

# A Walk on the Wild Side: 2023 Cool-Season Forage Recommendations for Wildlife Food Plots in North Florida<sup>1</sup>

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Food plots are very popular with hunters, for supplementing diets or attracting wildlife. Cool-season forages can also represent a great feed source for captive, farm deer, a fast-growing industry in rural America. A large portion of sales of cool-season forage seeds is dedicated to the establishment of wildlife plots. Establishment of those plots, however, can be challenging and frustrating if proper practices are not followed. Establishment failures are generally related to low soil pH, poorly performing varieties, lack of fertilization, and early grazing. Most hunters choose a spot in or close to the woods, where normally the native pH is low and light may be limiting to forage plant growth. Soil testing is essential to evaluate pH and levels of nutrients, which will determine any need for liming and fertilizer. Information on soil testing is available at [https://edis.ifas.ufl.edu/entity/topic/soil\\_testing](https://edis.ifas.ufl.edu/entity/topic/soil_testing). Multiple hunting and hardware stores sell nicely packed and small-sized seed mixes for wildlife. However, many of those mixes contain low-performing varieties or species that will not grow in Florida. Hence, following the recommendation list below and sourcing seeds locally (with seed retailers) is often a better and less expensive choice. Forage blends are generally

beneficial for the plot's longevity and stability and can be a resource for multiple wildlife species. Finally, installing an exclusion fence until the plots are well established prevents early grazing and overgrazing. The following list of cool-season forage recommendations for wildlife includes varieties that have been tested and are known to perform well in Florida. For more information, access our UF/IFAS Forage Team website (<https://programs.ifas.ufl.edu/forage/technical-information/>) and contact your local UF/IFAS Extension agent (<https://sfyl.ifas.ufl.edu/find-your-local-office/>).

## Cool-Season Legumes

Winter legumes are more productive and dependable in the heavier clay soils of northwest Florida or in sandy soils that are underlain by a clay layer than in deep upland sands or sandy flatwoods. Inoculation of legumes is very important because it eliminates the need to supply nitrogen. Certain plants will manufacture nitrogen if the proper inoculant (*Rhizobium* bacteria) is used. Many clovers and alfalfas come pre-inoculated. If the legumes you intend to use

1. This document is SS-AGR-28, one of a series of the Agronomy Department, UF/IFAS Extension. Original publication date April 2002. Revised October 2021, November 2022, and September 2023. Visit the EDIS website at <https://edis.ifas.ufl.edu> for the currently supported version of this publication.

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are **not** pre-inoculated, there are commercially available inoculants that are specific to each legume variety.

## Alfalfa

This high-quality legume is usually grown as a winter, short-lived perennial forage in Florida. It is, however, very challenging to grow and not recommended for most soils or production systems in the state. Several new varieties have been selected under grazing by cattle and are low- or non-dormant types. Low dormancy means that the alfalfa will sprout and grow in our mild winter climate. Many commercially available food plot blends include mid- or high-dormancy alfalfas that do not grow well in the southern United States. Alfalfa requires a soil pH of 6.5–7.0, high soil fertility, well-drained soils, and good management, making it difficult to manage in wildlife food plot situations.

Not recommended. Adapted varieties for north Florida are Bulldog 805 and Alfagraze 600RR.

## Arrowleaf Clover

This is an annual clover similar to crimson clover in soil adaptation, management, and fertility requirements. It is mainly grown in heavier soils in northwest Florida. It is more productive than crimson clover in late spring as a deer forage. However, the later maturation is not as suitable for turkeys in late spring nor for brooding.

Recommended varieties are Blackhawk and Apache. Yuchi is susceptible to bean yellow mosaic virus.

## Ball Clover

This is an annual clover that grows on a wide range of soil types, including poorly drained soils. It is well adapted, capable of reseeding readily, and considered an excellent clover for wildlife in Florida. It is highly preferable for deer and moderate for turkeys.

Recommended varieties are Don and Grazer's Select.

## Berseem and Other Miscellaneous Clovers and Medics

There are many other small-seeded clovers, including rose, berseem, hop, bur, and subterranean clover, which will work fairly well for wildlife food plots. Limited local seed availability or high seed costs may be limiting factors. Generally, these clovers produce less forage for deer than crimson, white, arrowleaf, and red clover and have a short growing season. They do, however, provide a better opportunity for brooding turkeys because the early maturation

allows native forbs to colonize late spring and early summer similar to crimson. Ball, Persian, and hop clovers reseed well.

Recommended varieties include Bigbee and Frosty berseem, Armadillo medic, and Devine little burr and Overton rose clovers.

## Red Clover

This clover behaves as a winter annual under most north Florida conditions. Some reseeding may occur. Non-dormant varieties are recommended. Red clover does not tolerate flooding. The later maturation is excellent for deer forage production, and it is preferred by adult turkeys in the spring.

