# **NEW & ESTABLISHED LAWN CARE GUIDE**

East Pierre Landscape and Garden Center

## **NEW LAWN CARE SPECIFICS**

There are 3 ways to start a new lawn; sodding, hydroseeding, and by hand seeding. Each has it's strengths and weaknesses.

### Sod:

Sod lawns are the quickest and least problematic way to install a new lawn. Also if there is a slope to the lawn of more than a couple of degrees, often sod is the only option. It is also the most expensive. Sod comes in rolls with growing grass, soil, and roots. But even with growing grass and soil, post-installation care is important. Do not wait for the next day to start watering. Immediately after installation, begin irrigating it deeply, six inches down into the ground until the sod is soggy to walk on. If water runs out from under the sod it is saturated.

Proper watering is essential to establishment (rooting) of your new sod for it's first 10 days. It's nearly impossible to over water new sod! Keep off the new sod except to move hoses and sprinklers, avoid all other foot traffic until after the first mowing. As a general rule, do not measure how much water the new lawn is getting, instead keep the sod and soil moist all throughout the day. Depending on daytime temperatures, multiple sprinklings during the day (morning and early afternoon) are required until sod begins to root. Do not water at night or in the late afternoon; give the sod time to dry off before nightfall to reduce the chance of diseases. Check if enough water is getting to sod next to hotter areas such as concrete walks, driveways, structures, and areas that are in the sun all day long where temperatures can be higher.

After 10 days reduce frequency of waterings gradually while increasing minutes per watering. Deeper, less frequent soakings will help roots grow down deeper and establish more quickly into the soil. Apply 1" of water per week; this can be measured by putting a pie tin out to catch sprinkler water. By this time the sod should have begun to root into the existing soil. Gently pull or tug on the turf to check the rooting progress. First mow will be 2-3 weeks after installation. Try cutting back on the frequency of irrigations just before the first mow to firm up the soil. Mow first, then water if irrigating the same day as mowing. Never mow off more than one-third of the grass blade and make sure your mower's blade is sharp.

After 3 weeks mow as needed, the lawn should be rooted in and take normal wear and tear. Fertilize your new sod lawn at 6 weeks to continue encouraging rooting and establishment. Use a slow-release, non-specialized lawn fertilizer (i.e., not weed & feed or weed & grub control, etc.) with relatively low nitrogen.

Aerate after 6 months if possible; wait for 1 year after planting until dethatching (see last page).

#### Hand Seed:

Establishing a new lawn through hand seeding is the least costly option but also requires the most work and in general can have the least success. Grass seeds are good on areas that are flat or only with the most gentle of slopes. It is better to try to start a new lawn from grass seed in the fall when the air is still warm and the ground is much warmer than in the spring. Starting in the spring brings the challenge of annual weeds. Pre-emergent weed preventer cannot be used as this product will prevent all seeds, both weeds and grass, from germinating.

Grass seeds germinate best by following a fairly regimented set of steps. Prior to leveling the planting area, mix a general slow-release nitrogen fertilizer (1<sup>st</sup> of the N:P:K numbers) into the top 4-6" of soil, then level the area. After leveling, pull a garden rake across the area making small valleys for the seeds. General recommendations

are 2-3 lbs of seed per 1,000 ft sq area. Spread the seeds so they are evenly distributed. One technique to achieve evenly distributed seeds is to divide the total quantity of seeds into halves and using a drop spreader distribute the  $1^{st}$  half in one direction and the  $2^{nd}$  half at right angles to the  $1^{st}$ . Then cover the seeds with a thin layer of top soil no more than 1/4" thick, better if it's only 1/8" thick. After the thin layer of topsoil, straw or some other loose organic material can be put down that will help with moisture retention and give some protection from birds and other animals that will look to eat the seeds. There are commercial mats and seeding mulch with a tack material available that can be used instead of the straw.

