

Repair Water Damaged Lawns

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URBANA – Any homeowner who has suffered from flood waters in the yard will find getting the lawn back can take some time. Several factors impact the amount of damage and the recovery, including what kind of grass, what season, and how long the area stayed flooded.

Temperature and tolerance

Water temperature controls how long grasses can stay submerged and survive, according to Bruce Branham, University of Illinois professor and faculty Extension specialist.

"Spring flooding with cold water often results in minimal damage. Summer flooding with warm water can cause rapid turf death if submerged more than a day or two. Turf grasses vary significantly in their tolerance to flooding. Fine fescues have poor submersion tolerance and can be killed in as little as a day of submersion under warm water. On the other hand, creeping bentgrass has excellent submersion tolerance and can tolerate several days of flooding. Kentucky bluegrass has medium submersion tolerance while perennial ryegrass has fair tolerance to submersion injury." (Beard, 1973)

Tips and timing

"If the water came and left the lawn covered with silt, the silt should be removed as soon as possible with water from a hose," says Richard Hentschel, Illinois Extension horticulture educator. "This will allow the grass blades to start producing energy to aid in recovery."

The floodwater filled all the available pore spaces in the soil displacing any soil oxygen. All plants need that soil oxygen to actively absorb nutrition from the soil. In areas where water has stood for many days, the grass plants are not likely to have survived and more recovery or repair will be needed.

Seeding at the proper time allows grass seed to germinate, grow, and be mowed several times before the growing season ends. Seeding can be done any time of year, but the best chance of success occurs when seed is planted in the late summer or early fall, according to Branham.

Suggested seeding times

Northern Illinois: Spring seeding should occur in April; fall seeding should occur Aug. 15 to Sept. 7.

Central Illinois: Spring seeding should occur from March 15 to April 15; fall seeding should occur Aug. 15 to Sept. 15.

Southern Illinois: Spring seeding should occur in March; fall seeding should occur in September.

Adapted from Master Gardener Manual University of Illinois

Spreaders, seeders, and species

Seeding options include a traditional broadcast seeding using a drop or centrifugal spreader or using a rental slit seeder that cuts through the dead grass and thatch layer and places the seed directly in the soil at the proper depth.

For areas up to 200 square feet, you can get good seed-soil contact by buying a small amount of topsoil and lightly covering the seed that was broadcast over the area. This approach is practical for relatively small areas, but for larger areas, a slit seeder will give you the best results. If using a slit seeder, be sure to go in two directions to ensure a better stand of grass in the coming weeks.

Grass seed is sold a couple of ways, says Hentschel. Blends combine several grasses of the same species, such as all cultivars of Kentucky bluegrass, or as a mix combining different species, such as Kentucky bluegrass and perennial ryegrasses.

"The choice depends on the quality of lawn you want to have or maintain and the sunshade pattern," says Hentschel. "In older lawn settings, a mixture may be preferred since, over time, a single species blend naturally becomes a mixed lawn."

Perennial ryegrasses can germinate in as little as three to five days while bluegrasses can take 10 to 14 days. If the lawn has been growing in shade, consider fine fescues being much more shade tolerant than bluegrasses as part of the mix.

"If only a portion of the lawn has been damaged, you should identify what species are present and match the seed you purchase to the species in the lawn," Hentschel says.

Branham cautions, buying inexpensive seed that often contains annual ryegrass.

"Annual ryegrass germinates very rapidly, usually in three to four days, but grows upright quickly, is a pale green in color, and will not blend in with other grasses in the lawn," says Branham.

Weeds and their seeds

As the water recedes, many kinds of weeds can and will show up from the seeds left behind from flooding. Some will germinate but not tolerate mowing and naturally die as the lawn is mowed; however, there will be the opportunity for lots of weed seed germination the following spring – over 90 percent of weeds are spring germinators – and some of them will have the same fate and not tolerate of being mowed.

Annual weeds that germinate each spring are killed in the fall by frost, but to prevent future populations, do not let them self-seed. If perennial weeds establish themselves and survive being mowed, then weed control treatments will be needed to remove them from the lawn.

"Whatever direction taken, focus on establishing the lawn; weeds can be managed later," Hentschel says. "Satisfactory recovery of the home lawn can take two years."

SOURCE: Richard Hentschel, University of Illinois Extension Horticulture Educator

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