Green Side

November 2022

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Ringwood Bowling Club

One of the more common questions we are asked is "could you please let me have some grass seed for my lawn?"

Our reply usually is "What type of lawn do you have?" A rather blank face is usually staring back at us and a typical reply is " well it is at the back of our house and there are some bare patches, and I thought some seed would fix them!" What we need to know is:

- "Is the lawn in full sun or have you lots of trees around your lawn?"
- "Is your lawn usually dry or does it lie wet?"
- "Is your lawn heavily used"?
- "Do you have a dog"?

These questions are all relevant, as grass seed is not just grass seed! I will try to explain.....

Where does grass seed come from?

Well, all modern varieties and there are hundreds if not thousands, are bred by highly specialist usually multinational, plant breeders.

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Year 1-3

Different grasses are crossed in order to find new and improved varieties. The new varieties are propagated and sown in thousands of test plots.

Year 4-8

The new breeding lines are tested. Only the best varieties continue in a rigorous breeding program.

Year 9-10

Every year new varieties are tested under different climatic conditions to evaluate their performance. The absolute best varieties are chosen for further official trials e.g. STRI.

Year 11-14

The chosen varieties are tested and evaluated in trials by official independent authorities. The highest performing varieties are put into production with very experienced seed growers.

Year 14

Official trials are completed. Only the varieties that have passed the official tests appear on the lists of recommended varieties. (e.g., STRI, SERF).

Year 15

Certified seeds are harvested, cleaned and samples are taken for purity and germination in renowned specialist laboratories.

Year 15+

After careful selection the varieties are mixed and packed ready for sale.

It is a painstakingly long process with thousands of trial plots, often spread over several countries, to replicate many, many different climatic, altitude, and indeed attitude!

To grass seed takes over 15 years from the breeders initial selections to the farmers growing the seed, combining, drying, cleaning the seed ready for market. "When we select a grass seed mixture for your green we always choose varieties that rank in the top ten varieties on the relevant STRI (sports Turf Research Institute) lists".

"Ultra fine leaved dwarf ryegrasses should be used in situations where the need for quick establishment and wear tolerance is combined with a degree of close mowing" When we select a grass seed mixture for your green we always choose varieties that rank in the top ten varieties on the relevant STRI (Sports Turf Research Institute) lists.

How many main types of grass seed are commonly used for bowling greens?

There are four main ones:

- 1. Ryegrasses (lolium)
- 2. Fescues (Festuca)
- 3. Bents (Agrostis)
- 4. Poas

Ryegrasses have got a very poor reputation amongst bowlers. For many years they were treated as an undesirable weed grass on bowling greens. They were coarse leaved grass, which grew in an unsightly rosette way. BUT in recent years plant breeders have produced stable hybrids that are very fine leaved, and have a good plant density. Most people are unable now to tell the different with these ultra-fine dwarf ryegrass varieties.

The advantages for ryegrass are:

- A longer growing season. Ryegrasses will start to grow when soil temperatures are 7 degrees or more.
- Are extremely hard wearing.
- Have a quick response to fertilisers
- On average have a good resistance to many common diseases found in fine turf.

The disadvantages are:

- Difficult to obtain a rooting depth of more than 100mm or so.
- To grow to a good sward will need more fertilisers than most Have a higher grass clip rate yield.
- Ryegrasses, due to limited rooting depth, will need more water / irrigation.
- For some reason still not liked by bowlers in general

- Although ryegrass seed is usually at the cheaper end of the market, it must be remembered that the individual seed is much larger than other types. So in a 20kg bag, you will get a lot less seeds than with fescues and a fraction of the number of seeds compared to bents.
- I quote from the STRI "Ultra fine leaved dwarf ryegrasses should be used in situations where the need for quick establishment and wear tolerance is combined with a degree of close mowing. They should not be seen as a replacement for bent grasses or fine fescues in bowling greens". Do we agree? No!

Fescues are the traditional grass found on most bowling greens. The infamous sheep grazed sea washed turf, much favoured in the 1920's, 30's and 40's was basic fescues.

Fescues can be split into two types: Chewings Fescue and Creeping Red Fescue. In simple terms:

For Chewings fescue:

- Very fine, needle like leaves.
- Tolerant of dry soil conditions.
- Slow growing.
- Used in high quality mixtures.
- Spring-Summer growth habit.
- Tufted species that does not spread.
- Seed is expensive.

For Creeping Red Fescue:

- Fine, needle-like leaves.
- Tolerant of dry soil conditions.
- Slow growing.
- Widely used in many different mixtures.
- Creeping growth habit. It is a rhizomatous grass, so will spread quite quickly.
- Seed is a lot cheaper than Chewings Fescues.

Bents are now THE grasses that are used extensively in golf greens. A lot of grass seed mixtures recommended for bowling greens are 80% Fescues / 20% Bents. Bent seed is the smallest of the grass seeds we are discussing today, about 1mm in size, compared to fescues at 4/5mm and the larger Ryegrass seed 7 / 10mm. So you get a lot of Bent seeds in a kilogram.

Bents were introduced into the UK in the 40's and 50's and were known as Colonial Bents. They were introduced when they were identified as a grass type and introduced into fine lawns / golf and bowling greens.

There are three types, but only two are suitable for bowling greens:

Creeping Bents:

- which as its names suggest produces many stolon's that spread above the ground across the soil surface. This produces a very dense growth that will choke-out most other grasses and even weeds. For this reason it is favoured by golf-course managers for the greens especially since it can also be mowed to as little as 3 mm.
- However in bowling greens it will choke-out other grasses giving it weed properties, since its relatively pale colour stands out against darker grasses and makes for a piebald effect.
- In addition the stolons encourage the development of *thatch* which is an undesirable condition causing the lawn to feel spongy and appear light brown just below the green blades.
 Very close mowing and special care is needed to control thatch.

Common Bents:

- is the type of bent found mostly on old estate lawns. It may also be used on golf courses/ bowling greens. It can still be mowed very closely, but it does not have the same problems of stolon production found with Creeping Bent, although some thatch may still be produced. In North America it is called 'Colonial Bent grass'.
- This species is a good choice for greenkeepers who wish to achieve a highly groomed appearance on their green. It is a slow grass to establish but the end result is worthwhile and the maintenance is less than for creeping bent.

So for bents, yes use in a mixture and they do have a lot of good characteristics, but they are generally the hardest grass to manage!

I hope that you, the reader, will now have some basic knowledge on how grasses and bred, how they are grown and why most bags of grass seed are indeed mixtures of different grasses. These will have been carefully selected for each use and those recommended for bowling greens will incorporate the necessary characteristics. The STRI test hundreds of varieties of grasses each year and publish the results. They list Shoot Density, Visual Merit, Mean, Resistance to Red Thread, Winter Colour and Summer Greenness.

We select mixtures to suit each one of our sites and base our selections on these STRI lists. The only remaining grass species are the Poa's and the Meadow Grasses.

Both are weed grasses, have poor shallow roots and really excel under a high chemical, high irrigation regimes.

All I will say about these grasses is to try to get rid of them asap!