Managing Weeds in Fescue Lawns

Tall fescue, *Festuca arundinacea*, is a popular turfgrass grown in the mountains and upper piedmont areas of South Carolina. To keep it looking its best, weeds should be controlled through an integrated approach. This involves knowledge of weed characteristics and the cultural requirements of the turf.

Disadvantages of Weeds
The main reason homeowners want to rid their lawn of weeds is that they are aesthetically disruptive. In other words, weeds are ugly and interrupt an otherwise uniform appearing lawn. Weeds are also fierce competitors and will rob the turf of sunlight, nutrients and moisture. Lastly, weeds have a tendency to spread rapidly. A few left uncontrolled can quickly become a serious problem.

Annual bluegrass (*Poa annua*) seeds germinate in the fall, and the grass makes white seed heads in the early spring. Joey Williamson, ©2015 HGIC, Clemson Extension

Common dandelion (*Taraxacum officinale*) seeds blow in the wind and allow this perennial weed to become a frequent invader of home lawns. Joey Williamson, ©2015 HGIC, Clemson Extension

Types of Weeds

**Grassy vs. Broadleaf:** Grassy weeds are true grasses which emerge from seed as a single leaf. The leaf blades are longer than they are wide and have parallel veins. An example is crabgrass.

Broadleaf weeds emerge from seed with two leaves. Leaves have netlike veins and many, like dandelion or clover, have showy flowers.

**Annual vs. Perennial:** Annuals germinate, grow, and die within a twelve month period. Summer annuals, such as goosegrass, germinate in the spring, grow through the summer, set seed, and die at the onset of cold weather. Winter annuals, such as chickweed, germinate in the fall, grow through the winter, set seed, and die as temperatures rise in early summer.
Perennials grow for two or more years. They reproduce from vegetative parts such as tubers, bulbs, rhizomes, or stolons, though some also produce seed. Examples are dallisgrass, wild garlic, and clover.

**Proper Management**

Weed control begins with proper management practices, which encourage a dense, healthy turf. A healthy turf shades the soil so that less sunlight reaches the ready to germinate weed seeds. A thick turf also minimizes the space available for weeds to become established.

Proper management practices include mowing, watering, fertilizing, and liming. These are mentioned briefly here but are covered in detail in corresponding HGIC fact sheets. See HGIC 1205, *Mowing Lawns*, HGIC 1207, *Watering Lawns*, and HGIC 1201, *Fertilizing Lawns*.

Tall fescue should be mowed at heights between 2½ and 3½ inches, and mowed frequently enough so that no more than ⅓ of the blade is removed. For turfgrass in partial shade, the mowing heights may be raised slightly. Proper mowing heights will encourage a dense, healthy stand.

When fescue shows signs of drought stress, water the lawn deeply so that the entire root zone is wet. This is typically 1 inch of irrigation water per week. During hot, dry periods, this may be every five to seven days. One inch of irrigation water will wet the soil to 6 inches deep, and encourage a healthy, extensive root system. Watering lawns three or more times per week will create moist surface soil conditions and promote weed seed germination and growth. Look for areas that stay excessively wet and make corrections so that water drains or is directed elsewhere. For more information, refer to HGIC 1207, *Watering Lawns*.

Fertilize and lime at the proper time and according to a soil test. Proper lime application will help to maintain a soil pH where nutrients are readily available to the turf. In general, spring nitrogen fertilization should cease in March.

Core aeration helps relieve the soil compaction that prevents optimum root growth and favors many weeds. Core aeration is superior to spike aeration.

**Control with Herbicides**

Even when cultural practices are heeded, weeds can appear. If the number of weeds reaches an unacceptable level and pulling by hand is out of the question, you may want to turn to herbicides. At this point, it is important to know what weed you are trying to control. Local extension offices, the Clemson Home & Garden Information Center, the Clemson Plant Problem Clinic, and publications can aid in identification.

**Preemergence Herbicides:** Preemergence herbicides are applied to the soil prior to weed seed germination. They provide good control for many annual grassy weeds and are the best weapon against crabgrass. They also control some broadleaf weeds. Most are in a granular formulation, but some are applied as a liquid spray.

Most granular preemergence herbicides should be watered in with about ½ inch of irrigation water immediately following application. This activates the herbicide, which is absorbed by the young roots of weeds as they begin to grow.

In the spring, preemergence herbicides should be applied when air temperatures reach 65 to 70 °F for four consecutive days. On average, this is March 15-30 for the piedmont and mountains. In the fall, to control winter annuals, apply preemergence herbicides when nighttime lows reach 55 to 60 °F for four consecutive days. On average, this is September 1 to 15 for the piedmont and mountains.

Preemergence herbicides are generally effective for six to 12 weeks, depending on the product. For season long control, make a second application nine weeks after the first. Before using, read the entire label and follow it precisely. See Table 1 for examples of herbicides and products.

