

The Effects of Summer Heat on Cool-Season Grasses

Hi, I'm Lance Britton, owner and president at Sharp Lawn Care. I'm glad you're here, and while I have your attention, I want to talk about a threat to your lawn that you might not be aware of: summer heat.

Summer's a great time for Americans. It brings to mind nice weather, long days, road trips, family vacations, and barbecues with friends and family. For kids, it's a time of freedom and exploration, a time to make memories. Chances are, some of your best childhood memories are of adventures you and your best friend had during summer vacation. You might even recall some cherished summer romances that seemed as sweet as summer itself.

But the grass on your lawn doesn't enjoy summer as much as you do.

Now, you might be thinking, "After the long, cold winter here, isn't summer just what the lawn needs? Isn't the warm weather good for it?"

Well, yes and no.

Yes, your grass grows well in warm temperatures, but it doesn't do well in hot temperatures, and the Midwestern summer is a hot, sunny one. Fall and spring are great times for your grass to grow, but summer temperatures can actually kill it unless you're taking proper measures to care for your lawn or if you're having pros like Sharp Lawn Care take care of those worries for you.

This is because the predominant lawn grasses in this region are cool-season ones. In the United States, there are three basic growth regions: cool-season, transition, and warm-season. There actually are more than that, but I'm trying to keep it simple here!

Now, while it is possible to plant cool-season turf grasses in the warm-season zone and vice versa, turf grasses generally do best in temperatures that match their growth patterns.

Our region sits squarely in the cool-season zone, so naturally, we mostly plant cool-season grasses such as Kentucky bluegrass, fine fescue, tall fescue, and types of ryegrass.

For cool-season grasses, the temperatures for optimum growth are from 60 to 75 degrees Fahrenheit. More specifically, roots grow best when soil temperatures are between 50 and 65, and the shoots do best between 60 and 75. By contrast, warm-season grasses like Bermuda grass grow best between 80 and 95 degrees. Because they can tolerate heat, drought, and salt, they are popular in regions like the South and Southwest.

But let's get back to our region! I could go on and on about different temperature zones and grass types, but you want to know about *your* lawn!

Since your cool-season grasses like those cooler temperatures, the best times for growth are spring and fall. In fact, we usually recommend seeding in the fall so that you get some good growth ahead of winter that sets the stage for strong renewed growth the following spring. For similar reasons, we like to perform services such as aeration and fertilization at those times as well.

Your cool-season grass also needs plenty of rain, which we usually get in the spring and fall but not always during the summer, or sometimes we get too much at once.

So what happens during summer? Two things, both bad for your cool-season grass: heat and drought.

Once surface temperatures rise above 77 and the soil warms accordingly, your grass roots stop growing, and above 90, the shoots do the same. Most likely, the grass will take on a brownish hue, making you wonder whether it has died. It hasn't-- at least not yet-- but it has gone dormant and the grass, especially new grass planted that spring, is susceptible to damage from heat and drought. That's another reason we recommend reseeding in the fall and not the spring.

With proper irrigation and other management techniques, your lawn will recover. Without them, though, your grass can die. It's not just the visible shoots you have to worry about; it's the roots as well, which can die once the soil temperature reaches 85 degrees. Consider that the average daily highs for July and August in this region are in the mid-80s, with many days hotter than that.

And that's just the beginning of the trouble. Once the grass dies, you get bare patches. Guess what likes those bare patches? Weeds and pests. Weeds take over bare patches and spread to healthy areas. Pests come in two varieties: insects that like to eat your grass and insects that like to bite and sting you.

Quite suddenly, your lawn can become a real mess, and a very expensive one to clean up!

So what can you do about this?

To begin with, you can monitor the soil temperature. The best way to do this is to use a soil thermometer, but if you don't have one or can't get one, you can research some basic information regarding soil temperatures vs. street and surface temperatures. For example, in August, if the street temperature is 100 degrees, the soil temperature will be about 75 degrees.

To be honest, though, if you don't have a soil thermometer, it's better to have a professional service like Sharp Lawn Care evaluate soil temperatures and make recommendations for care.

Beyond monitoring temperatures, there are 3 basic parts to protecting your cool-weather turf during the summer: irrigation, mowing, and fertilization. Let's look at each of those separately.

Your instinct might say to water lightly and frequently. Keep it cool but don't drown it, right?

Actually, the opposite is true. When you water lightly and frequently during times of heat stress, the moist zone is shallow and so are the roots. Then they have to put in twice the work to get the water they need, further stressing them. Once the roots cannot keep up, the grass dies.

Instead, you should water deeply and infrequently. This lets the roots grow deeper. It also helps the grass conserve sugars it needs.

Water the grass early in the morning. The ideal time is before sunrise. Temperatures are coolest then, so less water evaporates and more gets into the soil. Watering in the late afternoon or early evening in summer can actually cause harm because it locks heat down into the soil and creates more stress on the roots.

Like people, plants have a harder time cooling off the higher the heat index is, so water when humidity is low if you can, and avoid extra watering when humidity is high. It doesn't help.

Another instance calling for irrigation is if there are signs of drought damage. Cool-season grasses are actually really good at communicating this to us if you know what to look for. Common signs are a pale blue-green color to the grass, footprints staying around, and hard soil surfaces.

Extra irrigation can be necessary when conditions are very windy or temperatures will be above 95 degrees. In these situations, you can lightly sprinkle the lawn multiple times between 11 A.M. and 2 P.M. This cools the grass and keeps the surface from overheating. Only do this under these conditions or you will run into the problems associated with frequent light watering.

An automated, programmable sprinkler system really makes all aspects of watering a lot easier, and we're happy to install one or recommend one to you.

That's irrigation in a not-so-small nutshell. Now what about mowing and fertilizing? They're a little simpler to cover.

For cool-season grasses, we recommend mowing once a week and keeping grass length 4 to 4 ½ inches during the summer. Undercutting or getting behind schedule creates something we call "scalping," which reduces the health of the turf and invites weed growth. Overcutting creates a similar effect. In addition, it provides less protection for the soil from the heat.

Keeping grass the right length helps the soil stay cool, keeps the turf healthy, and deters weeds and insect pests.

Regarding fertilization, Sharp Lawn Care recommends treatments in spring, summer, and fall. The summer treatment helps continue spring growth and supplies essential nutrients for the grass during the time of year it needs help the most.

There are a couple of other things you can do. One, you can use kelp-based amendments to improve or rebuild your soil. These organic materials also increase root growth, and they improve color, density, and hardiness.

You can also choose to plant tall fescue. Of all cool-season grasses, it is the most tolerant to heat and drought.

I really appreciate that you've stayed with me this far. By now, I hope you have a good understanding of why summer is so hard on your cool-season turf and what you can do to protect and repair it. With proper knowledge and care, you can keep your lawn healthy, and a healthy lawn with thick, strong grass is the best defense against weeds, pests, and disease.

If conditions worsen, though, or if you just don't want to take all of this on by yourself-- summer is not, after all, the most pleasant time to be out mowing and doing other yardwork, and besides your time is valuable-- Sharp Lawn Care is ready to help. We're a leader in the field and we have years of training and expertise. All you have to do to get started is contact us for a free estimate, and we'll take care of all your lawn hassles and worries.

Thanks for visiting, and we hope to hear from you soon!

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SOURCES USED:

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