# Balancing Cool Season Forages and Weed Control

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Cool season annual forages are a popular choice for grazing during the winter and spring months in Alabama. Among these, annual ryegrass, clover species, and small grains like cereal rye and wheat are commonly used. These forages can quickly germinate and grow under ideal conditions, but so can weeds, which compete for resources and affect forage quality. Effective weed management is crucial for maintaining clean fields and producing high-quality forage, but cattle may be able to take advantage of hidden qualities of some weed species.

#### Strategies to Outcompete Weeds

Weeds are generally viewed as a negative component of crop production, and rightfully so. Before resorting to herbicides, several cultural practices can give forages an edge over weeds. Although much of the ideal planting window may have passed for cool season forages, timely planting is essential to ensure forage seed are in place or emerged before weeds begin to germinate. Using adequate seeding rates and appropriate mixes also helps increase ground cover and suppress weeds. For instance, annual ryegrass is typically planted at 15-30 pounds of pure live seed per acre, while wheat and cereal rye range from 90-120 pounds per acre. Once established, these improved species can quickly outcompete most encroaching weeds of smaller stature. Including legumes in the mix can also enhance the forage quality and provide additional ground cover, further reducing weed competition.

## Herbicide Use Considerations

When using herbicides, application timing and the growth stage of both weeds and desirable forages are critical. While producers are typically concerned about broadleaf weeds like thistle, plantain, or buttercup, any volunteer cool-season grasses are usually considered a 'desirable' species that cattle are encouraged to graze. It's important to keep in mind that herbicides like 2,4-D or dicamba are commonly used to control these broadleaf weeds, but they can also damage young grass crops if applied too early. For effective control of the unwanted broadleaves, forages such as annual ryegrass or wheat should have a minimum of three collared leaves before applying herbicides like 2,4-D.

Some herbicides are premixed with multiple active ingredients, offering both foliar and soil activity to control a broader range of weeds. Products like Weedmaster, GrazonNext HL, and Duracor can effectively target broadleaf weeds by absorbing through leaves and translocating through root uptake. However, these products come with application restrictions to prevent crop injury, especially in fields with clover mixes. A soil bioassay is advised if you suspect soil residual herbicides are present prior to legume (clover) establishment. It's crucial to consult herbicide labels before application to ensure crop safety.

#### **Deciding Between Grazing or Control**

If the aim is to utilize this "free" or volunteer mix of cool-season species, then by all means, let the cattle take advantage of these pastures. But, understanding the nutritional needs of your cattle is important. For cow/calf operations, forage swards should maintain at least 60% in-vitro dry matter digestibility (IVDMD) for optimal health and growth. One interesting fact about some of these 'weeds', like little barley and smooth brome, they may offer high forage quality during their vegetative stages, with IVDMD percentages in the high 70s, which may rival the improved annual ryegrass or tall fescue varieties. Surprisingly, many of the broadleaf species we typically view as weeds may also maintain high quality while growing vegetatively (Table 1).

Species	Vegetative Growth Stage		Reproductive Growth Stage	
	CP	IVDMD	СР	IVDMD
Weeds				
Carolina geranium	18.7	78	18.8	70
Henbit			20.1	78
Curly dock	29.9	73	19.1	54
Cheat (Bromus)	23.4	81	17.6	69
Little barley	23.6	82	17.6	78
Forage crops				
Ladino clover	27.2	81	22.1	85
Cereal rye	27.9	79	24.2	81
Tall fescue	22.1	78	16.5	73

Table 1. Data from Bosworth et al. 1986. "Forage Quality of Selected Cool-Season Weed Species"

Considering the potential forage value of these 'weeds' may create a conundrum between grazing and control, but the decision ultimately comes down to your personal farm goals. Afterall, we never know what the winter weather patterns may throw at us, if the freezing temperatures of December 2022 were any indication. If you desire to ultimately control these broadleaf weeds, there's a larger window of opportunity for herbicide use well into the fall/winter months on milder days of December and January. Delaying herbicide treatment and control of these broadleaves will allow both your volunteers (little barley, field brome, etc.) and the intentionally-planted grass varieties (annual ryegrass, wheat, etc.) to emerge and have greater tolerance against many of the auxin herbicides you may decide to use later.

### Challenges of Weed Seed Proliferation

It is important to remember that many of these volunteer, cool-season species are prolific seed producers, which can suppress the emergence of desirable warm season forages as we approach springtime. This can be problematic when trying to balance the benefits of using these weeds as forage versus controlling them to promote desirable forage growth.

Whether one chooses to graze or control the emerging vegetation, decisions will ultimately depend on individual production goals. Understanding the benefits and downsides of each option will help guide successful forage management.



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