

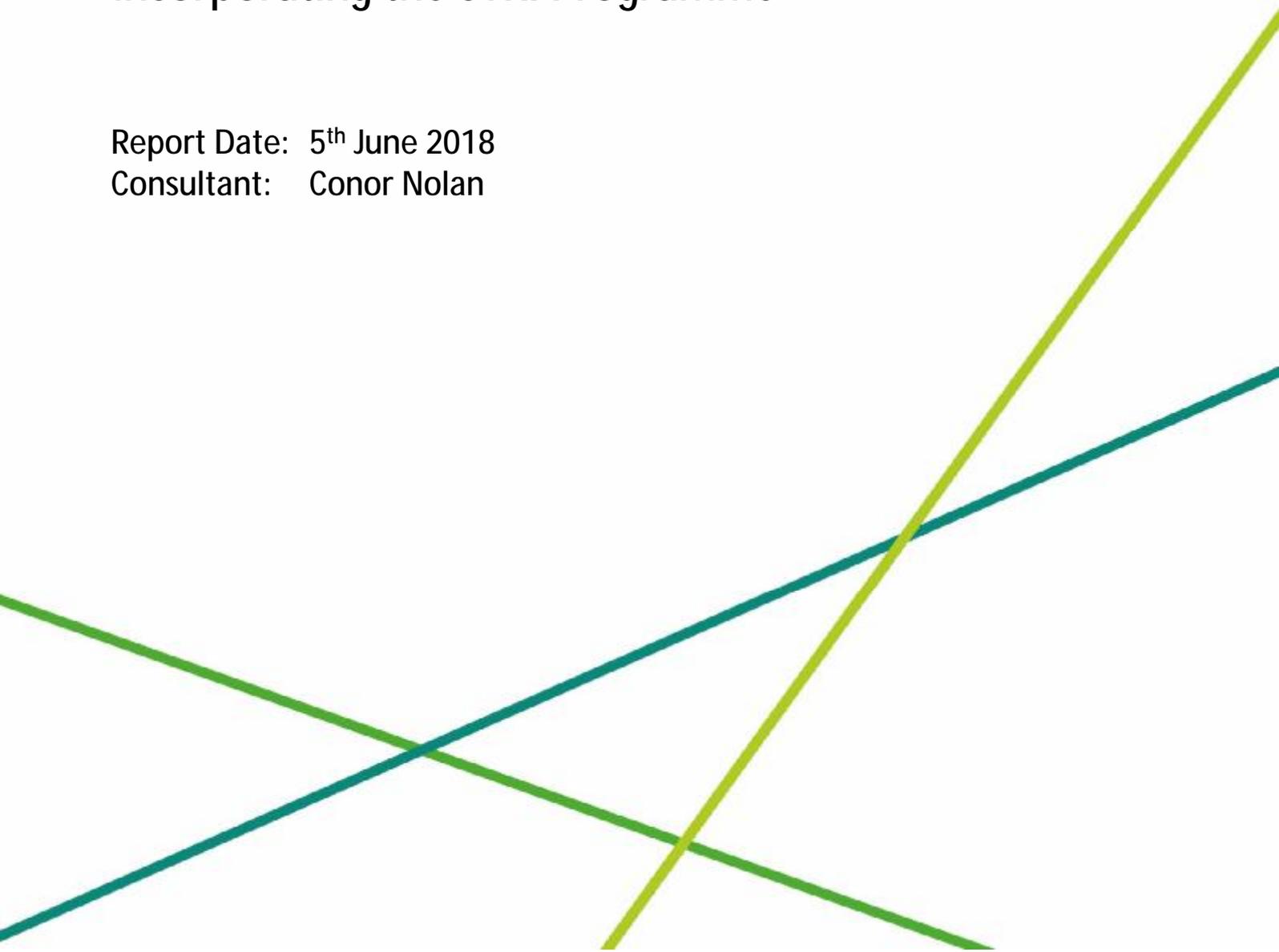


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CLONTARF GOLF CLUB

Advisory Report on the Golf Course incorporating the STRI Programme

Report Date: 5th June 2018
Consultant: Conor Nolan



Date of Visit:	31 st May 2018
Visit Objective:	To objectively measure greens playing quality in addition to review of overall course condition and provision of general advice on maintenance issues throughout the course. Measurements were postponed due to meeting with P Fagan (Club Chairman).
Present:	Mr C Murphy – Course Convenor Mr P Murray – General Manager Mr D O' Malley – Head Greenkeeper Conor Nolan – STRI Ltd
Weather:	Warm and dry. 20°C.

