Fall is the Time for Rejuvenating and Overseeding

Rejuvenate or Overseed?

Now that the heat of summer seems to be breaking any day now, it's time to start thinking about what to do to our lawns. Some lawns in some areas of the state, may have made it through the summer alright, and may only need to be fertilized and irrigated. See the table below for some more details. Sometime around the first week of September, apply about 1lb of N/1000sqft to you lawns. The N source should have some slow release N, from coated or controlled release products, at least 40% or more. After that, control weeds if necessary, and then apply a late fall 'winterizer' application in November.

Steps for Overseeding

Other lawns may have received more damage this summer and they are going to require a little more work. Those lawns may require some re-seeding. See last week's listserv post for options about types and varieties of seeds. Good sunlight penetration and seed-soil contact are essential to achieve maximum reseeding success. There can be three options for creating good seed to soil contact: Use a verticutter/slit seeder, core areate, or do both. Start this process in September. Start when the heat and drought period begins to subside.

- Mow lawn Short.
  Usually, I recommend mowing the lawn short to ensure good sunlight penetration. Don't scalp the soil, but mow it short and remove debris.
- Verticut/power-rake.
  Then, rent and use in one direction a slit seeder, verticutter, or power rake. This machine will create groves in the soil surface about ¼ of an inch deep and remove some of the thatch layer.
- Rake and remove the debris.
- Broadcast your seed at the correct rate.
- Verticut/power-rake again.
  Then go across the lawn with the verticutter again, this time at a 90 degree angle to the last time. Try do distribute the debris evenly or rake and remove any large piles.
- Fertilize the lawn with a starter fertilizer and irrigate.
  The initial irrigation should be deep. Slowly soak/saturate the entire soil profile, >6 inches deep. After that you want to irrigate frequently enough that the soil surface stays damp, not soaking wet, but damp. This may require one or more light (3-10 min) applications per day, depending on weather and soil type. Some areas may only require applications every other day or longer, just monitor the surface and water accordingly.
- Decrease irrigation frequency and increase application amount as turf matures.
- Mow when grass reaches prescribed height. 2.5-3 inches for Kentucky bluegrass 3-3.5 inches for tall fescue.
- See below about weed control notes and options.
- Apply late fall fertilizer in November.

Core Aerification

As mentioned above, another option to the verticutter is to use a core aerifier. This method works very well also. Verticutting will increase seed-to soil-contact more than aerifying alone. Verticutting and aerifying together will maximize your seed-to-soil contact and maximize the germination and coverage rate. With that being said, even lawns that are not being overseeded, are compacted and will benefit from an annual or biannual aerification.

Aerifying when not Overseeding

- If your lawn was the type described above and only needs to be rejuvenated, it still could benefit from aerification. In that case, I would pull cores from your lawn with an aerifier sometime in mid Sept when the temperatures are cooling off to reduce chances of serious injury to the turf, and hopefully, the rains have picked up, so that the soil will be soft enough to allow the machine to easily penetrate.

Aerifying as part of an Overseeding program

- Aerfiying alone.

  If your need to reseed you lawn, you can use an aerifier alone or you can combine the aerification and verticutting all together for maximum renovation. Irrigate or watch for some rain, and aerify shortly after. Spread your seed and follow fertilization and irrigation notes above.
- Combining aerification and verticutting.

  Aerify your lawn. Allow the cores to dry for a day, then verticut your lawn in one direction and remove debris. This will prepare your yard for overseeding and chop of the aerification plugs as well. Then continue as described above, seeding, verticutting, fertilizing, and irrigating.

Remember if you are verticutting, power-raking, or aerifying to flag or mark all your irrigation heads to prevent damage.

Seed

Last week I posted some recommended varieties of seed and described how they become recommended. This week I also want to stress to buy good, clean, quality seed. Here is where the old adage, 'You get what you pay for' holds true. Clean seed that is free from weed and other crop seeds and quality seed that is of good recommended varieties and has good germination rates will cost more and be worth more. Buy seed from reputable garden centers and landscape supply providers, and always inspect the tag.

Blends and *mixes* are preferred over mono-culture lawns of one variety. A *blend* is a bag of grass seed of the same genus and species, but of different varieties. The benefits are a smooth uniform appearance but with different varieties that may have slightly different traits, like resistance to one disease versus another. An example of this would be a 3-way blend of tall fescues or a 5-way blend of Kentucky bluegrasses.

A *mix* is grass seed of different species together in one bag. This can be good or bad. If the species and varieties are carefully chosen, the final result will be a uniform lawn with widely varying strengths in drought, disease, and insect resistance. Many quality tall fescue and Kentucky bluegrass mixes are examples of this. Many times a good tall fescue/bluegrass mix

will contain 3 or more tall fescues and 2 or more Kentucky bluegrasses. Often times these *mixtures* are combined at rates of 80-90% tall fescue and 20-10% Kentucky bluegrass by volume. Because the tall fescue seed is so large compared to bluegrass seed these mixes usually end up creating an application rate of equal number of seeds per square foot of each, tall fescue and Kentucky bluegrass.

