. Much depends on the management objectives involved, such as what species the planting is targeting. A plot designed solely to attract game into an area may actually work better when total food plot acreage is low. However,

this almost certainly will be a short duration food plot and will not function as a nutritional resource. There are times when this approach is desirable, as in the case of high-density deer populations, where long-term herd health would benefit from fewer numbers. A more responsible approach is to plant enough acreage to significantly impact and improve the quality of the habitat and the health of the wildlife population in the area. Food plots should exceed one percent of the entire area to significantly impact the wildlife habitat. The optimum acreage is still debatable. The ideal early successional habitat that would benefit the broadest range of wildlife species ranges between five to ten percent of the land area. A management objective of establishing between two and three percent of an area in permanent openings (excluding roads, clear-cuts, utility rights-of-way, etc.) is recommended. Existing wildlife densities must be measured, and higher densities will require higher planted acreages.

Size of Food Plot

The size of the food plot is often dependent on the species of wildlife to be benefited. With quail, numerous small plots or strips maximizes the number of different coveys that can benefit. In nearly all situations, many scattered openings are preferable to a few large openings. However, care should be taken not to make plots so small that competition for moisture and nutrients, as well as shading from large trees, hampers the growth of the food plot. Most cultivated crops depend upon abundant sunlight and shading may substantially reduce the growth and vigor near plot edges. For deer, plots should probably not be less than one acre in size. Conversely, there is little benefit to plots larger than three acres in size unless highly desirable crops, such as soybeans, are planted. In such cases where deer density is substantial, plots may need to be at least five to ten acres in size.

Shape of Food Plot

The “edge effect”, or “ecotone” refers to the area where two or more different habitats meet. Many wildlife species are most abundant where the amount of edge is maximized. Ideally, food plots should be long and narrow openings, laid out in rectangular fashion and following the contour of the land. A

length/width ratio of 3:1 or more is a good starting point. The width should not be less than about 75 feet or so to avoid the shading and competition problems discussed earlier. Such dimensions for openings are easier for heavy equipment to create and maintain than are circular openings (which produce the least amount of edge).

Use native bunch grasses, like switchgrass and gamagrass, to make excellent transitional areas along edges of the opening for bird nesting and wildlife cover. These distinctive, tall growing bunch grasses supply shelter, as well as a good food source (seed and foliage) for many game species.

Location of Food Plot

The location of the food plot is an important consideration. Certainly, adequate access for equipment should be available, as well as choosing sites with better soils. Generally, excessively wet or dry areas should be avoided. It is also a good idea to place openings near the edge of the drainage or other habitat features that are often used as travel corridors by wildlife. Avoid placing openings in the middle of uniform habitats, such as pine plantations. Instead, place them along the edge where the plantation meets a hardwood drain. This provides an area where three separate habitats converge (pine, hardwood drain and opening) instead of just two. Avoid placing plots along heavily used roads to minimize disturbance and poaching. Finally, try to distribute the openings as uniformly throughout the property as possible, as it maximizes both the amount of habitat and the number of home ranges affected.

Generally, plots 1 to 10 acres in size, scattered throughout 100 acres, providing up to 10 percent of the area in food plots, should be adequate to impact the nutritional standing of the deer population in the area, unless populations are extremely high. Placement of these food plots should include consideration of water availability, isolation from high traffic areas and ease of plot management (soil types, slope of land, low or upland soils, open or partially shaded land, etc.). Locations that are ideal are firebreaks, old cropland, and utility rights-of-way. Always check to make sure that food plot plantings are compatible with the location and do not hamper the original and intended use of the area.

Recommended and Preferred Native and Naturalized Plants (not comprehensive)

Many native, introduced, and naturalized plants have significant value as food and shelter for wildlife.

Remember that diversification is the key to providing good year round availability of food and forage for wildlife. There are many local plants that serve these purposes. Below is a list of some plants that are noticeably utilized by many wildlife species in north Florida.

