CARING FOR FLOODED LAWNS

Lawns usually survive being underwater for up to four days. But you may have to replace the lawn if floodwaters caused erosion or brought chemicals, contaminants or more than an inch of mud or silt.

Your major concern this growing season should be stabilizing the soil to prevent further sediment movement. Planting a temporary lawn is usually the best way to do this. Next year you can establish permanent grasses. While floodwater may cause new weed problems, keep in mind that some weed cover is better than no cover. Weeds help dry out soil.

When the lawn is under water. Damage to your lawn will depend on many factors including duration of submergence, water depth, temperature, grass species, light intensity and condition of the grass prior to flooding. A few general rules:

- Grasses survive much longer at water temperatures below 60 degrees F than at higher temperatures. But most grasses survive submergence at normal summer temperatures.
- Tolerance to submergence varies among grasses in the Midwest. Bentgrass has excellent tolerance, while Kentucky bluegrass, tall fescue and rough bluegrass have intermediate tolerance. Fineleaf fescue and perennial ryegrass generally have poor tolerance.
- As soon as possible after the water recedes, aerate the soil to a depth of at least three inches and lightly fertilize flooded areas. You can rent a mechanical aerator from your lawn and garden store or use a pitchfork. Areas submerged longer than four to six days may not survive and will require complete re-establishment (see steps in section on heavy silt deposits below).

Dealing with an inch of silt. Lawns submerged for less than four days and covered with an inch of silt or less have a good chance of recovery. To assist recovery:

- Wash as much silt as possible from the lawn using a garden hose.
- Use a steel tooth garden rake, a mechanical aerator or spiking equipment to break up the silt crust. Keep it broken throughout the growing season or until grass has become well established.
- Collect a representative soil sample and have it tested for nitrogen, lime, phosphorous and potassium requirements.
- If lawn recovery is spotty or generally thin, mechanically aerate the lawn four to six times in late summer or early spring. Then overseed with a desirable permanent seed mixture.

Handling erosion. If your lawn's topsoil has been greatly eroded, replace it to a depth of 4 to 6 inches late in the growing season. If topsoil is unavailable or too expensive, you can improve existing soil by adding organic matter such as peat, rotted sawdust, manure or other materials. Apply these materials at a rate of 3 cubic yards per 1,000 square feet of lawn are and work them into the top 4 inches of subsoil. A temporary lawn, established immediately and later worked into the subsoil, can also be a source of organic matter.

Dealing with heavy silt deposits. Lawns covered with more than an inch of silt may be heavily damaged, with only a slight chance of recovery. The degree of recovery will vary with grass species and depth of silt. Re-establish the lawn as follows:

- If silt accumulation exceeds 3 inches, consider having silt removed professionally. However, it may be more practical to rototill the area, using the silt layer as a new topsoil and having it tested for nutrients.
- If silt is less than 3 inches, or has been removed to this depth, till the area, making sure the silt is mixed thoroughly and uniformly through the top 4 inches of the original soil.

- Take a soil sample of the new soil mixture after silt has been mixed in. Have the mixture tested to determine lime, phosphate and potash requirements.
- Retil after applying lime and fertilizer according to soil test recommendations.
- Reseed the area as you would to establish a new lawn. Seedings, especially of cool season grasses, should be made in early spring or late summer.

Establishing temporary lawns.

- Where lawns must be completely re-established and immediate cover is needed, scratch the soil surface with a hand rake or similar tillage tool.
- Seed annual ryegrass at a rate of 4 to 6 pounds per 1,000 square feet.
- Till the ryegrass under at the appropriate time for re-establishment. Seed permanent grasses.

Oil and chemical spills. Soils may have been saturated with oil, herbicides or other toxic material. Petroleum will eventually decompose, but nothing can be done in the meantime to cancel its harmful effects. On large areas, bury oil deposits by deep plowing. On small areas, remove petroleum-soaked soil to a depth of 6 inches, and replace with new topsoil. Have a soil test taken; lime can often be added as a neutralizer. Reseed at the appropriate time.

Source: Clay County Courier, University of Minnesota Extension Service