Cool-season forages have long been the very highest quality feed that can be grown on the ranch for winter livestock supplementation in the Southeast. Land preparation, seed, and fertilizer costs have risen to the point that ranchers should be very selective choosing the of cool-season forages that fit your management system, and that the varieties of seed purchased have been tested in the region, for performance and disease resistance.

**Forage Species**

There are a number of choices as to the type of annual cool-season forages to grow. There is no single best choice, but blends can be used to provide longer seasons of grazing, and also some protection against variable climate and weather conditions. Within each forage species, there are even specific varieties that offer a range of production outside the averages provided in the following charts. Cool-season forages are most productive when planted on tilled land set aside for annual forage crops, or following warm-season row crops, immediately after harvest. While the majority of cool-season forages are grown for grazing, they can also be used to make excellent quality hay and silage, which may be an alternative for crop land without fencing, or inconvenient for animal grazing.

**Small Grains**

Small grains, such as oats, rye, triticale, and wheat offer rapid, vigorous growth and early grazing after planting. Most small grain varieties have been developed for grain production; however, there are forage types that are recommended in the guide that follows. Because they are a large-seeded crop, small grains should be planted 1-2” deep, and are most productive when planted on a prepared seedbed with a drill. Small grains grown for hay or silage have greater risk of disease, and should be scouted and treated as needed, using labeled pesticides.
Ryegrass & Brassicas
Ryegrass and the brassicas are small seeded cool-season annual forages with wide adaptability to Florida soils. Ryegrass provides high quality forage and is excellent for grazing, hay, or silage. The brassicas: turnips, kale, and rape are actually winter vegetables that provide rapid growth for quick, but limited, grazing. Ryegrass and turnips can be planted with a drill, cultipacker seeder, or broadcast and lightly covered, and can even be planted with a no-till drill or aerator, in dormant sod.

<table>
<thead>
<tr>
<th>Forage Type</th>
<th>Pros</th>
<th>Cons</th>
<th>Peak Growth</th>
</tr>
</thead>
</table>
| **Ryegrass (Annual)** | • Adapted to wide range of soil types: tolerates lower pH and wetter soils than small grains  
• Can be overseeded on dormant perennial pastures  
• Small seed allows use of a variety of planting methods  
• Can be managed to reseed | • Late season of growth (can be positive in a blend)  
• Can delay early growth of overseeded summer perennial grasses | **March-April** |
| **Turnips, Rape, Kale** | • Rapid growth after planting  
• Small seed allows use of a variety of planting methods  
• Inexpensive seed | • Short growing season  
• Does not persist with heavy grazing  
• Lower total yield  
• Limited development for forage production  
• Does not tolerate drought  
• Low disease resistance | **February-March** |

Legumes
Cool-season legumes are small-seeded plants that do not require nitrogen fertilizer, and will provide some residual nitrogen for warm season crops that follow. Legumes generally require
higher soil pH than perennial grasses. Legumes do require specific inoculants, or bacteria that produce nitrogen on their roots. Most commercial legume seed comes coated or pre-inoculated, but some need the inoculant mixed with seed just prior to planting. Legumes can be overseeded into dormant perennial grass pastures, or planted in blends with small grains or ryegrass, to improve forage quality and extend the grazing season. If allowed to mature and produce seed, there are several legume varieties that will reseed (be managed to come back from seed in future years). Legumes are sensitive to many of the broadleaf herbicides used in pastures, so you may be forced to decide which is more valuable, a weed free pasture or the legumes.

<table>
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<tr>
<th>Forage Type</th>
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<th>Cons</th>
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</tr>
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</table>
| Arrowleaf Clover | • High yield  
• Adapted to well-drained sites  
• Good choice for blends with crimson clover to extend grazing season | • Disease resistance (Apache is more resistant than Yuchi)  
• Not tolerant of low pH  
• Can delay early growth of overseeded perennial grasses  
• Limited seed availability  
• Limited pre-inoculated seed | April-May |
| Ball Clover   | • Excellent reseeder even with close grazing  
• Adapted to a wide range of soil types  
• More tolerant of wet soils  
• Relatively inexpensive seed | • Lower yield than other clovers  
• Not tolerant of low pH  
• Limited seed availability | March-April |
| Crimson Clover | • Most dependable clover  
• High yields  
• Good reseeder if managed to allow seed development  
• Adapted to well-drained sites  
• Early season growth  
• Good choice for providing nitrogen to warm-season pastures | • Can delay early growth of overseeded perennial grasses  
• Challenging to manage for reseeding when used in blends because it matures right at peak of ryegrass production | February-March |
| Red Clover    | • High yields  
• Late-season of growth complimentary in blends | • Weak reseeder  
• Easily damaged by overgrazing (longer rest period needed) | April-May |
| White Clover  | • Adapted to wetter sites  
• Fair seed producer that flowers over an extended period  
• Late season of growth complimentary in blends | • Not drought tolerant  
• Can delay early growth of overseeded perennial grasses | May-June |
| Medic         | • Adapted to a wide range of soil types  
• More tolerant of wet soils  
• Excellent reseeder | • Lower productivity than clovers  
• Poor tolerance of low pH  
• Limited seed availability | March-April |
| Vetch         | • High yield  
• Disease resistance  
• Works well in blends  
• Good reseeder, if managed to allow seed development  
• Adapted to well-drained sites  
• More tolerant of low pH soils | • Easily damaged by overgrazing  
• Limited commercial varieties  
• Limited seed availability  
• Requires specific inoculant  
• Seed is expensive | March-April |
## 2013 Cool-season Annual Forage Variety Planting Guide