Arrow-arum (*Peltandra virginica*)
 Bahiagrass and native Paspalums (*Paspalum* spp.)
 Barnyardgrass (*Echinochloa crusgalli*)
 Beggerweed (*Desmodium* spp.)
 Blackberry (*Rubus* spp.)
 Black cherry (*Prunus serotina*)
 Buckwheat tree (*Cliftonia monophylla*)
 Bulrush (*Scirpus validus* and *S. maritimus*)
 Dayflower (Asiatic, *Aneilema keisak*)
 Dogwood (*Cornus florida*)
 Gammagrass (Eastern-*Tripsacum dactyloides*, Dwarf-*T. floridana*)
 Grape (*Vitis* spp.)
 Greenbrier (*Simlax* spp.)
 Hickory (*Carya* spp.)
 Honeysuckle (*Lonicera japonica*)
 Lespedeza (*Lespedeza* spp.)
 Milkpea (*Galactia* spp.)
 Oaks (*Quercus* spp.)
 Partridge pea (*Cassia fasciculata*)
 Persimmon (*Diospyros virginiana*)
 Plums (*Prunus* spp.)
 Pokeweed (*Phytolacca americana*)
 Pondweed (*Potamogeton* spp.)
 Ragweed (*Ambrosia artemisiifolia*)
 Smartweed (*Polygonum pennsylvanicum*)
 Spikerush (*Eleocharis parvula*)
 Switchgrass (*Panicum virgatum*)
 Viburnums (*Viburnum* spp.)
 Watershield (*Brasenia schreberi*)
 Waxmyrtle (*Myrica cerifera*)
 Yaupon (*Ilex vomitoria*)

Recommended Forages: How, When, and What to Plant

There is great interest in planting food plots. Using adapted varieties and good management practices will give you a much better bang-for-your-buck!

How

How you plant is just as important as what you plant. Time of planting, plot land preparation and seeding depth and rates are very important. Table 1 includes planting recommendations for many wildlife food plot seed.

Planting cool season forages on a clean-tilled seedbed will result in earlier and greater total production as compared to overseeding on a grass sod. If overseeding bahiagrass, the sod should be disked or chopped for 30 to 50 percent disturbance. For overseeding bermudagrass, a pasture drill or no-till drill can be used alone. Excess forage should always be removed as hay or by grazing before planting. Recent experience suggests that when overseeding on bahiagrass or bermudagrass pastures, the planting date should be delayed, compared to planting on a prepared seedbed. If possible, plant after a frost in October or November. Also, successful establishment and productive growth of overseeding is highly dependent on adequate rainfall and soil fertility.

If native land is selected as the site for planting, it should be cleared of unwanted trees, stumps, dense underbrush, and other undesirable vegetation prior to actual seedbed preparation. Several diskings may be required to properly prepare a seedbed for planting.

Have soil tested at least two, preferably six, months before planting. Soil fertility and soil testing recommendations can be found on EDIS at: http://edis.ifas.ufl.edu/TOPIC_Soil_and_Water. Broadcast the recommended kind and amount of limestone two-to-six months before seeding clover and incorporate it with the soil during seedbed preparation. Most soils in Florida used for clovers will require liming. A suitable pH range for sweetclover and alfalfa is 6.5 to 7.0. Other winter legumes will require a pH above 6.0.

Planting techniques with small seeded forages, like clovers and alfalfa, require good, clean seed bed preparation, adequate soil pH (6-6.5 pH), shallow planting depths (1/2-inch for most large-seeded and 1/4-inch or less for small-seeded forages) and cultipacking or rolling over the top of the seeded bed to insure adequate contact with the soil and with any available moisture. Seeders can be conventional and no-till grain drill types (with small and large seed boxes), hand seeders, slings or a variety of other methods. The main idea is to get a uniform seed spread at a desirable planting depth.

Seed-soil-moisture contact is critical. If cultipacker or rollers are not available, dragging a board or chain-linked fencing over the plots will serve as a fair alternative.

Most cool season forages are annual plants, which means that they will need to be planted every year. Some clovers and alfalfa are perennial species and may persist for several years. Several annual forages are excellent reseeder, like ryegrass, vetch and crimson clover. The forage plants duration will depend on climate, disease or insect pests, and rate of consumption by wildlife. Be prepared to renovate and reseed food plots annually, unless conditions favor the selected forage.

