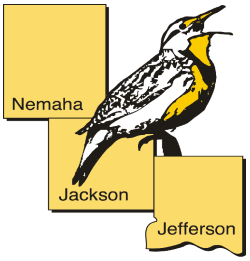

Kansas State University

It May Not Be What You Think It Is - Broomsedge Bluestem

Much of our cool season grass is really looking good. We've got moisture and perfect growing temperatures – and they've come earlier than in the past. Those stands need it based on some of the beating they've taken the past four or five years. Late freezes dinged them slightly. Prices have caused many to cut back or shy away completely from fertilizer applications. Armyworms beat some stands up too. Couple those, which weaken a stand in and of itself, with a couple of harvest time frames delayed by persistent wet weather and you've got a recipe for some struggling stands.

Because those 'challenges' have created 'open space' in stands, we've got invaders, the most noticeable a grass called broomsedge bluestem. Don't let bluestem in the name fool you – it's not anything like its distant relatives big or little bluestem! It tends to be unpalatable and takes up space in the stand where we could really use some good forages instead.

Right now, it's the orange colored grass sticking just above the brome that's nice and dark green. In a week or so, you won't see it at all. Don't think for a minute it's gone. On the contrary, its growing season has yet to begin in earnest. It survives very well in hot dry summers, particularly when brome isn't growing or has been slowed significantly by stressful conditions. You'll start to see it more in the fall and winter – giving some the illusion that native grass or another useable forage is available. It is not!

So, we know what it is - what do we do about it?

Broomsedge tends to infest fields with lower fertility or that have been grazed heavily. It has low requirements for P, aiding its survival in our low P soils (60% or more are low in P according to soil test results). Cattle also don't like it, which allows it to proliferate. It even produces allelopathic chemicals that inhibit other plants, including nitrogen fixing bacteria, making clover establishment a challenge.

Mowing doesn't seem to work. Burning in the late summer or fall can work – but mostly with bermudagrass. Its less effective on our native grass stands (particularly those where you want to keep some little bluestem). Its mostly ineffective in cool season stands (most research is in fescue), since September burns will damage the stand and encourage cool season weeds.

Herbicides like glyphosate work – but they are non-selective, meaning you sure don't want to get any on the desired grasses. You MAY have SOME success if you could use a wiper or roller – but they've been inconsistent, too.

That leaves us fertility. If we can get our fertility program right, and combine it with an appropriate haying time frame (knowing Mother Nature controls much of that) or a grazing plan (make sure you know your cow size and monitor their grazing patterns and stocking rates), we can actually encourage the competitiveness of the desired forage that can then suppress broomsedge. Even if other control methods are possible/successful, the broomsedge will return if cool season forages are left unfertilized. Work in both Missouri and Oklahoma suggests that a balanced fertility program (pH and N/P/K) can change the species composition back to a predominance of desirable species in as few as a two years. To make the stand more competitive, try P/K applications along with a little nitrogen in the later summer or fall if at all possible. This time frame helps to enhance tiller production in our cool season forages.

It won't be an overnight fix, but if your stand hasn't been completely taken over by broomsedge, try to alleviate some of the problem sooner than later with a soil test later this summer to determine what fertility enhancements may be needed.

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