

Seed or turf? If time allows, you'll reap what you sow

Ellie Tait looks at when seeding is the right option

With temperatures in parts of the UK reaching in excess of 16°C by late March, greenkeepers looking to renovate will be hoping it marks the start of a long, warm summer that's perfect for growing grass.

The commercial pressure on golf courses to open all year round means that there's often no option other than to turf tees, greens and bunkers to keep them in play, helping clubs to limit revenue loss and ensuring courses remain constantly pleasing to the eye.

Both turf and seed establishment techniques have their place in the turfgrass industry, offering the greenkeeper a choice of methods when establishing, renovating and developing a new grass sward.

If you choose to seed, the advances in seed development during the last decade have not only made the end result more predictable, but they've undoubtedly given greenkeepers the ability to create better playing surfaces.

SEED CHOICE

There's no doubt that the seed you choose is pivotal to the future establishment, stability and longevity of your playing surface.

The 'one size fits all' approach to selecting seed has long gone. In recent years we've seen notable advances in plant breeding, producing grass varieties that can perform and adapt under different conditions.

There are seed mixes to suit all greens maintenance regimes, and as cultivars have become more specialised, it's now possible to request a mix tailored to your courses requirements. By knowing the precise cultivars used, you can design a mixture that suits its individual climatic conditions and other variables that stress the plant including shade, drought, excessive moisture, combinations of soil types, different pH levels, poor soil fertility, windy and exposed sites, close mowing and heavy usage.

When selecting turf, you're restricted to the cultivars and species used by the grower. The grower should be happy to visit your course with samples of their turf or alternatively, visit their premises to discuss your requirements.

PURITY

Through careful preparation of the course prior to sowing and the intensive treatment and cleaning that seed is subjected to during the production process, weed and pest infestation are virtually eliminated. Seed houses have to follow stringent checks and processes governed by DEFRA, reducing the contamination of seed mixes with black grasses, Poa, and weed seeds. The cleaning process also tends to remove weaker seeds that are unlikely to germinate when sown, ensuring that you receive a pure mix of strong, healthy cultivars.

Many mixes are now coated with a preparation that helps prevent disease and stimulates germination and establishment.

As seed is sown directly into the existing rootzone, it develops stronger and quicker rooting than turf and has increased resilience to drought and wear. If you've chosen to turf but not specified the rootzone on which it's grown, there's a risk that what's imported might not be compatible with the existing soil, resulting in the roots staying in the surface area rather than penetrating deeply.



▲ Bent Grass called 'AberRoyal, *Agrostis Capillaris*, bred in the UK for UK Golf Courses'

SUCCESSFUL ESTABLISHMENT

Time is probably the most important factor in deciding whether to turf or seed. Turf provides an instant playing surface, while typically, seed takes 12 months before it is established enough to be played on.

The window of opportunity to seed is now wider than ever before. Modern cultivars can germinate and continue to grow in lower temperatures, extending the growing season as late on as November in the southern counties.

The advent of dwarf perennial rye varieties used on tees and fairways means that surfaces can be established quickly, and they do perform on par with more traditional varieties.

Budget restraints may also influence the decision. Although seeding is a cheaper method of renovating than turfing, a 20-25kg bag of grass seed costs between £55 and £200 depending on the mixture, so it's vital that the optimum benefits are achieved.

Brian Robinson, Rigby Taylor's Director of Grass Seed Research, highlighted some common reasons for seed failing to flourish:

"It's absolutely vital that the top dressing touches the seedling so that it can absorb moisture. If it's not kept moist, it will wither after the initial

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germination. For brown top bent, 50% of the topdressing must be put down before sowing, and 50% afterwards, otherwise the seed will be left dry on top.

During renovation work, it's possible to over-sow seed into the existing sward without affecting its performance, but the thatch level must be reduced to a practical minimum to allow space for the roots to go down."

Weather in all its extremes will affect seed and turf establishment and different species require sowing at different times of the year. For example, for golf courses that require bent and fescue grasses, sowing in March and April would be unlikely to yield the best results as the soil temperatures are too low for germination. It's necessary to leave sowing of these varieties until later in the summer, when better weather and higher soil temperatures are guaranteed.

Establishment can be further enhanced by using fleece or germination sheets, which will raise ambient temperatures above the soil surface and provide additional protection to newly seeded areas.

An application of a specified pre-seed fertiliser containing Phosphorous and Potash will also enable the emerging plant to gain a good foothold quickly.



▲ British Seed Houses Grade 'A' Amenity seed mixtures contain the latest cultivars bred by the Institute of Grassland and Environmental Research (IGER)

On tees and fairways and with reasonable soil and weather conditions from late spring onwards, it's reasonable to expect germination within 7-14 days, possibly quicker with the use of fleece/germination sheets.

The growth rate will differ between species with the more vigorous dominating the sward, sometimes resulting in the finer grasses being lost.

MAINTENANCE

To establish a mature sward from newly sown seed requires higher maintenance than for turf, where the initial establishment has already been achieved by the grower.

Once it has germinated it's important to allow the sward to grow to a predetermined height, dependant upon the grass varieties.

Light rolling two to three weeks in will encourage the plants to thicken and tiller from the base. The first cut should take place within another week or so. Just 'topping' the young seedlings will strengthen and thicken the sward.

From then on, optimal results will be achieved by;

- Maintaining a consistent height of cut
- Keeping the sward watered
- Maintaining soil nutrient status
- Keeping the soil aerated
- Removing any thatch and debris from the surface
- Keeping the sward weed free
- Using the appropriate mowing machines to obtain the desired finish

Within 12 months or so you can expect to have a surface that's fit for play. It's possible to shorten this time slightly if sowing takes place in the autumn and weather conditions remain favourable.

Photographs kindly supplied by British Seed Houses

The Neil Thomas Memorial Golf Day

Monday 14th June 2004 at Aldwark Manor

The Annual BIGGA Golf Day has been dedicated to the memory of the late Neil Thomas, BIGGA's first Executive Director, who passed away in February of this year. The event will be held at Aldwark Manor Golf Club, York, on Monday 14 June and the Association welcomes the entry of teams of four, with all profits from the day being donated to St Michael's Hospice, Harrogate, who cared superbly for Neil during his final weeks.



The programme for the day is as follows:

- Bacon sandwich, tea or coffee on arrival
- Tee times from 10.00 am to 1.30 pm
- Teams of 4 entered in competition over 18 holes, under Texas Scramble rules
- Ploughman's lunch available throughout the day
- Halfway House refreshments
- Team prizes plus Longest Drive, Nearest The Pin & Putting Competition individual prizes
- B-B-Q meal in the evening



The entry fee per team is £200 + VAT, with the offer being made on a first come first served basis

If you would like to enter a team in this golf day in memory of Neil, please contact Sarah Norris at BIGGA HOUSE on 01347 833800 or e-mail Sarah@bigga.co.uk