

Managing Broomsedge in Tall Fescue Pastures and Hayfields

Bruno Pedreira, Associate Professor and Director of the UT Beef & Forage Center, Department of Plant Sciences

Perennial cool-season grasses such as tall fescue and orchardgrass are the most common forages in the mid-south U.S., spanning from eastern Kansas to Virginia and the Carolinas, with Tennessee at the heart of this region. These grasses produce high-quality forage widely used in hayfields and pastures, playing a key role in supporting much of the nation's cow-calf production. However, many producers have seen an increase in infestations of broomsedge (*Andropogon virginicus*, Fig. 1), a warm-season perennial grass that competes with cool-season grasses, reducing yield and quality.

Broomsedge is not a sign of bad luck but rather an indicator of low soil fertility and inadequate management. It thrives in acidic, low-phosphorus soils and gains a foothold when cool-season grasses are weakened by overgrazing, mowing too low or inadequate nutrient management.

Understanding Broomsedge

Broomsedge is a warm-season perennial grass, similar to native species such as big bluestem or switchgrass. It begins to green up in May, produces seedheads by mid- to late summer and turns brown in the fall. The fluffy seeds are easily dispersed by wind or animals. Broomsedge grows most aggressively during the summer months when cool-season grasses like tall fescue are dormant. Although its seedlings are relatively weak competitors, broomsedge tends to spread in areas where cool-season grasses are already stressed or weakened.

Why Is Broomsedge in My Pasture or Hayfield?

Broomsedge becomes dominant when soil conditions no longer support vigorous growth of tall fescue or other desirable grasses (Figure 2). This usually results from:

- Low soil fertility: Especially low pH and phosphorus or potassium levels.
- Poor management practices: Overgrazing or mowing too short, which weakens the perennial cool-season forages.
- No herbicide control: There are currently no selective herbicides that will kill broomsedge without also damaging other grasses, including tall fescue.

Integrated Weed Management: A Multi-year Approach

Broomsedge infestations are rarely fixed in one season. The key is to outcompete broomsedge by restoring soil fertility and promoting a thick stand of cool-season grasses.



Figure 1: Broomsedge tussock
(Photo: Bruno Pedreira)

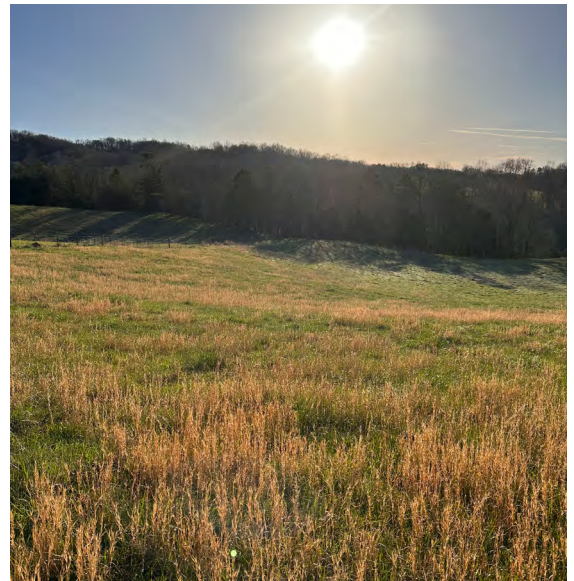


Figure 2: Broomsedge taking over a tall fescue pasture (Photo: Bruno Pedreira)

1. Correct soil fertility first

The first and most important step in managing broomsedge is to take a soil test. Broomsedge thrives in acidic, nutrient-poor soils, so correcting soil fertility is essential. Apply lime to raise the soil pH above 6.0 and add phosphorus, potassium, and nitrogen as recommended based on the soil test results. A well-fertilized, healthy stand of tall fescue will grow more vigorously, faster and eventually outcompete broomsedge. It has been demonstrated that consistent fertilization over a period of three to five years can effectively reduce broomsedge from infested fields.

2. Maintain adequate stubble height

It's critical to ensure that forage grasses are not grazed or mowed shorter than 3 to 4 inches. Maintaining this stubble height helps preserve the plant's photosynthetic capacity and supports rapid regrowth. When plants are cut or grazed too short, they must rely on root reserves to regrow new tillers and leaves, weakening the stand over time. Proper stubble height, combined with an adequate rest period, allows the forage to regrow faster and improves its ability to compete with broomsedge. This practice enhances pasture and hayfield resilience and reduces weed pressure in the long term.

3. Mow strategically

Mowing during the summer, when tall fescue is dormant and broomsedge is actively growing, can help suppress broomsedge. Mowing more than once, ideally from boot stage to when you see a few seedheads developed (from July to September), can significantly weaken broomsedge and reduce its ability to produce seeds. This practice not only limits seed dispersal but also helps diminish broomsedge populations over time.

4. Reseed if needed

Evaluate the density of your tall fescue stand. If the stand is thin, there may not be enough competition to suppress broomsedge. If you have a 50 percent or greater stand of fescue and other desirable grasses, consider drilling in additional tall fescue in the fall to thicken it. However, if less than 50 percent of the stand remains, a more aggressive approach may be needed: terminate the entire stand (including broomsedge) with a broad-spectrum herbicide (e.g.; glyphosate) and replant tall fescue in September. Establishing a thick, uniform stand is essential for long-term weed suppression. For more information on seeding, reference UT Extension publication PB378: Forage and Field Crop Seeding Guide for Tennessee.

5. Use a weed wiper (wick applicator)

- In the summer, if broomsedge stands 6 inches taller than the fescue, a wick or rope-wick applicator can selectively apply herbicide (e.g., glyphosate) to broomsedge without harming the shorter fescue. The most recommended mixture used in a rope wick applicator is one part herbicide with two parts water.
- Ideal timing: after the first hay harvest and before September when the broomsedge is still actively growing.

In Summary

Broomsedge is one of the most common weed problems reported in cool-season pastures and hayfields across the U.S., especially during late summer. While there is no quick fix, managing soil fertility, maintaining proper stubble height, thickening the stand and using targeted mowing or herbicide wipers can significantly reduce its impact (Table 1). With patience and persistence, the competitive advantage can be shifted back to perennial cool-season grasses, restoring yield and quality in pastures and hayfields.

Table 1. Long-term strategy for broomsedge control

Step	Action	Purpose
1	Soil test and fertilize	Rebuild soil fertility; support desirable grass competition
2	Maintain proper mowing height	Prevent overgrazing and thinning
3	Summer mowing	Reduce broomsedge vigor and seed set
4	Reseed if needed	Oversee or replant thin cool-season grasses stands
5	Weed wiper (if applicable)	Spot-treat tall broomsedge patches

Need Help Getting Started?

Contact your local Extension office for soil testing, fertilizer recommendations or help identifying the best time for mowing and herbicide application. Managing broomsedge is possible, but it starts with your soil and harvesting management.

Online Resources

UT Extension publication PB378: Forage and Field Crop Seeding Guide for Tennessee: tiny.utk.edu/SG



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