Irrigation must be very controlled in the beginning until the seeds germinate. This is where most hand seeded failures happen. If the top layer of soil dries out the seeds may not germinate. Water to keep the surface of the lawn moist. If conditions are windy and dry it may take 4 or more waterings per day. It's easy to give too hard of a spray that washes out the seeds. Rainstorms can also easily wash out areas. Most seeds will germinate in a 7-10 day window. Prevent, or at least minimize foot traffic on the lawn until it is tall enough to mow.

It may take up to 8 weeks before the lawn is established enough for it's first mowing. The grass leaves should get to at least 3  $\frac{1}{2}$ " tall; much taller than that will make the mowing much tougher as the leaves tend to form clumps which may get torn out instead of being cut. A sharp blade on the mower is a necessity; only cut the top  $1/3^{rd}$  of the leaves on any one mowing.

If no fertilizer was mixed into the top several inches of soil prior to putting down the seeds, a high nitrogen fertilizer can be applied after 4-6 weeks. If fertilizer was added to the soil prior to planting, follow the fertilizer bag instructions for a repeat application. If starting the lawn in the fall, do not apply broadleaf weed control chemicals to the lawn until spring. If starting the lawn in the spring do not apply weed control chemicals for 3 months.

Aerating and dethatching will not need to be done for at least a year, probably longer (see last page).

#### Hydroseed:

Hydroseeding consists of a heavy spray mix of grass seeds, a mulch component of wood dust, paper, or other organic component, fertilizer, and a stabilizing emulsion to help keep the mix in place. When working with large areas this is the most cost effective choice and takes the least amount of time and can be applied to slight slopes of several degrees. It also requires specialized tanks with agitators, pumps, and sprayers so hydroseed projects are usually hired out.

Pre- and post-planting care of a hydroseeded lawn is similar to a hand seeded one. The differences between hydroseeded and grass seed lawns are: 1) a hydroseeded lawn should not have fertilizer added to the soil prior to planting, 2) a hydroseeded lawn will not need as many daily waterings in the 1<sup>st</sup> 10 days to keep the soil moist, 3) a hydroseeded lawn may be ready for it's 1<sup>st</sup> mowing a week or so sooner, 4) hydroseeding a lawn generally is quicker than seeding by hand, and 5) if a huge rainstorm hits a newly hydroseeded lawn the entire application can be washed away (but so might the hand seeded lawn!).

## **ESTABLISHED LAWN CARE SPECIFICS:**

Lawn care requirements can be broken down into several categories: Irrigation, mowing, fertilizing, pest and disease control, aerating, and dethatching.

#### Irrigation:

For cool season grasses such as bluegrass, ryegrass, and fescues, regular watering is key to keeping the lawn healthy. Cool season grasses look their best in the cooler springs and falls and can look good in the heat of the summer but require a lot of water to do so. These types of lawns will need an inch or maybe more per week through a combination of sprinklers and rain, more in the summer. If all you want is to keep it alive, letting the grass go almost into dormancy keeping just the crown alive can be done, but you still will need to water it, and depending on how hot and dry the summer is you may need to water it a lot.

Warm season grasses like buffalo grass or blue grama require much less water, less fertilizers, do not need mowing, and once established require less maintenance to look their best. However they only look good when the temperatures are high so if a good looking spring and fall lawn is important, warm season grasses are not a good choice. These types of grasses do not compete well against weeds when they are establishing so careful use of herbicides and increased irrigation is required.

#### Mowing:

Grass kept at 2.5 - 3'' tall will help reduce watering needs and weed growth. The last mowing of the year can be much shorter, which reduces the probability of mold or fungus developing over winter. No more than  $1/3^{rd}$  of the grass leaf length should be removed at once. If a constant lawn height is desired throughout the growing season, more frequent mowings will be required during the heavy growth periods.

Keep the mower blades sharp. Dull blades leave shredded leaf ends that quickly turn brown. Sharp cuts do not turn brown nearly as much leaving a better looking lawn. Avoid mowing during the heat of the day when plant and soil moisture is more easily lost. Mowing when it's dry is not only cleaner to do but gets better results because the individual grass leaves are not clumped together or bent over.

