HOME GROUNDS FACT SHEET



Cornell University Cooperative Extension Nassau County



Horticulture Center Demonstration & Community Gardens at East Meadow Farm 832 Merrick Avenue East Meadow, NY 11554 Phone: 516-565-5265

Types of Lawn Grasses

Grasses differ in their ability to adapt to soil and air temperatures, soil fertility, moisture and pH as well as to mowing, traffic and pests. Selecting a well adapted species is the first step in reducing overall reliance on chemical pesticides. Visually, grasses differ in leaf width (texture), growth habit (bunch-type, rhizomatous, stoloniferous), density and color. Important "cool season" grasses include Kentucky bluegrass, perennial ryegrass, turf-type tall fescue and fine-leaf fescues. They are referred to as "cool season" grasses because they prefer temperatures during the growing season of 60-75°F. See Home Grounds Fact Sheet C-1-4 for information on Zoysia–a "warm season" grass which has very different characteristics and cultural requirements.

Kentucky Bluegrass

Kentucky bluegrass (Poa pratensis) is the predominant high quality turfgrass in northern climates for lawns and sports turf. When properly cared for, it can provide a thick, richly textured lawn that adds greatly to the overall picture and value of the landscape. It adapts well to moist, well-drained, fertile soils with a soil pH in the near neutral range-6.3-6.8. It is a perennial species that produces rhizomes (underground lateral stems) which enable bluegrass to form a thick mat or sod. Kentucky bluegrass is the prime constituent of most sod lawns. Sites receiving full sun with regular fertilization will be the most successful. However, 45-90 days are required to establish a dense lawn from seed so many bluegrass areas are established from sod. The major pest problems of Kentucky bluegrass include fungal diseases such as leafspot, dollar spot and necrotic ringspot as well as white grubs and surface feeders such as billbugs. Some of the improved perennial ryegrasses are quite compatible with bluegrass. This gives the lawn greater wear, drought and disease tolerances. Bluegrasses are generally not shade tolerant. This should be taken into consideration when selecting grass for a shady site. Fine and tall fescues are more adapted to these conditions. Bluegrass (shade tolerant varieties) can be blended with fine fescues to provide a more suitable lawn in the shade. Bluegrasses can be blended by using two or more varieties. It is always a good practice to use more than one variety (or type) of any grass in a seed mixture.

Perennial Ryegrass

Perennial ryegrass (Lolium perrenne) has improved through plant breeding and selection and is a desirable choice for home lawns and sports turf areas. There are many turf-type perennial ryegrasses that rival Kentucky bluegrass in overall appearance. Good color early in the spring and late into the fall is one of the strong points of this type of grass. In addition, they have excellent wear tolerance and are somewhat drought tolerant. They are most successful when they receive regular care in sites that are fertile, well-drained and in full sun. Soil pH should be in the 6.3-6.8 range. A medium level of maintenance is required. Perennial ryegrass is a bunch-type grass that does not spread like bluegrass. Each plant gets thicker at the base with side shoots known as tillers. Therefore, bare spots have to be overseeded and will not fill in unless they are quite small. Seeds germinate very quickly, usually in 6-8 days under ideal conditions, and are established in 3-4 weeks or less. A mixture of rvegrass and bluegrass is a recommended blend. The major pest problems of perennial ryegrass include fungal diseases such as red thread, rust, brown patch and Pythium blight. Gray leafspot may also be a possibility. Many ryegrass varieties contain endophytic fungi. Referred to as endophytes, the fungi live in association with the grass plant in the leaf sheath. Endophytes produce natural chemicals that deter surface-feeding insects such as chinch bugs and sod webworms but have no effect on white grubs or other root feeders. Seed mixes that contain endophytes should be used if possible when overseeding or starting a new lawn.

