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Head games

This spring we have all these seedheads showing up on our bermudagrass fields. While we have had some before, I do not ever remembering them being this bad. Do you know why they would be so much worse this year? Other than mowing, what should we be doing to make them go away?

North Carolina

This is a great question. I have also noticed that seedheads seem to be a little worse this year than the last couple. Seedheads are one way a bermudagrass plant reproduces. The seedhead, often called an inflorescence, is a grass's flower. It may contain viable seed that could mature. germinate under the proper conditions, and reproduce a new plant. Some turfgrass plant cultivars are sterile hybrids. These plants may still produce a seedhead, but not contain a fertile seed. For example Tifway is a hybrid but it may still produce some seedheads. Many of these sterile hybrids were selected by plant breeders because they produced fewer seedheads compared to other bermudagrass.

The presence of seedheads is generally considered bad. The seedhead stalk is thinner than a leaf blade so it may give the turf an appearance of having poor density. Also, the seedhead stalk and inflorescence on the end can give turf an off-color. Although the seeds themselves are generally purple, the thin stalk normally gives the turf a lighter appearance. This is worsened when feathery-looking anthers (pollenproducing organ) are present in seedhead. Be sure to inspect the seedhead closely. Some people confuse crabgrass seedheads for bermudagrass seedheads.

Those bermudagrasses that can cross with another bermudagrass plant and produce viable seed are normally called "common types" and often called "seeded types." Many of the common types are prolific seedhead producers. But just because a bermudagrass is a common type does not mean it will produce an abundance of viable seed. A good example is Celebration bermudagrass. It is a common type, but has characteristics more similar to a hybrid. So, it is a common type but not a cultivar that produces adequate seed for seeding.

So, seedheads sound bad, but to be honest they can be desirable in some respects. If someone wants to purchase a new cultivar that will be seeded, it is important since seed prices are typically related to seed vield (production). The more seed a plant produces, the less it will cost the customer. So many of our 'common types' that produce a lot of seed are often the cheaper to purchase and vice versa. A common type such as Princess 77 produces very few seedheads, so seed yield is very low. Consequently, the seed prices of this grass are generally among the highest of the seeded cultivars. So, the cost of poor seedhead production provides a more consistent looking turfgrass (fewer seedheads), but as a consequence the cost is passed onto the consumer.

But the genetics alone do not determine seedhead formation. Management practices and stress can influence seedhead initiation. The stress may be from a number of causes including low nitrogen fertility, drought, soil compaction, temperature stress, saturated soils, and chemical-induced stress. The stress will cause the plant to try and reproduce as a survival mechanism. The most common stress I see that causes seedheads is low nitrogen. Nitrogen generally maintains plants in a more vegetative growth stage. A drop in fertility may shift plants into a reproductive stage.

Plants often respond to day length differences with production of an inflorescence. While bermudagrass is considered day-length neutral, I swear that it will put out more seedheads when the day length (actually night length) reaches a certain critical duration in the spring and then again when the day length is about the same in the fall. Some have reported there is an interaction of day length and temperature. This may explain why some years the bermudagrass produces so many more seedheads than in other years.

Control of seedheads is usually accomplished by more frequent mowing. It should be noted that some grasses may produce seedheads that grow as much laterally as upright and therefore are not easily removed by mowing. I have seen Celebration do that on occasion, but other cultivars may also have this seedhead growth habit. If that is the case, then a very shallow verticut may be enough to remove the prostrate-growing seed heads. Some people will use plant growth regulators (eg, mefluidide and trinexapacethyl) to partially suppress seedheads. I feel that the seedheads generally do not last long enough and are obtrusive enough to warrant treating chemically, but some field managers may want to try one of these products if they feel the seedhead are a significant issue. These products have mixed results based on cultivar, application timing, and rate. So, the appearance of seedheads is a natural occurrence, particularly in the late spring and early fall. It is typically more prevalent for common bermudagrasses. The fact that it is worse some years than others may be an interaction of day length and temperature. But do not let it ruin the game, just sharpen the mower blades and mow a little more regularly. Within a few weeks there will be fewer seedheads to mow and you are sure to have a new issue to ponder.