Cultivars of most forage, especially the small grains, vary in when they optimize their seasonal production. Some cultivars are termed early season, mid-season and late season types. Blends of various types could extend the grazing and seed production periods of the forages and promote long duration foraging. Blends of grasses with clovers or other legumes provide several advantages. 1) The legumes should supply the grass component with some free nitrogen. 2) The legume may extend the duration and quality of the forage blend, as in the case of including red clover, which is a late winter and spring forage producer. 3) Legume-grass mixtures supply diversity and stability should seasonal conditions favor one forage over another.

When

In north Florida, cool season forage plots are generally planted over a broad range of dates, usually from September through November. Recommended planting dates for selected forages are listed in Table 1.

What

Cool Season Legumes (clovers, alfalfas, medics, etc.)

Winter legumes are more productive and dependable on the heavier clay soils of northwest Florida or on sandy soils that are underlain by a clay layer than on deep upland sands or sandy flatwoods. But, white clover and ryegrass overseeded can also be grown successfully on certain flatwoods areas in Northeast Florida.

Inoculation of any legume crop is very important because it will supply nitrogen if the proper inoculant (*Rhizobium* bacteria) is used. Many clovers and alfalfas come pre-inoculated. This is when the proper bacterial culture has already been applied to the seed in a clay-coating. If the legumes that you intend to use are not pre-inoculated, there are commercially available inoculants that are specific to each legume variety. Using a sticker to make the inoculant adhere to the seed is important (sugar water or soft drink will suffice). Purchase the inoculant and sticker when the seed are obtained. The inoculant is heat sensitive, so keep it refrigerated or in a cool storage area until used. Also, it is advisable to use fresh inoculant each year, as the viability of the bacteria may have declined.

Cross compatible inoculation groups are listed on Table 2.

Alfalfa – This high quality legume is usually grown as a winter annual in Florida. Several new varieties have been selected under grazing by cattle and are low-dormancy types. Low dormancy means that the alfalfa will sprout and grow in our mild winter climate. Many food plot blends sold commercially include mid- or high-dormancy type alfalfas which do not grow well in the southern U.S. Alfalfa requires adequate soil pH, high soil fertility and good management, which makes it often difficult to manage in wildlife food plot situations. It will not tolerate flooding or a high water table. Alfalfa acreage is low in Florida, because of these cost and management requirements. Recommended varieties are Florida 99, Bulldog 805 and Amerigraze 702.

Arrowleaf Clover - This annual clover is similar to crimson clover in soil adaptation, management and fertility requirements. It is mainly grown on heavier soils in Northwest Florida. It makes more growth in late spring than crimson. Recommended varieties are Yuchi and Apache.

Berseem and other miscellaneous clovers – There are many other small seeded clovers including roes, Berseem, hop, bur, subterranean and ball clover, which will work fairly well for wildlife food plots. Seed availability or high seed costs may be limiting factors. Generally these clovers produce less forage than crimson, white, arrowleaf and red clover and have a short duration growing season. Several types do reseed well in north Florida, particularly the ball and hop clovers. Recommended varieties include Bigbee berseem and Overton rose clovers.

Lupine - This annual legume is adapted to well-drained soils in North and West Florida. It is an excellent cover crop. In recent years seed supply has been low, and production has been limited by diseases and insects. Only sweet varieties are suitable for forage. Recommended varieties are Tifblue, Tifwhite, and Frost.

Red Clover - This winter clover acts as an annual under most north Florida conditions and some reseeding may occur. Similar to Alfalfa, non-dormant (or low dormancy) varieties are recommended. Red clover does not tolerate flooding. Recommended varieties are Cherokee, Southern Belle, Kenland, and Redland III. (Cherokee and Southern Belle were developed in Florida and are earlier and higher-yielding cultivars.)

Crimson Clover – This is a well-adapted legume for north Florida. It is an excellent forage producer and can reseed itself each year, if weather conditions permit. It is an annual clover that is adapted to fertile, well-drained soil. Of the clovers, it appears to be the least sensitive to soil pH. It has a relatively short grazing season, so it may be grown in combination with ryegrass, clovers or a small grain crop to extend the period of forage availability. Recommended varieties are Dixie, Flame, Chief, Tibbee, and AU-Robin.

