Cool-season forages can supply excellent grazing for livestock. They are usually higher in total digestible nutrients and protein than our summer perennial grasses. Planting and growing these forage crops can involve considerable expense and labor. Because rainfall is often unpredictable during fall months, planting cool season legumes becomes risky at times. Winter forages may be grazed to supplement frosted perennial grass pastures or low quality hay, or harvested as a high quality hay or silage crop. Some livestock producers reserve winter forages for young livestock that need higher quality forages. Winter forages cannot be grown everywhere in the state and on every soil type. Some areas and some soils are too dry during the cool season to successfully grow plants. Therefore, the type of winter forage and the site where it is grown should be carefully selected. We provide annual updated information on variety recommendations for forages that have been adequately tested under Florida growing conditions.

**Rye**

Rye is the most popular small grain used for grazing in North Central Florida due to its adaptability to infertile sandy soils. Rye is more cold tolerant than oats and usually produces more forage than oats or wheat. Wait until cool weather begins, don’t plant too early. Rye from northern states will produce little forage in late fall or early winter and will usually be severely damaged by leaf rust.

**Cultivars:** Recommended varieties by maturity:

- **Early:** FL 401 (for early grazing or for use in blends), AGS 104.
- **Medium:** Wrenz 96, Wrens Abruzzi, Pennington Wintergraze 70, and Early Graze
- **Late:** Bates, Oklon.

**Production Season:** November-April

**Nutritive Value:** Medium to high. If not harvested timely (before it heads out) the quality of hay drops significantly.

**Use:** Forage grazing, hay, cover crop.

**Adaptation**

- **Soil:** Sandy-loam, clay-loam
- **pH:** 5.2-7.5
- **Rainfall:** 15-50 inches
- **Temperature:** Most cold tolerant small grain crop.

**Management**

- **Planting Date:** Oct. 15-Nov. 15
- **Planting Depth:** 1 to 2 inches
- **Seeding Rate:** 90 to 120 lb/acre (1.5 to 2 bu.)
- **Seed Cost:** $0.44/lb; $40 to 44/acre
- **Fertilization:** For fertilization info. [http://edis.ifas.ufl.edu/SS163](http://edis.ifas.ufl.edu/SS163)
- **Production:** 4000 to 6000 lb/acre

**Notes**

- In mild winters it will head out early (Feb-Mar).
- Graze at height of 8-12 inches and stop grazing when at 3-5 inches; rest period: 7-15 days.

(Continued on pg. 2)
• Susceptible to leaf and glume 'blotch' (Septoria spp.) and also leafspot 'Bipolaris' (formerly Helminthosporium spp.)--both diseases cause lesions on leaf with no distinct shape to them, and associated to heavy N fertilization and wet, windy and instances of warm weather 60°F to 77°F.

Oat
Oats may be planted and grazed earlier than rye due to their resistance to seedling diseases. They are very palatable but are susceptible to freeze injury.

Cultivars: Recommended varieties by maturity:
• Medium: Horizon 270, Horizon321, Horizon 474, SS76-40, NK- Coker 227 (some years might be affected by virus), Harrison (old cultivar susceptible to rust).
• Late TAMO 406.

Life Cycle: Annual
If planted Dec.1st by April 15th to 30th at soft dough stage. Time from germination to pollination 140 days, followed by 3-4 weeks for starch build up and drying. If the drying is only 2 weeks, it indicates adverse weather conditions (too dry/hot).

Production Season:
• As early as December if planted for grazing
• January to April for grain

Nutritive Value: Very palatable
Use: Grazing, hay, dual purpose (grazing then grain), grain

Adaptation
Soil: Sandy-loam, clay-loam
pH: 5.5 - 7.5
Rainfall: 25-65 inches
Temperature: Susceptible to freeze injury

Management
Planting Date:
• September 15 to November 15 (for grazing).
• November 15 to December 15 (for grain). Planting for grain can be as early as October 15th, planting prior to this date is not advised in southern regions due to disease pressure.

Planting Depth: 1-2 inches
Seeding Rate: 100 to 120 lb/acre or 4 Bu (32 lb/bushel) for grazing, pasture, and hay; 60 to 90 lb/acre for grain or 3 Bu Seed Cost: Harrison ($0.53/lb; $50 to 56/acre), Coker ($0.33/lb; $30 to 33/acre)
Fertilization: Fertilizer recommendation after soil test and apply fertilizer when oats have 2-3 leaves present. For additional info [http://edis.ifas.ufl.edu/SS163](http://edis.ifas.ufl.edu/SS163)

Production: 4000 to 6000 lb/acre

Notes
• Graze at height of 8-12 inches and stop grazing when at 3-5 inches; rest period: 7-15 days.
• Lodging susceptible, specially under high rates of fertilization.
• Under drought stress, affected by Barley Yellow Dwarf virus; Under wetter conditions, bunt and smut diseases may be prevalent, in general, with no toxic effect to livestock.
• Appears immune to Bipolaris leaf spot (formerly Helminthosporium).

Wheat
Wheat is similar to oats in yield and palatability. However, wheat is less susceptible to freeze injury than oats. Don’t plant wheat for grazing prior to October 15. Plant only Hessian fly resistant varieties for grazing.


Production Season: December-April
Nutritive Value: High quality. Varies depending on management.

Use: Mostly used for grain. Secondary use is pasture grazing and hay.