**Postemergence Herbicides:** Postemergence herbicides target visible weeds. They are used primarily against broadleaf weeds, perennial grasses, and sedges. The chemicals 2,4-D, dicamba, mecoprop (MCPP), MCPA, carfentrazone, and triclopyr are broadleaf herbicides. They have been combined in many products that control many broadleaf weeds. Always check the product label to be sure that it can be used safely on a tall fescue lawn, that it will control the specific weeds in the lawn, and that it will be used at the correct rate.
With many products, repeat applications in 10 to 14 days may be necessary for difficult to control weeds. For triclopyr, a repeat application may be needed in 4 weeks on some weeds.

In fescue lawns, grassy weeds such as crabgrass, goosegrass, and dallisgrass can also be controlled with postemergence herbicides. Products containing fenoxaprop and quinclorac are recommended.

There are few herbicides that will suppress bermudagrass without harming fescue. For home lawns, the active ingredient fenoxaprop is available. This should be applied as soon as the bermudagrass turns green in the spring and repeated monthly. Stop treatments when temperatures consistently reach 90 °F, and do not apply to drought stressed fescue. The addition of a non-ionic surfactant at 2 teaspoons per gallon of water will improve control.

Yellow nutsedge and purple nutsedge are difficult to control perennials. Halosulfuron is effective against both and is safe to use on fescue, but will need to be repeated in 3 to 4 weeks for complete control. Some products require the addition of a nonionic surfactant at 2 teaspoons per gallon of water. Sulfentrazone is faster acting on nutsedges, but will also require a second application. See Table 2 for examples of herbicides and products to control broadleaf weeds, grasses and sedges.

Guidelines for Using Postemergence Herbicides

When choosing an herbicide, make sure that it will control the weed and that it is recommended for your turf. Before using, read the entire label and follow it precisely for rate and timing. The following tips will help you achieve optimum control.

- Most broadleaf weeds are best treated in the spring or fall when air temperatures are between 65 and 85 degrees F. During hotter temperatures, turf damage is more likely to occur.
- At the time of treatment, soil moisture should be adequate. When stressed by drought, weed control is poor and turf damage may occur.

- Do not mow immediately prior to or after application. Mowing lessens the amount of surface area that the herbicide contacts.
- With spray applications, treat weeds when no rain is expected for at least 24 hours.
- Avoid treating on windy days because herbicide spray drift can injure ornamental plants.
- Best results occur when weeds are young.
- For acceptable control, repeat applications, 10 to 14 days apart, may be required.

Precautions for New Lawns

It should also be noted that there are precautions for new lawns with regard to preemergence use. A new lawn must have time to become well-established, as preemergence herbicides can inhibit lawn grass root growth. Always read the label thoroughly for specifics regarding seeding. On fescue lawns, preemergence herbicides should not be applied in the fall if the lawn is to be over-seeded. If overseeded by October, any preemergence herbicide application would have to be delayed until spring (March) for summer weed control. To keep a tall fescue lawn thick and more weed-free, consider over-seeding one fall, and alternating that with a preemergence herbicide application the next fall. In sodded areas, preemergence herbicides should be used only on well-established turfgrass tall fescue.

For bermudagrass lawns to be over-seeded with annual ryegrass, delay seeding until 6 to 16 weeks after the preemergence herbicide application (depending upon rate of application and the herbicide used).

Postemergence herbicides can be applied to newly seeded lawns at ½ the rate, but only after the lawn has been mowed four times. If overseeding after a postemergence herbicide treatment, you must wait three to four weeks, depending on the product used. Postemergence herbicides should not be applied if summer temperatures are greater than 90 °F.
Table 1. Preemergence Granular Herbicides for Lawns.

<table>
<thead>
<tr>
<th>Weeds Prevented</th>
<th>Active Ingredients</th>
<th>Examples of Brands &amp; Products</th>
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<tbody>
<tr>
<td>Annual grass weeds including crabgrass &amp; annual bluegrass; also some broadleaf weeds</td>
<td>benefin</td>
<td>Pennington Crabgrass Preventer</td>
</tr>
<tr>
<td>Same as for benefin, plus goosegrass</td>
<td>oryzalin</td>
<td>Southern Ag Surflan A.S.</td>
</tr>
<tr>
<td>Same as above</td>
<td>benefin + oryzalin</td>
<td>XL2G</td>
</tr>
</tbody>
</table>
| Summer annual grasses, annual bluegrass, some selected annual broadleaf weeds    | benefit + trifluralin | Anderson Turf Products Crabgrass Preventer with 2% Team Herbicide  
|                                                                                |                   | Hi-Yield Crabgrass Control                          |
| Same as for benefin, plus oxalis & speedwell                                     | pendiometalin     | Scotts Halts Crabgrass Preventer                    |
| Same as for benefin, plus oxalis                                                 | dithiopyr         | Bonide Crabgrass & Weed Preventer for Lawns & Ornamental Beds  
|                                                                                |                   | Hi Yield Turf & Ornamental Weed & Grass Stopper Containing Dimension  
|                                                                                |                   | StaGreen CrabEx Crabgrass Preventer                  |
| broadleaf weeds, such as chickweed, clover, henbit, bittercress, spurge, plantain, & others | isoxaben          | Ferti-lome Broadleaf Weed Control with Gallery       |
| summer annual grasses, annual bluegrass, some selected weeds such as chickweed, spurge, goosegrass | prodiamine        | Helena Pro-Mate Barricade & Fertilizer 0-0-7        
|                                                                                |                   | Howard Johnson Crabgrass Control with Prodiamine & 0-0-7 |
|                                                                                |                   | Lebanon Pro Fertilizer (0-0-7) with Prodiamine      
|                                                                                |                   | Lesco Stonewall Plus Fertilizer (0-0-7)              
|                                                                                |                   | Lesco Barricade Plus Fertilizer 0-0-7                
|                                                                                |                   | Pro-Mate Barricade Plus Fertilizer (0-0-7)           
|                                                                                |                   | Scotts Halts Pro 0-0-7 & Halts Pro                  |