Headlines

- Scars to the putting surfaces were much reduced but there were still some significant ones that should be removed immediately. More intensive plugging was required in February which would have ended the matter.
- The presence of dry patch on greens and lack of plugging of scars reflects the difficulties that course staff face in finding sufficient time because of the heavy golf programme.
- It was pleasing to see the good seed strike from the recent overseeding of greens with the disc seeder.
- Ball roll to non-scarred green sections was good as was firmness/sand topdressing.
- The aprons were somewhat leafy at times. No overseeding was done this May to progress them.
- Tees vigour was good and much improved to the now brighter 3rd and 16th tees.
- Sand topdressing was behind to tees except those that were cored.
- Fairways offered nice lies with good attention to weed control made through herbicide spot treatment in house.
- Vigour of fairways was not too strong, but it was too weak to the 14th fairway.
- Drought to the central part of the bowling green is affecting the overall performance. It is the cause of moss and the high pearlwort population. Fertiliser to recover the green also slows the surface.

Key Actions

- Plug out remaining disease scars on greens quickly.
- Address dry patch on greens through hand watering with hoses/wetting agent.
- Overseed greens in August and September with the now proven Vredo disc seeder.
- Overseed aprons and approaches now with fescue and dwarf perennial ryegrass if they are to progress. Deploy a contractor if necessary using the plant pot method (18mm diameter solid tines) to sow.
- Sand topdress the tees now at 25 tonnes per hectare and again in six weeks or so.
- Plan to overseed the fairways with fescue and some dwarf perennial ryegrass at 125kg/hectare at the end of August/early September.
- Sand the new fairways soon to maintain the functionality of the drainage system. Apply at rates of 20-25 tonnes per hectare. Repeat in September and October.
- Address the lack of irrigation coverage to the central portion of the bowling green.
- Plan to apply Cabadex herbicide to the bowling green in a month or so to control pearlwort weed.

Other Comments

While the extent of the disease scarring this past winter is hopefully a once off due to Darragh being on sick leave the following measures are advised both in the short and medium term:

- Next autumn through winter the strategy for disease control should follow regular preventative applications of fungicide between end of September and early December.
- Once mowing drops to once per week or less in the late autumn then regular application of dew dispersal agent should occur until March. Aim to apply it every 2-3 weeks between end of October and early March. We have to get used to doing this as there will be a day where there are no fungicides. There is no longer any fungicide to provide sufficient curative control. Dew is the main cause of Fusarium patch disease scarring together with a vulnerable grass species.
- It would be helpful if the start to golf were delayed or so during the week until 9am during the low season to allow removal of dew before application of dew dispersal agent occurs. There are insufficient gaps once play starts. Dew dispersal agents last longer when applied to a dry leaf, which is helped by blowing or dew switching.
- Certified training will be provided for the deputy head greenkeeper so that second person is permitted to apply fungicides.
- Promote good air movement and sunshine penetration to surfaces to deliver a stronger plant and drier leaf. Good work has been achieved this spring.
- Sand topdressing shall be postponed between end of September and January.
- No plant potting with larger amount of sand applied in September shall occur.
- Aim to promote new browntop bentgrass through three disc seeding treatments between May and September each year. How successful establishment will be determined by the effect of your traffic levels. Other courses are making good headway while you are a heavily trafficked course with many smallish greens.

Photo Observations and Comments



Figure 1: Hardly a disease scar on the 8th green. Better airflow and sunshine are noted to it now.



Figure 2: Most scars remain to the 15th green above and the 13th. Note the dry patch to the side of the green.



Figure 3: Dry patch to the 11th green. Dry patch was found to the edges of some greens also where a north-easterly wind affected sprinkler coverage. Main bodies of the odd other green were affected (7th, 12th and 13th). The ability to address localised dryness is limited until seasonal help arrives. Scars were mainly found to the meadowgrass at this stage.



Figure 4: Good enough control of organic matter noted to the well-presented 16th green. Pearlwort was seen still to the front and to the odd other green e.g. 5th and 12th.