Adaptation
Soil: Sandy-loam, clay-loam
pH: 5.5-8.0
Rainfall: 10-66 inches
Temperature:
• Cold tolerant
• Second most cold tolerant small grain
• Less susceptible to freeze injury than oats

Management
Planting Date:
• Oct.15 - Nov.1 (for grazing), Nov.15 - Dec.20 (for grain).
• Plant only early maturing varieties in mid Dec. and do not plant any variety for grain after that date.
• For dual use (grazing/grain) plant Oct.15-Nov.1, graze for 2 months (mid Dec-mid Feb) remove cattle at first hollow stem (mid Jan), let produce grain (In dual use there is approx. 25-40% losses in grain yield).

Planting Depth: 1.0 inch
Seeding Rate: 100 to 120 lb/acre for forage. Use 60 to 80 lb/acre for grain.
Seed Cost: $0.83/lb; $75 to 83/acre

Production:
- 4000 to 6000 lb/acre
- Adapted varieties will flower by end Mar-mid Apr. If flowering in mid Apr. filling of head is in hot weather with resulting low weight and yield.

Notes
- Graze at 8-12 in and stop grazing at 3-5 in; rest period: 7-15 days.
- Susceptible to leaf and glume 'blotch' (Septoria spp.) and leafspot 'Bipolaris' (formerly Helminthosporium spp.) both cause leaf lesions associated to heavy N fertilization, wet, windy, and warm weather 60 to 77°F.

Ryegrass
Cultivars: Gulf (Early maturity); Florlina, Surrey II, Jackson, TAM 90 (mid to late), Jumbo, Prine, Big daddy

Production Season: February through all of May (except in south Florida, where growing season is shorter).

Nutritive Value: High quality; High crude protein; high digestibility

Adaptation
Soil: Sandy-loam, clay-loam
pH: 5.5-7.5
Rainfall: 35 inches (winter-spring period), requires moisture
Not recommended for sites with low moisture retention.
Temperature: Grows during cool season. Tolerates 12°F

Management
Planting Date: October 1 - November 15
Planting Depth: <0.25 inch
Seeding Rate: 20 to 30 lb/acre
Seed Cost: Gulf ($0.66/lb; $17 to 20/acre) Passerel ($0.56/lb; $14 to 17/acre)
Fertilization: 60-80 lb N/acre early in January.

Production:
- 4000 to 7000 lb/acre (less than 4,000 lb/acre may be considered a failure crop).
- Well managed and all other conditions favorable you can obtained 3 harvests (mid Feb., late March, and mid April).

Notes
- Due to later maturity than winter small grains, important to keep grazed short to prevent competition to warm-season perennials when overseeding into these permanent pastures.
- Susceptible to leaf and glume 'blotch' (Septoria spp.) and leafspot 'Bipolaris' (formerly Helminthosporium spp.) both cause leaf lesions associated to heavy N fertilization, wet, windy, and warm weather 60 to 77 F, especially in Brevard, Osceola, Polk, Pasco counties and northward.

Remember the following:
- Winter forages planted on a clean, well prepared seedbed will produce more forage earlier as compared to overseeding on a grass sod.
- When overseeding or sod seeding, remove all excess forage by haying or grazing prior to seeding.
- Disc or chop 30 – 50% of bahiagrass sod when seeding.
- Wait until mid-November or later to plant cool season annual grasses on bahiagrass.
- A pasture or no-till drill may be used alone when overseeding bermudagrass.
- Disc first, then seed with grain drill or broadcast. A light harrowing after broad casting, plus culti-packing is needed to cover the seed.
- Success of winter pastures depends on rainfall. This is especially true when overseeding.
- Fertilize according to soil sample. When overseeding established perennial grasses with cool season annual grasses, apply 50 lb N/A plus all of the P₂O₅ and K₂O after emergence. Apply an additional 50 lb N/A after each subsequent grazing period.
- Don’t graze cool season grasses until the root systems are well established. To test when forage is ready to be grazed, firmly pull on plant, the stems and leaves should break off. The plant should not come up by the roots.

John Mark Shuffitt
Livestock Agent III
Marion County Extension

The Foundation for The Gator Nation
An Equal Opportunity Institution
“Beef Cattle Management Tips”

**NOVEMBER**

⇒ Have soils tested.
⇒ Observe cows daily to detect calving difficulty.
⇒ Use high magnesium mineral if grass tetany has been a problem in the past.
⇒ Check for external parasites and treat if needed.
⇒ Maintain adequate nutrient level for cow herd.
⇒ Calve in well-drained pastures.
⇒ Survey pastures for poisonous plants.
⇒ Start summarizing your annual records, both production and financial - then you will have time to make adjustments for tax purposes.
⇒ Re-evaluate winter feeding program and feed supplies.
⇒ Get breeding soundness exams on bull battery, so you have time to find replacements if some fail.
⇒ Implement bull conditioning program.

**DECEMBER**

⇒ Check mineral feeder.
⇒ Begin grazing small grain pastures, if ready.
⇒ Check for external parasites and treat if necessary.
⇒ Deworm cows and heifers prior to winter feeding season.
⇒ Check cows regularly for calving difficulties.
⇒ Rotate calving pasture to prevent diseases.
⇒ Observe calves for signs of scours.
⇒ Investigate health of bulls **before** you buy.
⇒ Check replacement heifers to be sure they will be ready to breed 3-4 weeks prior to the main cow herd.
⇒ Complete review of management plan and update for next year.