How To Select The Best Grass For Northern Lawns

Another Report on Effective Turf Maintenance from the Lawn Institute

New, improved lawn grass varieties for the 21st century provide you with the latest technological benefits for improving your lawn. These varieties represent a new generation of grasses bred for:

• Lower maintenance
• Water conservation and heat tolerance
• Reduced need for fertilizers and pesticide controls

A majority of homeowners in the northern climatic regions will generally purchase turfgrass sod or lawn seed in mixtures or blends rather than a single variety. Many cool season grasses are compatible and widely used in seed mixtures. Kentucky bluegrass,
fine fescue, perennial ryegrass, and turf type tall fescues varieties can be combined to make excellent mixtures for the northern lawn. A blend is two or more of the same grass specie.

**Kentucky Bluegrass**

Kentucky bluegrass is the basic grass species for northern lawns. Many older lawns were planted with common Kentucky bluegrass some years ago. In the last few years, there has been a breakthrough in the breeding and development of the new improved bluegrasses.

The new named bluegrass varieties found in premium blends and mixtures have been developed with more heat and drought tolerance, and with greater insect and disease resistance. This makes the turf more persistent in crowding out weeds throughout the year. In seed mixtures, Kentucky bluegrass should be the dominant type grass seed.

**Perennial Ryegrass**

The new turf type perennial ryegrasses are the most versatile of the lawn grasses. They germinate rapidly and are often used in mixtures with the improved Kentucky bluegrasses. Perennial ryegrass germinates faster than Kentucky bluegrasses, which helps to prevent soil erosion during lawn establishment. The other valuable quality is that perennial ryegrass normally has better wear tolerance than Kentucky bluegrass.

**Fine Fescues**

There are several grasses that are called fine fescue. The most widely used is creeping red fescue. Its shade and drought tolerance makes it a popular variety in northern seed mixtures. Chewings fescue also is a fine fescue with good drought tolerance and is frequently used in mixtures. Neither of these grasses are routinely seeded alone, but generally used with Kentucky bluegrass.

**Tall Fescue**

Tall fescue has traditionally been used in the transition zone and upper south, but the development of new turf-type tall fescues has made them compatible in the cool, humid regions as well. Tall fescues have good heat and drought tolerance.

These grasses have a large root system and tend to grow well with less irrigation during hot summer weather and dry spells. The new turf type tall fescues often are sold as blends of two or more named varieties. However, mixtures in combination with Kentucky bluegrass are becoming more common.

**Making the Lawn Seed Decision**

There are a few environmental questions that you as a homeowner need to answer before making a decision on what turfgrass sod seed to buy. Does the majority of your
lawn receive a lot of sun? Do you have a substantial amount of shade? Will you have a considerable amount of traffic and play on the lawn? Do you plan to regularly irrigate the lawn?

Answers to these questions will help you and the retailer make a better decision as to which mixture or blend to buy. Here are some general guidelines for your purchase:

**Generally sunny with irrigation** - In the northern portions of cool humid, semi-arid, and inter-mountain areas, consider a blend of improved Kentucky bluegrasses or a mixture of Kentucky bluegrass and fine fescue. In the southern portion of the cool humid and semi-arid areas, look for an improved Kentucky bluegrass blend with improved perennial ryegrass.

**A considerable amount of shade** - In the northern portions, semi-arid, and inter-mountain areas, look for an improved Kentucky bluegrass blend, combined with a higher percentage of fine fescue. In the southern portion of the area, look for a mixture of improved Kentucky bluegrass, improved perennial ryegrass, and improved fine fescue. Another option is to use an improved turf type tall fescue blend.

**High traffic and play** - In the northern portion, semi-arid, and inter-mountain areas, look for a mixture of improved Kentucky bluegrasses with a relatively high percentage of improved perennial ryegrass.

In the southern area, once again, look for a mixture of improved Kentucky bluegrasses with a high percentage of improved perennial ryegrass. You can also choose an improved turf type tall fescue variety or blend.

**Make Sure You Buy Quality Seed!**

As a homeowner, be wary of low-cost seed mixtures. They often contain common, unadapted, temporary, and low-quality grasses. Improved seed varieties will generally cost a bit more, but within that seed lies the potential for an improved quality of lawn.

Read the seed label and understand what you're getting in the box or bag.