Finally, mowing with a mulching blade and letting the cuttings stay on the lawn can give some nitrogen back to the lawn and saves the time bagging and emptying the clippings. Finely shredded clippings created with a sharp mulching blade will quickly decompose into the lawn.

#### **Fertilizing:**

Always follow the instructions on the fertilizer container. A common mistake is for homeowners to over fertilize by not knowing either the rate their equipment distributes the product, the size of their lawn, or both. Too much fertilizer is much worse than too little. Too much can actually weaken the grass allowing disease and pests to gain a foot hold. Even worse is excessive amounts of fertilizer can leach into the ground and eventually get into water supplies. A good way to get uniform coverage is to halve the application rate and then perform two passes over the lawn, the second pass at right angles to the first.

Each fertilizer manufacturer makes a series of products for use at different times of the year. If you only do a single fertilization, do it in the early spring with a high amount of slow release nitrogen (1<sup>st</sup> of the N:P:K numbers). Recent research tells us that the second most important time of the year to fertilize is in the fall a couple of weeks before the last mowing of the year, this time with a quick release nitrogen fertilizer, named urea or ammoniacal nitrogen.

A 3<sup>rd</sup> and 4<sup>th</sup> application, in mid- to late-spring and then again in mid-summer, can be done if desired. The midsummer application can harm the lawn if applied when it's very hot. Organic fertilizers are more lawn-friendly and are a good substitute for mid-summer inorganic fertilizers. The 3<sup>rd</sup> and 4<sup>th</sup> applications are the least important and may not be needed. More than 4 is unnecessary and probably does more harm than good.

#### Pest & Disease Control:

Many homeowners prefer the convenience of combination fertilizers that also contain insecticides or herbicides such as grub control, pre-emergent crabgrass control, or broadleaf weed control. This is fine if the actual need for the product coincides with the fertilizing schedule. Unfortunately that is not always the case. All of these products can be purchased separately from a fertilizer.

Pre-emergent crabgrass control needs to be applied when the soil temperature warms and stays in the 50-54 degree range for 72 hours. It is not eternally effective so applying it too early is a waste of the product. Applying it too late does nothing to prevent crabgrass seeds from germinating. Both scenarios put chemicals into the environment unnecessarily.

A spring application of a broadleaf weed control along with proper irrigation and mowing will help prevent weed takeover of a lawn. A fall application of a broadleaf herbicide just before plants start to shut down for the season is a great way to attack perennial weeds. Broadleaf weed herbicides come in granular and liquid forms.

#### Aerating & Dethatching:

Over time subsurface soils become compressed, thereby reducing the ease at which water, nutrients, and oxygen can get to the grass' roots. Aeration is a process that pokes holes several inches into the ground creating easier exchanges with the roots. Dethatching is the removal of dead organic materials at the base of the grass and soil surface. Some accumulation is good, too much is not. Both activities can be done at the same time of the year and done once per year for best results. Specialized tools are used for both jobs, so most homeowners hire these jobs out or rent the tools if they want to do them themselves.

Aeration and dethatching are best performed just before or during periods of high growth. For cool season grasses that would be the mid- to late-spring and early fall periods. For warm season grasses that would be during warm times between late-spring and early fall. Avoid doing both procedures immediately preceding or during periods of stress to the lawn, whether from heat or drought, or when the turf or soil is wet. In the spring, wait until the lawn has been mowed a few times. This ensures the lawn is growing fast enough to recover and take advantage of the increased pore space and air exchange at the root zone. Aeration and dethatching should be performed early enough in the fall that the turf can recover before it needs to prepare for winter dormancy.

Irrigation after these treatments is always a good idea. Some homeowners prefer to overseed with new grass seed after aeration to take advantage of the newly created holes. Applying fertilizer and broad leaf weed killer is beneficial shortly following treatments. However do not apply pre-emergent weed killer if you're going to overseed following aeration.