Turf-type Tall Fescue

Turf-type tall fescue has gained in popularity in the last several years. Previously, they were not used in lawn areas because of the broad, coarse blades which were not visually attractive nor easy to mow. Major breeding efforts have produced tall fescues that compare favorably with high maintenance favorites like Kentucky bluegrass on a visual basis with less maintenance. Tall fescues are deep rooted and withstand drought condi-

C-1-1 RT 1/09

Building Strong and Vibrant New York Communities Cornell Cooperative Extension in Nassau County provides equal program and employment opportunities. tions better than many of the other lawn grasses. They are wear tolerant and are recommended for high traffic areas. Full sun is preferred but they can tolerate a wide range of soil conditions and will tolerate light shade. Soil pH of 6.3+ is recommended. Tall fescue is a bunch grass and therefore thin and bare areas should be reseeded (overseeded) to fill in. These grasses grow fairly rapidly and may have to mowed more often than other grasses. Because of their growth habit, they are not usually blended with or planted with other types of grasses. Rather, 2-3 varieties of tall fescues are used in the mix. They germinate fairly rapidly in 10-14 days and should establish in 4-5 weeks. Seed should be planted in late summer to very early fall. In colder climates, tall fescues are subject to winter kill but this is very rarely a problem on Long Island. Pest problems may include brown patch, Pythium and rust. Although the usual turf insects attack tall fescue, some varieties contain endophytes which can deter surface feeding insects such as chinch bugs and sod webworms. Look for these varieties that contain endophytes when purchasing seed.

Fine Fescue

There are several types of fine fescues that are currently used for lawn areas. These include hard fescue, chewings fescue, sheep fescue and creeping (red) fescue. Red fescue (*Festuca rubra*) is the most common in most seed mixes. Fine fescues are medium to dark green with needle-like thin leaves. They are good grasses for dry soil in sun and are very tolerant of shaded conditions. If unirrigated, they may turn brown during hot, dry periods but will quickly recover during cool, moist weather conditions. Fine fescues are not usually successful in wet or poorly drained soils. They are well adapted to infertile, more acid soils and require much less additional fertilizer than other lawn grasses. Performance is actually the best under low maintenance (water, fertility, mowing) but may not do as well under high maintenance conditions. Do not over-fertilize. As a group, they are not very tolerant of high traffic areas and being bunch type grasses, do not readily fill in open spaces. Fine fescues are most important as components of lawn seed mixtures for cool sites with moderate shade. Blending or mixing several fines fescues together or mixing with more shade tolerant varieties of bluegrass or ryegrass is recommended. The fine fescues have few major pest problems except during persistent wet conditions (or improper/over watering) when red thread and leaf spot can be severe. Buildup of excessive thatch can also be a problem if heavily fertilized. Certain varieties have endophytes that repel surface feeding insects such as chinch bugs and sod webworms but are susceptible to infestations of white grubs which feed on the roots. Look for these varieties that contain endophytes when purchasing seed.

For additional information on general lawn care, see Home Grounds Fact Sheet C-1-25 Fertilization and Care of Long Island Lawns.

Sunny, medium- to high-maintenance lawn:

- 65% Kentucky bluegrass blend (several different varieties)
- 15% perennial ryegrasses
- 20% fine fescues
- Seed at 3 to 4 pounds per 1,000 square feet.

Sunny, low-maintenance lawn:

- 65% fine fescue blend
- 15% perennial ryegrasses
- 20% Kentucky bluegrass blend
- Seed at 4 to 5 pounds per 1,000 square feet. **OR**
- 100% tall fescue blend
- Seed at 7 to 10 pounds per 1,000 square feet.

TYPICAL SEED MIXES FOR DIFFERENT SITUATIONS

Shady areas:

- 100% fine fescue blend
- Seed at 4 to 5 pounds per 1,000 square feet

SUMMARY OF COOL-SEASON LAWN GRASSES

	Kentucky Bluegrass	Perennial Ryegrass	Tall Fescue	Fine Fescue
Shade tolerance	Poor	Poor	Good	Excellent
Drought tolerance	Poor	Poor	Some	Some
Wear tolerance	Good	Good	Good	Poor
Establishment (days)	Slow30 to 90	Fast14 to 21	Ave./Fast21 to 30	Average21 to 50
Growth habit	Rhizomatous	Bunch	Bunch	Bunch
Leaf texture	Medium-Fine	Medium	Coarse	Very Fine