### Cool-season Legumes (must add inoculant, or use pre-inoculated seed)

<table>
<thead>
<tr>
<th>Annual Crops from Seed</th>
<th>Dr. Ann Blount’s Recommended Varieties</th>
<th>Planting Dates</th>
<th>Target pH range</th>
<th>Seeding Rates (lb/A)</th>
<th>Seeding Depth (inches)</th>
<th>Grazing height (in.)</th>
<th>Rest Period</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Arrowleaf Clover</strong></td>
<td>Apache</td>
<td>Oct. 1 - Nov. 15</td>
<td>5.8 – 7.0</td>
<td>8 – 10</td>
<td>0 – 1/2</td>
<td>8-10</td>
<td>3-5</td>
</tr>
<tr>
<td><strong>Ball Clover</strong></td>
<td>Grazer Select, Don</td>
<td>Oct. 1 - Nov. 15</td>
<td>5.8 – 7.0</td>
<td>2 - 5</td>
<td>0 - 1/4</td>
<td>6-8</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Crimson Clover</strong></td>
<td>Dixie, AU-Robin</td>
<td>Oct. 1 - Nov. 15</td>
<td>5.8 – 7.0</td>
<td>20 - 30</td>
<td>1/4 – 1/2</td>
<td>8-10</td>
<td>3-5</td>
</tr>
<tr>
<td><strong>Red Clover</strong></td>
<td>Barduro, Red Ace, Bulldog Red</td>
<td>Oct. 1 - Nov. 15</td>
<td>6.0 – 8.0</td>
<td>D: 6-10 B: 12-15</td>
<td>1/4 – 1/2</td>
<td>8-10</td>
<td>3-5</td>
</tr>
<tr>
<td><strong>White Clover</strong></td>
<td>Ocoee, Osceola, Louisiana S-1, Regalgraze, Regal ladino, and Duranna</td>
<td>Oct. 1 - Nov. 15</td>
<td>6.0 - 7.5</td>
<td>2 - 4</td>
<td>0 - 1/4</td>
<td>6-8</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Medic</strong></td>
<td>Armadillo burr, Devine little burr</td>
<td>Oct. 1 - Nov. 15</td>
<td>6.5 - 7.5</td>
<td>10 - 15</td>
<td>0 - 1/4</td>
<td>6-8</td>
<td>1-3</td>
</tr>
<tr>
<td><strong>Vetch</strong></td>
<td>Hairy, Americus, AU-Early Cover, Cahaba White, Nova II</td>
<td>Oct. 1 - Nov. 15</td>
<td>5.8 – 8.0</td>
<td>20 - 30</td>
<td>1/4 – 1/2</td>
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### Small Grains

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<tr>
<td><strong>Oat</strong></td>
<td>Horizon 201, RAM LA 99016, SS76-40</td>
<td>Sept. 15 - Nov. 15</td>
<td>5.8 – 6.5</td>
<td>100-120</td>
<td>1 - 2</td>
<td>8-12</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Rye</strong></td>
<td>FL 401, AGS 104, Wrens 96, Wrens Abruzzi, Bates RS4, and Oklon</td>
<td>Oct. 15 - Nov. 15</td>
<td>5.8 – 6.5</td>
<td>90-120</td>
<td>1 - 2</td>
<td>8-12</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Triticale</strong></td>
<td>Trical 342, Monarch</td>
<td>Oct. 15 - Nov. 15</td>
<td>5.8 – 6.5</td>
<td>90 - 120</td>
<td>1 - 2</td>
<td>8-12</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Wheat</strong></td>
<td>Cocker 9553, SS8641, AGS 2038, and Pioneer 26R61</td>
<td>Oct. 15 - Nov. 15</td>
<td>5.8 – 6.5</td>
<td>90 - 120</td>
<td>1 - 2</td>
<td>8-12</td>
<td>3-4</td>
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### Cool-season Grasses & Forbs

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<tbody>
<tr>
<td><strong>Rye grass (annual)</strong></td>
<td>Attain, Big Boss, Bulldog Grazer, Diamond T, Earlyployd, Flying A, Nelson, Passerel Plus, Prine, Rio, TAMTBO, Verdurde</td>
<td>Oct. 1 - Nov. 15</td>
<td>5.8 – 6.5</td>
<td>20 - 30</td>
<td>0 – 1/2</td>
<td>6-12</td>
<td>3-4</td>
</tr>
<tr>
<td><strong>Brassicas</strong></td>
<td>Turnip, Kale, Rape</td>
<td>Oct. 1 - Nov. 15</td>
<td>5.8 – 8.0</td>
<td>D: 5-8 B: 8-10</td>
<td>1/4 – 1/2</td>
<td>6-8</td>
<td>2-3</td>
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</table>

**Blends:** To develop a blend, divide the high seeding rate listed above in half. Example Blend: **triticale -60 lbs. + ryegrass – 15 lbs. + crimson clover – 15 lbs. + vetch – 15lbs. + arrowleaf clover – 5 lbs. + ball clover – 2.5 lbs.**