Vetch – Vetch grows best on well-drained, fertile, loamy soils. It has a spreading, viney growth habit and is an annual plant. The plant does reseed itself fairly well. Seed and foliage are consumed by many wildlife species. Recommended varieties are Americus, Cahaba White, Hairy, and AU-Early Cover.

White Clover – White clover in Florida is usually a winter annual, but may act as a short-term perennial under optimum fertility and moisture conditions. It spreads quickly by stolons and is a good reseeded. It is adapted to moist soils throughout Florida. Nematodes and other pests can limit production. Recommended varieties are Osceola (developed in Florida), Louisiana S-1, and Regal Ladino. Durana and Patriot are also well adapted but have a prostrate growth habit and lower initial forage yields.

Winter Peas - This annual legume is best suited to well-drained soils with high clay content. They typically are not very cold hardy. Austrian is the recommended variety.

Cool-Season Grasses

Cool-season grasses generally include ryegrass and the small grains: wheat, oat, rye, and triticale (a man-made cross of wheat and rye). There are distinct differences between ryegrass and rye, although they are both often called rye. Ryegrass is *Lolium multiflorum*, a very small-seeded grass that grows in the winter and early spring. It naturally reseeds itself if not heavily grazed. Rye, *Secale cereale*, a small cereal grain similar to wheat in appearance and time of seasonal growth. It has a fairly large kernel and forage production is generally late fall and winter.

Oat - May be planted and grazed by wildlife earlier than rye. When seeded in mid-fall they should produce very palatable forage by late fall. In general, oat varieties are not as cold hardy as rye or wheat and may be susceptible to freeze injury. It is important to choose recommended oat varieties. Many “feed” oats are sold and planted as seed oats, but often they do not have a guarantee on the percent germination. They may not have resistance to the heavy disease pressure in Florida, particularly to rust and virus. Seeds from oat are often consumed by a number of wild game species in the spring. Recommended

varieties include Horizon 270, Horizon 474, Horizon 321, TAMO 406, Horizon 474, Horizon 321, and Horizon 270 are relatively new varieties that have improved crown rust resistance, winter hardiness, and good grain and forage production for our area.

Rye - Rye is widely used for winter grazing for cattle, but may be grazed by deer as well. Rye is more cold-tolerant than oat and generally produces more forage than either oat or wheat. Rye should not be planted as early as oat because of several disease problems that may occur in the early fall. It is best to wait until cool weather begins to plant. Choose locally developed varieties of rye, as rye from northern states will produce little forage in late fall or early winter, and will usually be severely damaged by leaf rust. Recommended varieties are Wrens 96, Florida 401, Florida 402, Wrens Abruzzi, Bates, Elbon, Bonel, Oklon, Maton, Pennington Wintergraze 70, Early Graze, and AGS 104.

Wheat – Wheat is an excellent winter grazing and seed producer for wildlife. It is a very winter hardy grain and when planted early, it can be grazed in late fall. It is similar to oats in yield and palatability. Wheat should not be planted for grazing before October 15. Plant only Hessian fly-resistant varieties, as early fall plantings may be infected by the Hessian fly which will result in stunted plants and loss of forage and seed production. Seed of wheat are excellent for wild birds. Recommended varieties are AGS 2000, Pioneer 26R61, Coker 9835, and USG 3592. AGS 2000 and Pioneer 26R61 are relatively new varieties and have performed very well in cool-season variety testing.

Ryegrass - Ryegrass is a valuable and hardy forage crop for use on flatwoods soils or the heavier sandy-loam soils in northwest Florida. Ryegrass may be seeded alone or with a small grain on a prepared seedbed, or overseeded onto permanent grass pastures. Seeding ryegrass with small grains and clover lengthens the seasonal availability of forage. Recommended varieties are Jumbo, Florlina, Surrey II, Brigadier, Jackson, Magnolia, Gulf, Southern Star, Big Daddy, TAM 90, Passeral Plus, Rustmaster, Fantastic, Graze-N-Gro, King, Prine, Ed, Thunder, Bruiser, Striker, Attain, Big Boss, and Beefbuilder III. (Other new varieties may be suitable but have not been adequately tested in Florida.)