Table 2. Postemergence Herbicides for Tall Fescue Lawns.

<table>
<thead>
<tr>
<th>Weeds Controlled</th>
<th>Active Ingredients</th>
<th>Examples of Brands &amp; Products</th>
</tr>
</thead>
</table>
| annual & perennial grasses, such as crabgrass, foxtails, goosegrass, sandbur; bermudagrass suppression | fenoxaprop         | Aventis Acclaim Extra 0.57EC¹                                    
|                                                                                |                   | Bayer Advanced Crabgrass Killer for Lawns RTS                     |
| Wild garlic, wild onion, dandelion, clover, plantains, and most other broadleaf weeds | 2, 4-D + dicamba + mecoprop (MCPP) | Bayer Advanced Southern Weed Killer For Lawns (Conc.)
Bonide Weed Beater Lawn Weed Killer with Trimec (Conc.)
Bonide Lawn Weed Killer Granules
Ferti-lome Weed Out Lawn Weed Killer With Trimec (Conc.)
Lilly Miller Lawn Weed Killer (Concentrate)
Southern Ag Lawn Weed Killer with Trimec Concentrate
Spectracide Weed Stop for Lawns Concentrate

| Wild garlic, wild onion, dandelion, clover, plantains, and most other broadleaf weeds, plus sedges | 2,4-D + dicamba + mecoprop (MCPP) + sulfentrazone | Spectracide Weed Stop for Lawns for Southern Lawns Concentrate

| Wild garlic, wild onion, dandelion, clover, plantains, and most other broadleaf weeds; & moss suppression | 2,4-D + dicamba + mecoprop (MCPP) + carfentrazone | Bonide Weed Beater Ultra Concentrate
Ortho Weed B Gon Max for Southern Lawns Concentrate

| Crabgrass, foxtails, signalgrass; most broadleaf weeds, such as dollarweed, black medic, wild onion & garlic, speedwells, plantains, dandelion, white clover, violets, henbit, chickweed, star of Bethlehem | 2,4-D + dicamba + quinclorac | Bayer Advanced All-in-One Lawn Weed & Crabgrass Killer Concentrate
Bonide Weed Beater Plus RTS
Ferti-lome Weed Out with Q Concentrate
Monterey Crab-E-Rad Plus Concentrate
Ortho Weed B Gon Max Plus Crabgrass Control Concentrate

| Crabgrass, foxtails, signalgrass; most broadleaf weeds, such as dollarweed, black medic, speedwells, plantains, dandelion, white clover, violets, henbit, chickweed, star of Bethlehem, & nutsedges. | 2,4-D + dicamba + quinclorac + sulfentrazone | Spectracide Weed Stop for Lawns Plus Crabgrass Killer Concentrate

| Crabgrass, foxtails, signalgrass; some broadleaf weeds, such as dollarweed, black medic, speedwells, dandelion, white clover, violets, henbit, chickweed, star of Bethlehem, & nutsedges. | sulfentrazone + quinclorac | Image Kills Crabgrass Concentrate

| Many broadleaf weeds; partial bermudagrass suppression | MCPA + dicamba + triclopyr | Monterey Spurge Power Concentrate
Bonide Chickweed, Clover & Oxalis Killer Concentrate
<table>
<thead>
<tr>
<th>Weed Types</th>
<th>Herbicide(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>yellow nutsedge, globe sedge, annual sedge, and many broadleaf weeds</td>
<td>bentazon</td>
</tr>
<tr>
<td>yellow &amp; purple nutsedge, annual sedges, common purslane, groundsel</td>
<td>halosulfuron</td>
</tr>
<tr>
<td>Several broadleaf weeds; partial bermudagrass suppression</td>
<td>triclopyr</td>
</tr>
</tbody>
</table>

These products require the addition of a wetter-sticker agent at 0.25% by volume (2 teaspoons of a non-ionic surfactant per gallon of water) to aid in weed control, such as Hi-Yield Spreader Sticker. RTS = Ready to spray (a hose-end sprayer bottle).

Note: Due to the high potential for volatilization and offsite drift, triclopyr should not be used when the temperature is above 85°F. Drift can result in kill of non-target trees and other woody vegetation.


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