

HOME GROUNDS FACT SHEET

CORNELL

Cooperative Extension
Nassau County



Nassau County
Horticulture Program
Eisenhower Park
East Meadow, NY 11554
516 228-0426

Building a New Lawn

A healthy and dense lawn means different things to different people. For some, it is the finishing touch to their landscape, while for others, a nice lawn gives them an added touch of serenity. Whatever the reason, it doesn't change the fact that proper timing, preparation, varietal selection and maintenance are necessary to having a good lawn.

Late summer to early fall is the best time

Here in southeastern New York, the best time to build a new lawn is between mid-August and the end of September. Temperatures are cooler and there's usually some natural rainfall. The reason it's so much better for seeding than the springtime is because it is generally warmer. The new grass has almost a whole year to grow before it is put under the hot summer stresses and there is far less competition from weeds.

Before any soil preparation is started, all the existing grass should be removed. You can use a rented sod-cutter to do this quickly and easily; or a non-selective herbicide can be sprayed on the old lawn and the existing grass will die in about a week. Keep in mind that this chemical will kill most plants it comes in contact with - so if there is anything you don't want to kill don't allow the spray to get on it. Don't spray in the wind or rain and read and follow the label instructions and precautions!

Small areas can be covered with a tarpaulin to kill the grass. After the grass is dead you can take it up. The purpose of doing this is to kill hard-to-control weeds and undesirable grasses that were in your old lawn that you don't want in your new one.

Drainage

Adequate soil drainage is a must. Fortunately, most soils in this area drain well - sometimes too well, and that can be a problem, especially in areas near the shore. If this is the case, organic matter and/or topsoil should be incorporated. Be careful not to form a seal between incompatible soil types which will prevent drainage and/or root penetration.

Grading

It will be helpful to establish a soil grade that is slightly sloping away from the house or other buildings. Avoid steep slopes because they are difficult to establish and maintain. When regrading, keep in mind that soil added on top of tree or shrub roots or taken away from plant roots can cause injury.

Topsoil and organic matter

About six inches of top soil is desirable but not necessary. Poor topsoil, subsoil or sand can be conditioned with some organic matter that will be an asset to good grass growth. To improve on a poor soil, mix one to two inches of organic matter such as coarse peat moss into the top 6-8 inches of existing soil. If your soil is just in need of organic matter, incorporate 6 cubic feet of compost or 2-3 cubic yards of well-rotted manure per 1000 square feet. This will improve both the soil structure and water-holding capacity of the soil. If you are using horse manure, make sure your tetanus booster is up to date.

Lime

Lawn grasses prefer the soil pH in the 6.3 to 6.8 range. This is very important since the greatest availability of essential turfgrass nutrients are available at this pH. If the soil pH is below 6.3, lime should be added to bring it up to the proper level. Soils should be tested yearly, preferably in the fall, and the appropriate amount of lime applied. Soil tests can be done by Cooperative Extension or some garden centers. (See Home Grounds Fact Sheet A-1-0.) The Cornell soil pH test kit can be purchased from your local Cornell Coopera-

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Building Strong and Vibrant New York Communities

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tive Extension office so you can do many accurate tests yourself.

Fertilizer

Seed sown on unfertilized soils produces thin, if any, turf. It is necessary to incorporate the proper amount of a complete fertilizer into the top 6-8 inches of soil. It is important to use one that will put an ample amount of phosphorus (the middle number on the fertilizer bag) into the soil in the zone where the roots grow. Since phosphorus moves very slowly in the soil, it must be mixed in to be effective.

As for the amount of fertilizer to use to establish a new lawn, a double rate is usually advised: 40 pounds per 1000 square feet of 5-10-5, 5-10-10 or equivalent - applied with a drop-type or centrifugal spreader. (See Home Grounds Fact Sheet C-1-25.)

Rates for other fertilizers are:

FERTILIZER RATES FOR 1000 SQUARE FEET FOR NEW SEEDBEDS	
If the first number (% nitrogen) on the fertilizer bag is:	pounds per 1000 square feet:
	50
4	40
5	33
6	28
7	25
8	22
9	20
10	10
20	8
25	

Tilling

Mix by rototilling or spading the organic matter, lime and fertilizer into the top 6-8 inches of soil. You can rent a rototiller or hire a landscape gardener to do it for you.

Seedbed preparation

After tilling the soil, rake the entire area removing dead grasses, weeds, plant parts and stones over 2 inches in diameter. Then rake the area again so the surface is smooth and the grade even.

Light fertilization

Before the seed is sown apply a light application of fertilizer (about 1/3 of the amount previously used before tilling). This is to make sure there is adequate fertilizer near the germinating seed.

Final grade

A level seedbed is a MUST and can be prepared with a wide wooden or aluminum rake. It is helpful if time is allotted for the ground to settle before the final raking - this way high and low spots can be eliminated.

Sowing seed

If you're preparing your own mix or blend of seed, make sure that all the types or varieties of grass(es) are evenly mixed throughout the mixture. Divide the grass seed (to be used for the lawn) in half and sow half the seed mixture in one direction and the other half at right angles to it.

Rake lightly

Since lawn seeds are rather small, a light raking is all that is necessary to cover them with about 1/8 inch of soil. Guard against deep raking or cultivation; the seed would be buried too deep and not come up.

Light rolling

Rolling the seedbed with a light roller will firm the soil and promote better seed-soil contact, which in turn will promote better seed germination. Rolling is an optional practice and deleting this step will not harm the seed - it will just germinate a little slower.

Mulching

Mulching is another optional practice that can be useful on sandy soils or slopes. Mulching simply slows up surface drying and helps prevent washing away of seeds during heavy rains. Straw is one option and can be placed over the seedbed so the soil surface is still visible after it has been put down. Be sure not to use hay as a mulch for it can contain many weed seeds. Don't use more than one inch of straw. If a mulch is applied properly it usually doesn't need to be removed. It should only be removed if the young seedlings are being smothered (if you think they are being smothered by too much mulch). Never use peat moss as a mulch.

Anchor the straw on steep slopes with wooden pegs (placed at 3 or 4 foot centers) and twine tacked to the stakes down close to the straw so it can't easily move. Remove when the seeds germinate.

Watering

Now water - it is critical. Don't overwater so the seeds get washed away - water lightly but enough so the top five to six inches of soil are moist. After this initial watering, water lightly several times a day, especially on hot, windy days. Water is the most important factor in establishing a new lawn. As soon as the grass is three inches high, mow it. Your lawn should be mowed regularly from then on.



WHENEVER YOU USE A PESTICIDE,
ALWAYS READ THE LABEL AND FOLLOW
THE MANUFACTURER'S INSTRUCTIONS
AND RECOMMENDATIONS.