Triticale - This is a very high quality, robust small grain that resulted from a cross of wheat and rye. It is very well adapted to north Florida, has good disease and insect resistance and grows well even when late planted in December and January. Seed availability may be limited because seed production is scarce. Recommended varieties include Sunland, Florico, Trical 342, and Monarch.

Recommended Cool Season Forage Blends

Recommended Cool Season Forage Blends:
(Use recommended varieties listed above and inoculate clovers with proper Rhizobium bacteria. **Crimson clover is better adapted to well-drained sites, red clover to medium-drained sites, and white and arrowleaf clover to wet or poorly-drained sites.**)

Best Buy for your Buck-#1

- 50 lbs (2 bu) oats
- 50 lbs (1 bu) wheat or triticale
- 6 lbs red clover
- 14 lbs crimson clover

Best Buy for your Buck - #2

- 50 lbs (2 bu) oats
- 15 lbs crimson clover
- 16 lbs ryegrass (may reseed)
- 6 lbs red clover

Double Treat (for well-drained sites)

- 10 lbs red clover
- 15 lbs crimson clover

Triple Treat (for wet or poorly-drained sites)

- 4 lbs white clover
- 12 lbs red clover

4 lbs arrowleaf clover

Tetra Treat (medium-drained sites)

14 lbs crimson clover

6 lbs red clover

4 lbs arrowleaf clover

2 lbs white clover

Brassica and Forage Chicory Crops

Brassicas are annual crops that are highly productive and digestible and can provide forage as soon as 40 days after seeding, depending on the species. Forage brassica crops such as turnip, swede, rape, and kale can be both fall and spring-seeded. In addition, crude protein levels are high, varying from 15 to 25 percent in the herbage and 8 to 15 percent in the roots depending on the level of nitrogen fertilization and weather conditions. **At this time little is known about adaptability of forage brassicas to Florida or the acceptability by wildlife as a food source.**

All brassica crops require good soil drainage and a soil pH between 5.5 and 6.5 for optimum production. Phosphorus and potassium soil test levels should be in the optimum range prior to planting. A preplant application of 35 to 50 lbs of N per acre should be used. In addition to the nitrogen applied at planting, additional N should be applied between 60 and 80 days after seeding to increase yield and crude protein level of the brassica tops.

Kale (*Brassica oleracea* L. acephala group)-- Kale is very winter hardy. Varieties include Premier, Vates and Siberian.

Rape (*Brassica napus* L.)-- Rape would also be considered to be very winter hardy. Varieties include Rangi, Rangiora, Barnapoli, Dwarf Essex, Emerald and Winfred.

Turnip (*Brassica rapa* L.) or Turnip Hybrids-- These crops grow very fast, reaching near maximum production levels in 80 to 90 days. Varieties include Purple Top, White Globe and Barkant. Some varieties such All Top and Seven Top only produce tops.

Swede (*Brassica napus* L.)-- Like turnip, swedes produce a large edible root. Yields are higher than those of turnip, but they grow slower and require 150 to 180 days to reach maximum production.

Forage chicory (*Cichorium intybus* L.)--Chicory is a perennial plant (forb) that is suited to well or moderately drained soils with medium to high fertility levels and a pH of 5.5 or greater. Chicory produces leafy growth, which is higher in nutritive and mineral content (if managed properly) than alfalfa or cool-season grasses. It has a relatively deep taproot, which provides tolerance to drought conditions. Chicory can provide forage from late winter through summer with maximum growth rates from March through July. While chicory is a relatively new forage crop in the United States, it has been used in other countries for over 300 years. Although it originated in Central Europe, much of the breeding for improved forage characteristics has been completed in New Zealand.