**How to Read a Seed Label**

<table>
<thead>
<tr>
<th>XYZ Brand</th>
<th>Lawn Seed Mixture</th>
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<tbody>
<tr>
<td>Pure Seed</td>
<td>Seed Variety</td>
</tr>
<tr>
<td>60%</td>
<td>Aries Kentucky Bluegrass</td>
</tr>
<tr>
<td>15%</td>
<td>Virgo Chewings Fescue</td>
</tr>
<tr>
<td>24.55%</td>
<td>Pisces Perennial Ryegrass</td>
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</table>
Other Ingredients

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>0.26%</td>
<td>Other crop seed</td>
</tr>
<tr>
<td>0.10%</td>
<td>Weed seed</td>
</tr>
<tr>
<td>0.09%</td>
<td>No noxious weed seed</td>
</tr>
<tr>
<td></td>
<td>Inert matter</td>
</tr>
</tbody>
</table>

Tested January, 2000
Lot No. 1002

XYZ Super Seed, Anytown, WA 99001

- Look to see if the varieties are listed by trade name, rather than a generic name like Kentucky bluegrass, perennial ryegrass, tall fescue, or the Latin name for the species or variety. Avoid packages that state "VNS" or Variety Not Stated.

- Make sure the germination percentage number is high with at least 75% for Kentucky bluegrass, and 85% for perennial ryegrasses, fine fescues, and turf type tall fescues.

- The weed content should not be more than 0.5% and other crop grasses no more than 0.5%.

- Inert matter, which is incapable of growing under any conditions, should be no more then 5%.

- There should not be any noxious weeds stated on the label.

- There are many places where annual grasses are used and are beneficial to the environment, but the permanent lawn is NOT one of these places. When reading the seed label, avoid boxes or bags that list annual grasses at more than 5% by weight of the container, i.e. annual ryegrasses. A small percentage can be helpful for erosion control at establishment but annual grasses do not provide the basis for a healthy, permanent lawn.

- A quality seed mixture or blend should be free of bentgrass and Poa trivialis (rough bluegrass). These weedy grasses are particularly difficult to control in a permanent lawn and can quickly deteriorate the quality of the lawn.

- If the seed label indicates these minimum and maximum levels, you can be confident that you are buying a good quality mixture or blend.

- Buy a premium seed variety, mixture, or blend available for your area. The performance and environmental benefits are worth the cost differential for a healthy, attractive lawn. And remember, premium lawn seed is still one of the least costly products you can buy to improve the value and environment of your home and landscape.
How To Establish, Renovate, or Overseed Your Lawn

Another Report on Effective Turf Maintenance from the Lawn Institute

There are three basic methods commonly used for the establishment of turfgrass: by seed, by sod, or by sprigs. Regardless of the method, the preparation of the soil is the same. Make a soil test to determine the fertilizer (nutrient) requirements and the rate of application needed.

Ten Steps to Establishing a Healthy New Lawn

Follow these establishment steps for starting a successful lawn.

**Step 1. Test The Soil** - This is the best way to determine what nutrients your soil needs and the amounts it needs to provide the best start for a new lawn. The test also shows if the soil pH (acidity/alkalinity) needs adjusting.

Most lawn and garden centers, nurseries, or hardware stores have soil testing kits. In most areas, there are also private testing firms or local County Extension offices that may offer testing and information.

**Step 2. Control Weeds** - Most annual weeds can be controlled by tilling the soil. A potential problem is the perennial weeds that are capable of regrowing, even though the top parts may have been removed. A post-emergent herbicide should be used several days before tilling the soil.

**Step 3. Prepare The Soil** - Your soil test results will indicate the fertilizer analysis needed and at what rate. In the absence of a soil test, a fertilizer high in phosphorus should be initially applied at a rate of 2 to 3 lbs. per 1,000 sq. ft. Also, apply any additional materials recommended for soil pH adjustment.

**Step 4. Till The Soil** - Tilling does several things. It works the fertilizer and the pH control materials into the soil. It helps the new grass roots grow into the soil and it makes the soil easier to smooth out and make level. Till the soil to a depth of 4 to 6 inches.
Step 5. Rake - Use a garden-type rake to remove any rocks and debris that the tiller has brought to the surface. This also is the last chance to work on contouring and low spots.

Step 6. Apply Seed, Sod, Or Sprigs - Buy the best quality turfgrass sod or seed available of improved varieties recommended for your area as a single variety, mixture, or blend. Seed purity and germination percentages should be high, only a small percentage of non-perennial grasses should be present, and no noxious weeds should be named on the seed label.

When seeding, sow the recommended pounds per 1,000 sq. ft. uniformly across the lawn area, using 1/2 the amount in two directions at right angles, to help ensure good coverage. After seeding, lightly rake the seed into the soil, but not too deep. Next, use a roller to firm the soil surface, which will help germination.