Another mixture commonly sold as 'Sun and Shade Mix' can have good or bad traits, depending upon your desires and your point of view. Frequently, these mixes will contain several species of grass: tall fescue, perennial rye, Kentucky bluegrass, creeping red fescue, and possibly annual ryegrass. The idea is that if you spread this out, something will hopefully grow. The downfall is that there are so many different species in the bag that the appearance of the lawn will not be uniform. Hopefully, something will grow, and it will be green. For some, that is enough; something green in my yard; not dirt. But usually these mixes will result in a patchwork yard of different shades of green and different leaf blade thicknesses. For many, this patchwork appearance will not be acceptable

Nurse grasses or Cover Crops

In the past, it was common to recommend that lawns were to be seeded with a 'nurse grass' or 'cover crop' to help with the establishment of your desired turfgrass species. One common recommendation was to use annual ryegrass. Annual rye germinates quickly, grows very rapidly, and dies after one year of growth. The problem is that the annual rye germinates and grows so fast that it out-competes your desired turfgrasses, and you end up with a thin, less-dense lawn. If you are in a situation where you are concerned with soil erosion, use a seed mat or erosion blanket. With that being said, I don't recommend using straw as a mulch either, since it needs to be relatively thick to be an effective mulch, it blocks sunlight and can reduce germination. But more importantly, straw mulch often contains many weed seeds that will contaminate your nice new lawn.

Seed Germination

Just for your reference, under 'ideal' moisture, sunlight, and temperature conditions tall fescue seed germinates in about 5-10 days, Kentucky bluegrass germinates in about 8-14 days. Again, these are under 'ideal' conditions, your results may vary.

Weed Control

If you overseeded and you have broadleaf weeds, most labeled products require that you mow your lawn at least 2 times before you apply the product to your lawn. There are 2 products that can be used on newly seeded lawns. The only problem is that they are usually considered professional products and not easily found at 'Big-Box Stores' and some garden centers. If you have a big weed problem, you can wait until you have mowed your lawn twice, call a lawn-care professional, or seek out these products. *Remember to Always Read and Follow Label Directions*. As I remind lawn care professionals during pesticide applicator training classes, I'll remind you; the product label is a contract between you, the manufacturer, and the EPA, that you will use and apply the product at the correct rate to the correct plants and pests. If you buy a farm chemical and apply it to your lawn, you are actually violating that contract and the law. But that's another topic for another email. The two products that can be used on

newly seeded lawns are Drive 75DF® (Quinclorac) and Quicksilver® (Carfentrazone). Research has shown these products to be safe and effective on tall fescue seedlings as soon as seven days after seedling emergence. Drive 75DF® is very effective against many grassy weeds and some broadleaf weeds. Quicksilver® is generally effective against many broadleaf weeds. Mixed together, the two can control a very broad-spectrum of weeds. But again, read and follow the label.

Late Fall Fertilization

Lastly, whether you overseeded or not, in November you also want to apply a 'winterizer' fertilizer at about 1-1.5lb N/1000sqft, of which most of it is quick release (non-slow release) N. This late fall fertilizer application will prolong your fall winter color and store carbohydrates in roots that, in turn, will enhance and/or quicken the spring green up without causing excessive spring growth.

Cool Season Fall Lawn Schedule; Tall fescue, Kentucky bluegrass, perennial ryegrass

Month	Schedule if Lawn Requires Overseeding	Schedule if not Overseeding
September	• Aerify, Verticut, Seed. • Apply Starter Fertilizer. • Irrigate Frequently.	• Aerate, if needed. • Power-rake/Verticut to remove thatch if needed. (If removing thatch, you may want to overseed after power-raking.) Fertilize with 1lb N/1000sqft. • Around 50% or more should be slow release. • Water in fertilizer or apply before light rain.
October	• Cut back irrigation as grass matures. • Mow when grass reaches prescribed height. • Treat weed if lawn has been mowed 2-3 times.	• Late Sept. or Early October, treat broadleaf weeds
November	• Apply 1-1.5lb N/1000sqft. Don't use slow release N sources. Irrigate after application or apply before light rain.	• Apply 1-1.5lb N/1000sqft. Don't use slow release N sources. Irrigate after application or apply before light rain.

Total Renovation

It is getting a little late to be recommending total renovation, but for those of you that have a big weedy patch and want to start fresh now or next year. Here's some recommendations.

- Kill existing vegetation.

  For most weeds and grasses, apply Round-up® or some other non-selective herbicide to the yard 1-2 times, about 2-3 weeks apart, according to label directions. Before and during this time, the lawn area should be watered enough to prevent drought and dormancy. The weeds and grasses need to be healthy before they can be killed with an herbicide. Water occasionally between applications so that any 'escapes' will be healthy enough to receive a second dose of herbicide and die.

- If the lawn is at the desired grade and the soil profile is of desired quality then verticut and seed.

  After lawn area is dead, mow it short, and verticut and remove the debris. Add in aerification if needed or desired. Seed, fertilize, and irrigate as above.

- If the soil is poor, clay or sandy, modify the soil profile.

  If you are going through all the work to kill your whole lawn, now would be a good time to improve the soil. The best thing to do to the heavy clay soils that most of us have in KS and MO is add organic matter. Even if you are located in some areas of the state where the soils are sandy, addition of organic matter will greatly improve your soil. Locate some clean and 'properly-composted' compost that is free from large chunks and sticks and have reached the proper temperature to kill weed seeds, insects and pathogens. Apply about 3 inches of it to the soil surface and till to a depth of 6 inches. Grade, smooth, and seed. Fertilize and irrigate as described above.