Forage chicory is a low growing rosette plant with broad leaves in the winter, very much like dandelion. With warm temperatures in the spring, it rapidly produces large numbers of leaves from the crown. In late spring, after the establishment year, a few flower stems begin to develop from the crown and will reach heights of six feet. Varieties available at this time are Puna and Forage Feast. Phosphorus and potassium levels should be in the moderate to optimum range at seeding. Apply nitrogen fertilizer at 35 lbs per acre at seeding to stimulate chicory establishment. Chicory requires a high level of fertility for maximum production. It is also very responsive to N fertilization. If chicory is grown without a legume, apply 100 to 150 lb N per acre in split applications of 50 lb per acre in early spring when the chicory becomes green and 50 lb per acre in early summer and in early fall. **At this time there is only limited experience with chicory production in Florida.**

Staggering Planting Dates and Varieties to Maximize Duration

It is important to develop a wildlife forage program that offers good quality choice forages on a year round availability. No single forage will provide

this. You must use a blend and a succession of forage varieties and staggered planting dates to achieve year-round success. Warm-season plants that can be used in food plots will be discussed in Wildlife Forages for North Florida-Part II: Cool-Season Forage Plots.

EDIS Sites for Additional Information and Related Topics

Soil testing:

http://edis.ifas.ufl.edu/TOPIC_Soil_Testing

Additional forage information:

http://edis.ifas.ufl.edu/TOPIC_Forage

2006 Fall Forage Update:

<http://edis.ifas.ufl.edu/AA266>

Winter forages: <http://edis.ifas.ufl.edu/DS127>

White clover: <http://edis.ifas.ufl.edu/AA198>

Red clover: <http://edis.ifas.ufl.edu/AA190>

Annual ryegrass: <http://edis.ifas.ufl.edu/AG104>

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Table 1. Planting dates, seeding rates, and planting depths for certain cool season crops.

Seed-Propagated Crops ¹	Planting Dates ²	Seeding Rates	Seeding Depth
Alfalfa	Oct 1 - Nov 15	12 - 20	1/4 - 1/2
Chicory	Sept 15 - Nov 15	3 - 4	1/4 - 1/2
Clover, Arrowleaf	Oct 1 - Nov 15	8 - 10	0 - 1/2
Clover, Berseem	Oct 1 - Nov 15	16 - 20	1/4 - 1/2
Clover, Crimson	Oct 1 - Nov 15	20 - 26	1/4 - 1/2
Clover, Red	Oct 1 - Nov 15	6 - 12	1/4 - 1/2
Clover, Subterranean	Oct 1 - Nov 15	18 - 22	1/4 - 1/2
Clover, White	Oct 1 - Nov 15	3 - 4	0 - 1/4
Fescue, Tall	Nov 1 - Dec 15	16 - 20	1/4 - 1/2
Oats for Forage	Sept 15 - Nov 15	96 - 128 (3-4 bu)	1 - 2
Pea, Austrian Winter	Oct 1 - Nov 15	45 - 60	1/2 - 1
Rape and Kale	Sept 15 - Nov 15	3 1/2 - 4	1/2

Table 1. Planting dates, seeding rates, and planting depths for certain cool season crops.

Seed-Propagated Crops¹	Planting Dates²	Seeding Rates	Seeding Depth
Rye for Forage	Oct 15 - Nov 15	84 - 112 (1.5 - 2 bu)	1 - 2
Ryegrass, Italian (annual)	Oct 1 - Nov 15	20 - 30	0 - 1/2
Turnips and Swede	Sept 15 - Nov 15	1 1/2 - 2	1/2
Vetch, hairy	Oct 1 - Nov 15	20 - 30	1 - 2
Wheat for Forage	Oct 15 - Nov 15	90 - 120 (1.5 - 2 bu)	1 - 2

¹ Always check seed quality. Seed germination should be 80% or higher for best results.

² Planting date range: in general, cool season forage crops in north Florida can be planted in the early part of the planting date range and in south Florida, the latter part of the planting date range.

Table 2. A list of inoculant types and the legumes they inoculate.

Inoculant Type	Crops
Alfalfa	alfalfa, bur clover, sweet clover
Clover	crimson, hop, red, white, ladino
Lupine	blue, yellow, white
Pea and Vetch	field pea, Austrian winter pea, vetch
Cowpea	cowpea, lespedeza, beggerweed, kudzu, peanut, velvet bean
Arrowleaf clover	Check label for special type 0 inoculant
Rose clover	Check label for specific inoculant
Subterranean clover	Check label for specific inoculant