Figure 5: Good vigour presented to the 3rd tee helped by effective coring/sand topdressing and tree removal.



Figure 6: Good sand build up and coring of the 9th tee. Non-cored tees were not well sanded this spring.

Photo Observations and Comments (continued)



Figure 7: Nice ball support noted on the 9th fairway which was typical. Thankfully this year a lower rate of the controlled release fertiliser was applied. Good spot treatment of weeds was seen, which more environmental sensitive and cost effective. Weeds were at a very low level.



Figure 8: Excessive dryness and much reduced ball support on the 14th due to irrigation scheduling issues. Where water has been applied to the second half of the 13th fairway ball support was much better.



Figure 9: Dryness noted to the bowling green is a repeated occurrence for many years. The sprinkler coverage issues have not been addressed due to this pearlwort and moss spread. With weakness and moss there is a call to stimulate growth which slows the surface. While excessive dryness is the main cause of problems the fertiliser treatments need to be lighter and more often to avoid catching up with larger inputs.



Figure 10: Much better sand input to the bowling green since September, which aids firmness.

Recommendations

Greens

- Complete replacement of larger disease scars (greater than 25mm) now in an intensive manner. Use good plugs free of thinness or moss taken from the garden green and nursery (if short). You should be able to complete scar removal in a few days with a couple of staff. Please do not half do the job.
- We need to get on top of hand watering when there is dry patch not only to the edges of greens but also to the main body of greens. That two seasonal staff start soon for the summer is helpful. There is a need not just to hand water these areas with hoses and curative wetting agent (preference for Aqueduct-Aquatrols) but to monitor their status with your moisture metre before they display drought stress. Keep the moisture content between 15-25%. Otherwise you will have hard dry spots, poorer growth and ingress of moss and pearlwort.
- Continue to sand the greens once per week with 5-6 tonnes per hectare until end of September. Given the recent disease outbreak sanding during the off season will cease from end of September until the end of January for now. If there is a dramatic reduction in disease and good use of dew dispersal agents, then applications may resume the following autumn/winter.
- Plug out as much pearlwort (e.g. 3rd, 5th and 16th greens) and ryegrass (3rd green) as you can before replacing with browntop bentgrass plugs from the garden green.
- The height of cut should remain at 3.5mm until September end.
- Maintain the current level of nitrogen with fortnightly applications of fertiliser supplying 0.4g/m².
- Plan to apply Coragen insecticide if you see cranefly (adult leatherjackets) landing on the surface of the greens in August/September. There is a lead in time of 3-4 weeks with the product which affects larvae at the 1st and 2nd instar stage only. Apply at the labelled rate of 0.6 litres per hectare. Water-in if dry.
- Supplement the September disc seeding with further overseeding with an August treatment with the disc seeder (Vredo-25mm drill spacings). Suitable seed mixture includes Bar All bent (Barenbrug). Sow at 30kg/hectare per treatment at a shallow depth of 3-4mm.
- Aerate greens with 8mm diameter tines mounted on the Aercore to reach a depth of 100mm once more over the summer.
- Now that there has been a good seed strike and there is a wish to allow seedlings to persist/establish then disturbance pressures such as rolling, verticutting and grooming should be kept to a minimum. Only verticut if you absolutely must. Grooming is the least damaging of the three treatments but it is still damaging. Only do these treatments if you absolutely must.
- Commencement of the preventative wetting agent programme is due to begin in late March. Repeat monthly until September.

Greens Aprons, Surrounds and Approaches

- Maintain the current approach to mowing the aprons/approaches with the new 8 bladed greens grade triplex mower set at 10mm height of cut.
- While there is a good mower in place the aprons and approaches need overseeding with better grasses to improve. To achieve overseeding of the aprons/approaches twice per year may need an outside agency to do it as the optimum time to do it is when growth is good and mowing demands are high. A treatment is due now and again in mid-September.