If the lawn is sodded, lay the sod in a brick-like pattern. Run the strips lengthwise across the face of any slope areas. Make sure the sod pieces are tightly butted to each other. As with seeding, use a roller to make sure the sod is in good contact with the soil.

Sprigs should be evenly spread across the lawn area by hand or by equipment designed for this purpose. After planting, the sprigs can be top-dressed by adding a thin layer of soil. The roller should be used after top-dressing to give the sprigs good contact with the soil.

Step 7. Water - The newly seeded or sprigged lawn must be kept moist, NOT saturated, until the seeds or springs begin to grow. As they start to grow and establish a root system, reduce the frequency of watering. Too much water promotes poor germination and seedling disease. As you reduce the frequency of watering, increase the amount applied each time. In about 4 to 6 weeks after planting, the lawn should be treated as an established lawn. Then, water infrequently, applying 1 inch when the soil is dry 4 to 6 inches deep.

Watering a newly sodded lawn is different from seeds or sprigs. That sod must be soaked heavily to the point that the soil is completely wetted under the sod. This should be done every day for the first 1 to 2 weeks, until the roots are established in the new soil. After this period, treat the sod as an established lawn.

Step 8. Mow - As the new lawn grows, it will be necessary to mow. Set the mower for the recommended height of your grass variety. When the grass has grown about 1/3 higher then the recommended mowing height, it's time to mow. Always mow when the grass is dry. The more often a newly seeded or sprigged lawn is mowed, the faster it tends to fill in and thicken. For recommended mowing heights, refer to the 4th brochure in this series, Home Lawn Care Programs That Work.

Step 9. Fertilize - When the seeded lawn is 6 to 8 weeks old, it's time for the first application of fertilizer. If the soil test didn't recommend a fertilizer for an established lawn, one with an N-P-K ration of 3-1-2 will do a good job. Examples are 15-5-10, 12-4-8, 18-6-12. Apply at the manufacturer's recommended rate. Sodded lawns will not
require fertilizer for at least the first season.

**Step 10. Control Weeds** - All newly seeded lawns will have unwanted weeds, most of which came from the soil. Annual weeds should be controlled by mowing. Hopefully, any perennial weeds were controlled with the post-emergent herbicide used in Step 2. Herbicides are not usually recommended the first year of a new lawn. A little hand weed control may be necessary. Sodded lawns should not require weed control chemicals.

### Renovating and Overseeding

Usually lawns with less than 50% weeds can be renovated and overseeded without tearing it up and starting all over. The best time of the year for these procedures is early spring or fall. The following steps are recommended:

**Step 1. Remove Thatch And Weeds** - After closely mowing your lawn, use a power rake or verti-cutter to remove thatch and weeds. Usually, this requires several passes over the area in different directions. Rake off the debris so that the soil surface is exposed between grasses that are left.

**Step 2. Apply Fertilizer And Other Nutrients** - A soil test will help determine what is needed. In the absence of a soil test, use a slow-release fertilizer with an N-P-K ratio of 3-1-2. Limestone also may be needed to correct soil acidity. Set the power rake or verti-cutter so as to cut only slightly into the soil surface, then work the fertilizer and other nutrients into the soil.

**Step 3. Apply Seed** - Select a blend or mixture of named, improved varieties of lawn grasses. We cannot overemphasize the importance of renovating and overseeding with modern, improved grasses that are insect and disease resistant, and have stress tolerances and sufficient vigor to crowd out weeds. Using these improved varieties will cost less to maintain when you follow proper mowing, watering and fertilizing practices.

Use a machine called a slit seeder to sow the seed into the lawn. All of the machinery mentioned above can be found at an outdoor equipment rental store. If this seems like more work than you want, contract with a professional landscape or lawncare company.

**Step 4. Add Water** - Like the establishment of a new seeded lawn, renovated or overseeded lawns need to be kept moist, but not soaked, until the new seeds begin to grow and develop a root system. In 4 to 6 weeks, treat it as a reestablished lawn.

*Note: Grasses that spread by runners can be plugged into an existing lawn that needs renovation. These include bermudagrass, St. Augustine, zoysiagrass, and buffalograss.*

With over 50% of the lawns in North American more than 7 years old, most could benefit from renovation and the planting of the new turfgrass varieties that are more resistant to insects and disease, and more tolerant of drought than common older varieties. As an added bonus, the new grass varieties generally mean the need for less pesticides and water to have a healthy, nice looking lawn.