

# Grazing Bites

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I've had two people ask lately about the yellow flowered plant that has suddenly invaded one of their pastures this spring. It is called buttercup and it's not something you want to see in the field, even if it is pretty.

And despite seemingly appearing out of nowhere, this winter annual probably didn't just abruptly appear. The "foundation" of its existence in such prevalence most likely has come from a built-up seed bank. If you like pretty, yellow flowers, then they will never let you down – but you don't want them! Don't build me up buttercup – that will age me.

Buttercup most often sneaks in from bought hay, poorly cleaned seed or from hay equipment. It may lay incognito for several years in the understory of forage slowly increasing the seed bank and waiting for an opportunity to fully show its true colors.

That opportunity usually starts with overgrazed fall pastures with at least some soil disturbance. This not only sets back desirable forage species that would normally compete with the weed, but also provides some small bare soil spots that enable the pesty weed to really take off from that built up seed bank.

Wet soils with at least some compaction and bare soil creates ideal conditions for buttercup. The whole situation is then exasperated with each passing growing season.

Buttercup is toxic to all species of livestock. Animals that consume buttercup may suffer from mouth blisters, diarrhea, colic or possibly in some cases death. Luckily, I suppose, most livestock will not consume buttercup because it is just unpalatable. It generally is avoided if there is anything else to graze. Most likely the animal is getting some type of negative biological feedback from the plant fairly quickly and stops consuming it before it takes in too much. The toxin is not a problem or concern in hay – but if present in hay that is being made, seeds from maturing plants may get moved to new locations.

Cattle don't like it and will only eat it if there is nothing else present. Even then, it is usually still minimally consumed. Horses hate the stuff and will totally avoid it. Sheep don't typically eat buttercup but are more likely to graze the plant than most animals when the plant is very immature. They tend to have mouth blistering when they consume much of the plant.

Undesirable species, like buttercup, are plants typically rejected by livestock. They quite often have undesirable side effects when eaten or have little to no food value. Desirable plants are readily consumed by livestock and generally are of good quality to consume. Intermediate species are only eaten by certain species of livestock for short periods of time when somewhat tolerable and then avoided. This quite often is the case with species that have anti-quality factors that tend to increase as the plant matures or with plants that have a very short desirable stage. Yellow bluestem or Broomsedge is a good example of this, it's actually decent quality when it first spikes and starts to grow, but quickly turns to very undesirable and avoided rubbish.



*Buttercup might look pretty to some people, but it's a terrible weed in pastures.*

So, when undesirable plants like buttercup are avoided and desirable species are grazed tighter than they should be, the undesirable species gets a continually stronger foothold for dominance in the pasture. I've seen this happen quite quickly in horse pastures. Like I said, horses will totally avoid it and have no issue picking around it and eating any desirable species into the dirt if allowed. A field where it was barely visible one year can turn to a field of solid yellow flowers in just a year or two.

What can we do about this pest? First of all, try not to bring it onto the farm in the first place. Check and maintain good fertility on pasture and hay fields to encourage good production and growth of desirable species. Be careful not to overgraze, especially in the fall and weaken the competition from desirable species.

We don't usually think about the pesky yellow flowered buttercup in the fall, but we should. Most buttercup plants develop from seed during the fall (somewhat dependent on if enough moisture is present). Overgrazing fields create opportunities for buttercup to grow. Maintaining cover is one of the best methods to help compete again with the emergence and growth of this weed.

Don't let it go to seed if at all possible! Mowing directly after a grazing event can help level the playing field just a little bit, setting the plant back to a more vegetative state. That only helps a little bit because the plant can set seed quite closely to the ground if forced to do so – but at least less seed is produced.

Longer rest periods prior to grazing again can help to create more competition from desirable species when it is still not too high in population. Once the threshold has been reached – and you'll know when that has happened – the infestation will have to be controlled by chemical means.

Ideally, apply herbicides in the early spring before flowers start to show. If present in the fall or early spring, herbicides labeled for use on pastures can help control it and you do have choices. Fall applications can be very advantageous especially with proper grazing management and good fertility programs.

Unfortunately, the unintended consequences of herbicide treatments to control buttercup can also be pretty detrimental to desirable forbs and legumes in the pasture sward. Some of those desirable species may return from the seedbank in the soil, but you may also need to reseed them once you have control of your pasture back. Contact your local extension office for herbicide choices and follow label instructions and restrictions.

I'm thankful that the new growing season is in full swing now. I certainly wish everyone a very good and productive grazing season. We never know what lies ahead so it is always good to try to stand sound and stay prepared. The simplest way to do this is never graze anything more than seven days in a row, a shorter time frame is a lot better. Do not overgraze – most plants respond best and produce more if they are not grazed shorter than three or four inches. Ideally, allow at least thirty days of rest prior to grazing again – no, that is generally not too long. Lastly, though it is hard to do and quite often can't be avoided, try to keep as much of the forage as possible in vegetative form.

Remember, it's not about maximizing a grazing event, but maximizing a grazing season! Keep on grazing!

### **Reminders & Opportunities**

**International Grassland Congress (IGC)** - The American Forage and Grassland Council is hosting the IGC. - May 14 to 19, 2023 - Covington, KY. The theme of the conference is "Grassland for Soil, Animal, and Human Health." For additional information or to register for the IGC, visit <https://internationalgrasslands.org/2023-igc/> or follow-on social media at @IGC2023.

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