Recommended varieties are Southern Belle, Bulldog Red, Barduro, and Red Ace. Southern Belle and Barduro were developed in Florida.

## 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 clovers or a small grain crop to extend the period of forage availability. The early maturation makes it highly conducive to colonization by native annual forbs such as common ragweed that support high insect production and excellent structure during brooding for turkeys and northern bobwhite. This is the most versatile clover in terms of successfully balancing deer forage production and attraction with turkey and quail use.

Recommended varieties are Dixie, AU-Sunrise, and AU-Robin.

## Vetch

Vetch grows best in well-drained, fertile, loamy soils. It has a spreading, viny growth habit, is an annual plant, and can easily form a thick mat taking over the food plot area. The plant reseeds itself fairly well. Many wildlife species consume the seed and foliage. There are two main species of vetch: hairy (*Vicia villosa*) and common (*Vicia sativa*). Deer have moderate preference for vetch as a forage. Neither species of vetch is desirable for upland gamebirds.

Recommended varieties are Cahaba White, Hairy, and AU-Merit. Commercial seed production of most vetch

varieties is limited. It may be necessary to special order seed. Patagonia is another variety available in the market and has performed well in some of our trials, but it has not been broadly tested at this time.

## White Clover

White clover in Florida is usually a winter annual, but it may act as a short-term perennial under optimal fertility and moisture conditions. It is adapted to moist soils throughout Florida and reseeds well. Nematodes and other pests can limit production. Both deer and turkey have a high preference for white clover as a forage during spring.

Recommended varieties are Ocoee and Osceola, Louisiana S-1, Barblanca, Regalgraze, and Regal Ladino. Durana is also well adapted, having a prostrate growth habit and longevity.

## Winter Peas

This annual legume is best suited to well-drained soils with high clay content. Deer preference is high. The legume does not tolerate heavy grazing and is not very cold hardy.

Patagonia is another variety available in the market and has performed well in some of our trials, but has not been broadly tested at this time.

## Cool-Season Grasses

Recommended cool-season grasses for wildlife include the small grains: wheat, oat, rye, and triticale. These grasses provide excellent winter forage and a spring seed crop which wildlife readily utilize, but the grasses generally require nitrogen fertilizer inputs to be productive. Ryegrass, a common forage alternative for livestock, is normally not recommended for wildlife plots.

## Oat

Oat may be planted and grazed by wildlife earlier than rye (except FL401 rye). When seeded in mid-fall, oat should produce very palatable forage by late fall, but it will be more susceptible to diseases in hot fall weather. Oats 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 they often do not have a guarantee on the percent germination. Feed oats also may not have any resistance to the heavy disease pressure in Florida, particularly from rust and virus.

Buck, Juggernaut, Horizon 306 (late), Horizon 578, Horizon 720 (moderately resistant to crown rust), Legend 567

(moderately resistant to crown rust), PlotSpike Forage Oat, RAM LA 99016 (moderately crown rust-susceptible) and RAM FLLA11019-8 and TriCal Cadillac (early variety). It would be optimal to choose an oat variety with improved crown rust resistance, winter hardiness, and good grain and forage production for wildlife interests in our area.

## Rye

Rye is widely used for winter grazing for cattle, but it 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 due to several diseases occurring in the early fall. It is best to wait for cool weather before planting, around mid-November.

Recommended varieties are FL 401 (for early grazing or for use in blends), Kelly Grazer III, and Wrens Abruzzi. Bates RS4 and Elbon are older, late-season varieties. Other commercial varieties may be adapted but have not been included in our variety trials in recent years.

## Wheat

Wheat is excellent for wildlife, but not well adapted to Florida conditions. Low productivity and high incidence of diseases are common. Hessian fly can be an issue, so recommended varieties should be Hessian fly-tolerant. Deer prefer the forage, and some nongame birds utilize the seed. The seed head on awnless varieties gets substantial use from deer, turkeys, and mourning doves.

AGS 2024 (moderate tolerance to Hessian fly), AGS 3015, AGS3022, AGS 3026, AGS4023, AGS 4043, Dyna-Gro Plantation.

## Ryegrass

Ryegrass is a valuable and hardy forage crop for use on flatwoods soils or the heavier sandy loam soils in northwest Florida for cattle. **In wildlife food plots, ryegrass may become a weed problem and dominate the food plot.** It is also low-preference for deer and extremely low-preference for upland gamebirds. Ryegrass also tends to reseed and may germinate the following year. There are many well-adapted ryegrass varieties on the commercial market. However, we do not recommend their use in wildlife food plot mixes.

## 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. Deer preference is moderate to high. Triticale provides complementary structure for upland game birds when mixed with early-maturing clovers.

