# Preparation Guide for Hydroseeding

- 1. Watering Preparation IMPORTANT!
- 2. Soil Preparation
- 3. Weeds & Spraying

# WATERING PRAPERATION

Not all sprinkler systems are created equally. Because your sprinklers are essential in helping keep your lawn moist and able to survive in the arid Idaho climate, a shoddy or poorly calibrated system will make it very difficult to succeed in keeping your lawn properly - and evenly - watered.

Due to these variations, it is ESSENTIAL that you test (calibrate) your sprinklers on your bare/prepared dirt before we hydroseed. This will reveal any problem areas where water pools (grass will not grow here), along with areas that may be too dry or that dry out far quicker than other locations. A quality and properly calibrated system will water all areas evenly and unless you want dead spots in your lawn, any problem areas found during testing should be addressed before we arrive.

NOTE: Water pooling may be a grading issue more than a sprinkler issue, regardless steps must be taken to avoid pooling as it will drown the hydroseed.

## **HOW TO CALIBRATE YOUR SPRINKLER SYSTEM**

- Run your sprinkler system through a full cycle, ten minutes for rotating heads and five minutes for pop-up sprinklers is a good starting point.
- Before the ground can dry out observe each zone as watering is completed. If the ground is not evenly damp, adjust sprinklers as is needed until the watering levels are even.
- To prevent washouts, divert all gutter downspouts away from seeded areas.
- Please run your sprinklers <u>only</u> as much as needed in order to calibrate your system. Limiting water will prevent existing weed seeds from germinating.

It is important to note that heavily **sunlit** areas will dry out faster than **cooler** shady areas, so it is important to adjust your sprinklers to compensate for this divergence in order to ensure that sunlit areas get enough moisture to compensate for evaporation while shady areas do not get too much. Without these considerations, you will likely end up with patchy grass.

PRO TIP: It often helps to water beyond the lawn area, this helps prevent the edges from drying out too quickly.

# **SOIL PREPARATION**

#### **CLEARING EXISTING VEGETATION**

Properly prepared soil will directly reflect the health and appearance of the lawn for years to come. At a minimum, our process requires loosely raked surface **free of existing vegetation and debris**, to apply the hydroseed mix.

It is imperative that the soils surface is bare and that all weeds are removed before we hydroseed. It is best to rake up all debris after weed removal and bag it so that you don't leave weed seed on the ground. The hydroseeding mixture (called a slurry) comes out of the hose with the consistency of a thick pea soup and this needs to make contact with the soil for the grass seed to germinate and grow.

# **SOIL QUALITY**

A high percentage of turf problems can be traced to - or caused by - a poor soil environment. Construction sites, for instance, can become severely compacted by machinery resulting in a loss of space between soil particles which impedes the flow of air and water along with the grassroots' ability to penetrate the soil. In these cases, the addition of a few inches of topsoil over the top of compacted soils does little to improve the situation, resulting in a shallow-rooted lawn that is highly susceptible to drought during the summer and flooded roots during the winter.

The best approach to correct this situation is to till decomposed organic matter into the existing soil (example compost, peat moss, etc.). If this approach is not possible, the second option would be to import at least five inches of topsoil.

Proper soil preparation before any planting will make it easier for the grassroots to penetrate deeply and evenly. Deep roots will make your lawn more drought resistant - meaning more efficient at absorbing water and nutrients - resulting in a thicker, lusher lawn as well-fed grass shoots eagerly emerge.

When preparing your soil, be sure to fill in with topsoil any dips or low-lying areas where water may collect. As you loosen up compacted areas, you may uncover more debris and rocks, be sure to remove these as well.

When adding topsoil, if possible, till any compacted soil first to a depth of at least two inches. This will alleviate subsoil compaction, foster a bonding of the topsoil to the subsoil, and improve root penetration, air, and water movement.

#### TO TILL OR NOT TO TILL

If your soil is hard-packed and you cannot dig a hole in it with your heel, you probably need to either rototill it or bring in at least **four inches of new topsoil**. This will improve drainage and aeration allowing baby grassroots to work their way unencumbered into the soil. There is a reason why grass won't grow on concrete, and if your soil feels like concrete, you probably won't have the beautiful lawn you imagined.

When rototilling, try to till down at least four to six inches while being mindful of PVC and sprinkler piping. In fact, it is usually better to do this before installing your sprinkler system, but if you already have irrigation in place, you can locate the pipes and mark them with flags before you till. If you are going to add a soil amendment (sand, compost, etc.), you will want to add it first, spread it around evenly, and then till it into the soil as deeply as you can, mixing thoroughly.

If you fail to till the amendment into the soil, the roots will want to stay in the top area where the nutrients and drainage are optimal, resulting in a shallow root system that will not produce a healthy and durable plant. Once tilling is complete, it is a good idea to rent a lawn roller, fill it halfway full with water, and roll it over your yard in two different directions to firm it up. This will even up the soft areas and make them consistent, resulting in an ideal smooth surface bereft of hills and valleys. If you can step on the soil and sink in a couple of inches, you need to firm it up some more.

Tilling and rolling can sometimes be challenging steps that you may be tempted to skip, but you cannot do much about over-compaction once the lawn is planted. And your grass will be much healthier if you do till so roots can breath and have room to grow.

## TILLING ALTERNATIVE: HYDROSEED ADDED SOIL AMENDMENTS

In areas where it is not possible or practical to till in soil amendments we have the ability to add a product called Biotic Earth to the hydroseed mix. Our Biotic Earth product adds living microorganisms to the soil which will propagate for years to come improving the quality of your soil.

# WEEDS & SPRAYING

Our proven processes and techniques produce a nearly weed free lawn consistently. However it is essential to start with a clean slate. Below are tips and tricks to assist in doing so.

# TIPS ON SPRAYING WEEDS / EXISTING GRASSES

Do not use any weed treating chemicals that are classified as a pre-emergent or have a residual herbicide. These will prevent grass from growing.

- 2-4-D along with the most common weed killers are soil active, and can only be used at a minimum of ten days before hydroseeding.
- Round-up and Spectracide are NOT soil active and can be used as little as 48 hours before hydroseeding. These non-soil active products are the best and safest options to use when treating weeds before hydroseeding.
- Weed killing lawn chemicals work by making direct contact with plant foliage, so do not cut the weeds or grasses before spraying them as this decreases their surface area.
- There is no benefit to spraying weed killers on bare dirt.
- Surfactants (wetting agents) will greatly increase the effectiveness of whichever weed killing product you choose. These can be found at D&B Supply, Farmer Supply, Steve Riggins, Zamzows and other retailers.

## DO I NEED TO SPRAY WEEDS BEFORE REMOVING THEM?

That depends on the weed type. Many common weeds are killed simply by you removing the top of the plant. However some weeds with complex root structures (tap roots for example) can only be killed by proper spraying. These weeds include; dandelions, thistle and morning glory and most weed grasses. It is highly recommend that if these weeds are present that you treat with a non soil active spray before hydroseeding.

## DO I NEED TO REMOVE TINY WEEDS?

The short answer is probably not. Our hydroseed mix contains (unless requested to be left out) a special pre-emergent that prevents everything other than our grass seed growing. This is both a pre and post emergent that is effective on most weed varieties. So small weeds will very likely die off within a few days of our seeding process. Please note this pre-emergent typically only lasts for about three weeks while your new lawn is being established.

See our care guide for dealing with weeds in an established hydroseeded lawn.