

THE NEW GENERATION IN TURF-GRASS SEED

Scott Uffelman/
Everett Nieuwkoop
Ontario Seed Co. Ltd.
Waterloo, Ontario

There have been more changes in turf-grass seed development in the past 5 years than there have been in the previous 50 years. The standard lawn grass varieties in Canada have been annual ryegrass, creeping red fescue, and common bluegrass, both Kentucky and Canada blue. Preceding these varieties were Timothy, Alsike and Clover. These species were subject to problems with drought, disease, texture, wear-resistance, coarseness, low-fertility and germination.

Due to these problems, a new generation of turf-grass seed was needed. Extensive research by institutions such as the University of Guelph, Penn State, University of Michigan etc., as well as privately funded horticultural research stations have yielded a wide variety of new cultivars and sub-species which, either alone, or blended with other new varieties or the old standards, are producing superior turf. Some require much less fertilizer, herbicides or fungicides than the older types.

New developments include dwarf-type hybrid Kentucky bluegrass, shade tolerant Poa trivalis and Chewings fescue, and low-maintenance Hard and Sheep fescue.

Some of the most exciting advancements have been made in two common species. They are ryegrass and tall fescue. Both have been adapted to turf-type varieties. Turf-type perennial rye has a fine-leaved blade

and is very similar in texture to Kentucky bluegrass. It can be used in a bluegrass mixture, or over-seeded on older bluegrass lawns and fairways and blend in very well. Turf-type perennial rye can withstand moderate shade, and, in drought conditions, is one of the last grasses to lose colour and the first to green-up. It also requires far less fertilizer than bluegrass. Rapid germination, 3 to 7 days, makes turf-type perennial rye ideal for slopes and in areas where grass is required of rye, such as "Spectacular", which features the unique qualities of "BARCLAY" which is actually the only creeping rye cultivar, or a mixture containing 40% rye, 20% Kentucky bluegrass and 40% Chewings fescue is good. For direct seeding, apply this mixture at a rate of 6-7 lb per 1000 sq. ft. (250 lb./acre) for great turf. However, turf-type perennial rye does poorly in areas that are wet and is susceptible to ice and salt damage.

In these areas, on sports fields, and along roadways and boulevards turf-type tall fescue is ideal. This cultivar also germinates quite quickly, 7 to 10 days, and requires little fertilizer and does well in drought conditions. It can take heavy traffic and can be used in low, wet areas such as seasonal drainage areas. However, this is a fairly coarse grass and should not be used in over-seeding established turf because it tends to clump. A mixture of 80% turf-type tall fescue and 20% turf-type Chewings fescue, sown at a rate of 5-6 lb./1000 sq. ft. (225 lb./acre) gives a very sturdy turf with excellent wear-ability. An additional benefit of this mixture is that it requires little maintenance.



If sandy soil or fair to heavy shade is a problem, the variety that should be used is Chewings fescue. This species is less susceptible to disease, and keeps greener longer in drought conditions than does creeping red fescue. It is extremely shade-tolerant and germinates in 3 to 7 days. It is a very fine textured grass but does not take high traffic well. In very sandy areas use Chewings fescue and turf-type perennial rye mixed equally at 50% each and spread at a rate of 6-7 lb./1000 sq. ft. (250 lb./acre). In heavy shade use 100% Chewings fescue at a rate of 6 lb. per 1000 sq. ft. It must be remembered though that nothing will grow in 100% shade. In areas where there is a mixture of sun and shade, the mixture of 40% Chewings fescue, 20% Kentucky bluegrass and 40% turf-type perennial rye is ideal, both as an over-seeding mixture to re-vitalize established turf or for starting new lawns.

The new turf-grass seed has done extremely well in all test plots and is producing superior lawns throughout the country. Research continues to develop even better cultivars for the future.