TriCal 342 and TriCal Surge (late).

Note: Trical 1143 is an awnless variety previously recommended for wildlife, but it is not available in the market this year.

## Brassica and Forage Chicory Crops

Brassicas are annual crops that are highly productive and digestible and can provide forage as quickly as 40 days after seeding, depending on the species. Forage brassica crops such as turnip, swede, rapeseed, and kale can be both fall- and spring-seeded. Little is known about the adaptability of forage brassicas to Florida. Deer preference for these forages is highly variable across sites, most likely due to the high sulfur content. Gamebird use is relatively low when planted alone, but brassicas do support high insect production when mixed with a cereal grain and early-maturing clover.

### Kale (*Brassica oleracea* L. *Acephala* Group)

Kale is very winter-hardy. Recommended varieties include Premier, Vates, and Siberian.

### Rapeseed (*Brassica napus* L.)

Rapeseed is very winter-hardy.

Recommended varieties include Rangī, Rangiora, Barnapoli, Dwarf Essex, Emerald, and Winfred.

### Turnip (*Brassica Rapa* L.) OR Turnip Hybrids

These crops grow very quickly, reaching near maximum production levels in 80–90 days.

Varieties include Purple Top, White Globe, and Barkant. Some varieties such as 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; however, these grow slower and require 150–180 days to reach maximum production.

### Daikon Radish (*Raphanus sativus*)

This is a highly palatable brassica that is well-adapted to light, sandy soils. It is often referred to as tillage radish. Early planting may cause early bloom. Consider staggered planting dates to encourage longer season availability.

Recommended varieties are Trophy and Daikon radish.

### Forage Chicory (*Cichorium intybus* L.)

This is a perennial plant (forb) that is suited to well-drained or moderately drained soils with medium to high fertility levels and a pH of 5.5 or greater. This forage is highly preferred by deer and supports high insect production when mixed with a cereal grain and early-maturing clover.

Varieties available at this time are Puna and Forage Feast.

## 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 Value

- 50 lb (2 bu) oats
- 50 lb (1 bu) triticale
- 6 lb red clover
- 15 lb crimson clover

### Double Treat

For well-drained sites:

- 10 lb red clover
- 15 lb crimson clover

### Triple Treat

For wet or poorly drained sites:

- 4 lb white clover
- 12 lb red clover
- 4 lb arrowleaf clover

### Tetra Treat

For medium-drained and dry sites:

- 15 lb crimson clover
- 6 lb red clover
- 4 lb arrowleaf clover
- 2 lb white clover

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

Seed-Propagated Crops <sup>1</sup>	Planting Dates <sup>2</sup>	Seeding Rates (lb/A broadcast)	Seeding Depth (in)	Grazing Height (in)		Rest Period (days)
				Beginning	End	
Alfalfa	Oct. 1–Nov. 15	15–20	¼–½	10–16	3–4	15–30
Clover, Arrowleaf	Oct. 1–Nov. 15	8–12	0–½	8–10	3–5	10–20
Clover, Ball	Oct. 1–Nov. 15	2–3	0–¼	6–8	1–3	7–15
Clover, Berseem	Oct. 1–Nov. 15	15–20	¼–½	8–10	3–5	10–20
Clover, Crimson	Oct. 1–Nov. 15	20–25	¼–½	8–10	3–5	10–20
Clover, Red	Oct. 1–Nov. 15	10–15	¼–½	8–10	3–5	10–20
Clover, Subterranean	Oct. 1–Nov. 15	15–20	¼–½	6–8	1–3	7–15
Clover, White	Oct. 1–Nov. 15	3–4	0–¼	6–8	1–3	7–15
Fescue, Tall	Nov. 1–Dec. 15	20–25	¼–½	4–8	2–3	15–30
Medic	Oct. 1–Nov. 15	10–15 (rates differ)	0–¼	6–8	1–3	7–15
Oats for forage	Sept. 15–Nov. 15	100–120	1–2	8–12	3–5	7–15
Pea, Austrian Winter	Oct. 1–Nov. 15	40–60	½–1	Poor grazing tolerance.		
Rye for forage	Oct. 15–Nov. 15	90–120	1–2	8–12	3–4	7–15
Sweetclover	Oct. 1–Nov. 15	10–15	¼–½	8–10	3–5	10–20
Turnips	Oct. 1–Nov. 15	5–6	¼–½	6–8	2–3	varies
Vetch, Hairy	Oct. 1–Nov. 15	20–30	1–2	6–8	3–4	varies
Triticale for silage or use in blends	Oct. 15–Nov. 15	90–120	1–2			

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

<sup>2</sup> Planting date range: In general, cool-season forage crops in northern Florida can be planted in the early part of the planting date range, and in southern Florida, in the latter part of the planting date range.