- Sow the aprons with 70% mid green coloured dwarf perennial ryegrass (e.g. Barolympic, Chardin, Claudine and Bargold) and 30% slender creeping red fescue seed. Use 18-19mm diameter solid tines set to a shallow depth to form 'plant pots'. Sow at a rate of 60-80kg/hectare using a drop spreader to apply seed before working the seed to the 'pots' with a turned upside-down tees mat. Do not use a brush to work in the seed or the dimple seeder to sow. Sand only once seedlings emerge.
- Fertilise aprons and approaches when putting surfaces are being fed in the months ahead. make the odd extra feed if uniformity begins to wane. Try and avoid applying a granular unless it's a low analysis e.g. 4:3:4. One wishes to avoid lush conditions which will only lead to puffy conditions and prevent new seedlings establishing.
- Apply 9:7:7 to any weaker or trafficked surrounds to maintain uniformity on an on-going basis to counter wear e.g. approach to 12th and left side of the 8th and 13th.
- When ground conditions allow continue to make light applications (15 tonnes per hectare) of sand to paths and pinch points on surrounds (e.g. 13th surrounds) in the coming months.

Tees

- Sand the tees and paths soon and at 25 tonnes. Repeat six weeks later or so. 5-6 applications are required during the year to avoid softening/ponding. Lighten the rate to 15-20 tonnes per hectare in the low season when days are shorter and potentially damper.
- While you favour granular fertiliser application it would be cheaper to apply urea at 25kg/hectare in 300 litres of water each month until October. Or apply liquid 30:0:0 at 35 litres per hectare each month instead. Application of 9:7:7 could be reserved for par threes.

Fairways

- While there is insufficient run time reportedly to irrigate the new fairways during the night it must be done some way to prevent the current level of dryness. Water well in between mowing days before golfers reach those holes. application was due now.
- My preference for nutrient application for the main growing season has for a long time been to apply liquids. It means that we can maintain more control and consistency at a lower level but with sufficient sward density. Application of a controlled release fertiliser maintains growth at a higher level that suppresses fescue which we wish to encourage. Urea application every 4-6 weeks between May and October at a rate of 25kg/hectare in 300 litres of water would be a starting point.
- Overseeding of the fairways should be an annual event with 35% slender creeping red fescue, 30% chewings fescue and 30% dwarf perennial ryegrass (mid-green colour) if we are to improve the texture, ball support and turf/ball/club impact. The operation should be timed for the end of August/early September each year. The contractor should be engaged to do the works. Seed at rate of 125kg/hectare and sow at a depth of 6-8mm with a closely spaced disc seeder i.e. Vredo. It is important that the vigour of the sward is not too strong i.e. moderate vigour is required but with good ball support.
- Sand topdress the new holes soon at light rates of 20-25 tonnes/hectare once there is no drought. Repeat in early September and again in October. The new holes should receive in the order of 80-100 tonnes of sand in total per hectare per year to prevent deterioration of the overall drainage.
- Maintain the fairway at a height of 13-14mm for the main season.
- Address the dipped ground to one or two gully pots on the 12th fairway by lifting the turf next November. Dress with topsoil before replacing the turf.

Bowling Green

- The poor irrigation coverage to the central area of the green needs to be rectified quickly either through consultation with the contractor or with Adrian Mortram (your former irrigation consultant). Either the sprinklers will need to be replaced to ensure a much better throw, additional sprinklers will need to be

inserted within the green or a self-propelled travelling sprinkler will be required. The latter is labour demanding but may be necessary in the short term. All problems are stemming from the lack of water.

- Apply Cabadex selective herbicide to the Green at full rate in a month unless there is good response from the recent application of Re-Act herbicide. If there is a good response delay the follow up treatment until early September. Pearlwort is normally only moderately susceptible and requires two treatments.
- Maintain the height of cut at 4mm during the main season.
- Fertilise as per the golf greens.
- Do not scarify to make the green faster. It will only damage the good grasses. Speed will come in time if we can prevent drying out which demands more fertiliser (slows the green) to achieve recovery once it happens.

Tree Plantations

- Ivy at the base of the evergreens to the right of the 3rd fairway is best controlled with a mixture of one small jam jar of glyphosate, one jam jar of Garlon Ultra or Grazon Pro together with one jam jar of diesel (penetrates wax layer) mixed in a 20-litre knapsack sprayer. Apply to the point of runoff over the summer. It will take several weeks to take effect. Control will be dependent upon uniformity of application to avoid any need for a repeat treatment.

Signed

A handwritten signature in black ink that reads 'Conor Nolan'.

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