Making great sport happen

NEWTOWNSTEWART GOLF CLUB

Report on the agronomic condition of the golf course

Report Date: 9th September 2019
Consultant: Ian McClements

Newtownstewart Golf Club

Date of Visit:	Tuesday 20th August 2019
Visit Objective:	To review current conditions and to discuss the effectiveness of the current maintenance regime.
Present:	Mr Ronnie Jack – Green Convenor Mr Alan McFarland – Course Supervisor Dr Ian McClements – STRI Ltd
Weather:	Cool with showers, 16-17ºC, westerly breeze 5 mph

Headlines

- Putting surfaces continue to improve botanically with increasing quantities of desirable species now found through many surfaces. The rate of progress should be accelerated through additional seeding treatments, particularly where greens are weakest.
- It was reported that the course held up well to play over a relatively benign winter and that the putting surfaces were seeded in the spring. It is understood that further overseeding is planned for the week commencing 9th September.
- In the absence of an effective irrigation system, surfaces remained vulnerable to drought stress. Thinner areas of greens are primarily associated with sections vulnerable to drought and dry patch activity. There must be an effective wetting agent programme in place to manage drier conditions as well as being mindful of the need to irrigate when required.
- The preferred bent and fescue species are naturally tolerant of dry conditions and whilst they may brown off and go dormant in prolonged dry conditions, unlike annual meadow-grasses, they will recover when rains return.
- Desirable bent and fescue species will also make the greens more resilient to foot traffic, difficult environmental conditions and disease. Surfaces dominated by these species are therefore environmentally and economically sustainable.
- Nutrient inputs were thus far reported to be in the region of 36 kg of nitrogen/ha and with two or three further applications planned are expected to fall within our target range for these greens.
- Greens were firm underfoot with a little organic debris at the sward base.
- The bentgrass element of the sward was a little leafy at the reported 4.5 mm height of cut. More brushing to elevate the bentgrass leaves into the path of the cutting the units would help to improve texture and ball roll.
- It was reported the greens were not verti-drained in the autumn of 2018 and we would suggest that this deep aeration would be desired to factor the underlying soil and to encourage water movement to depth.
- Tees were looking a little tired and efforts should be made to intensify the maintenance programme on tees to assist with sward recovery and improve standards of presentation and playing quality.
- The conifer to the rear of the 6th green complex had been trimmed but not removed as suggested and tree thinning works down the left hand side of the 8th had yet to commence. Given the trees that are prevalent on the course that adversely impact upon turf grass growth, there should be a commitment to remove or thin out specimens where appropriate.
- Gorse in the carry of the 13th hole is obscuring the view through to the green and the plantation should be regenerated to keep the gorse in its pioneering/building phase.
- Fairways and roughs were generally being presented to a satisfactory standard. There was some discussion around the length of the sward cover and the impact that this was having on course playability.

Key Actions

- The opportunity should be taken to close out some of the thinner areas that are prevalent on greens through overseeding. Make provision to apply enough nutrient to encourage the young seedlings to establish and to develop grass density ahead of the winter period.
- Intensify the overseeding programme to accelerate botanical improvements.
- Review techniques for managing dry weather conditions particularly the application of wetting agent over the season.
- Greens should be opened to depth with the Verti-drain to encourage moisture penetration and rooting to depth.
- Areas of naturalised rough require management with mowing and scarification treatments to encourage thinning and to improve playability.
- Tree removal and thinning remains an important element of course maintenance to improve the environmental conditions for turfgrass growth in several areas.

Photo Observations and Comments

Figure 1: Encouraging signs of increasing bent and even fescue are noted on many putting surfaces

Figure 2: Damaged cup covers were adversely affecting greens presentation

Figure 3: The 2nd green was one of the thinnest surfaces and more seeding is required to build grass density

Figure 4: Where density is good, sward texture is compromised by the leafy bentgrass element

Figure 5: Thinning can be attributed to the drought of 2018 where surfaces had yet to fully recover

Figure 6: Excellent rooting noted through many greens, here on the 3rd green

Figure 7: Profiles in some areas remain hydrophobic and water repellent

Figure 8: Freshly cut rough provided a satisfactory degree of penalty off the fairway. During periods or more vigorous growth, mowing frequency should be stepped up to achieve the desired playing quality for weekend golf when most members play

Figure 9: A Hydraulic leak had occurred on the approach to the 6th green, it remains to be seen how much damage will be caused and the appropriate form of remediation

Figure 10: Gorse in the carry to the 13th green site should be rejuvenated

Recommendations

Greens

- Wetting agents are important in helping to maintain a receptive surface to moisture whether is artificially applied or occurs naturally through rainfall. This is an important element of the green's maintenance programme in terms of minimising drought stress and dry patch activity. Wetting agent application should begin in spring before the profiles experience any drying and be sustained monthly through to end of September or early October. Use one of the better-quality wetting agent products such as Revolution, H^2 Pro, Qualibra or similar.

- End of season renovation work on greens should comprise a light scarification to lift out some of the organic debris at the sward base followed by top seeding. Use a small 10 mm diameter blunted tine on a 50 mm penetration pattern to puncture the surfaces to a depth of around 10 mm. Top dress to part fill the tine holes and follow up with an overall application of seed. Use a conventional fescue/bent seed mixture at a rate of 25-30 g/m^2. Follow up with a further dusting of sand to support the seed.

- Once seeding works are complete and seedlings start to show then lift the height of cut from the present 4.5 mm to 5 and then to 5.5 mm for the winter period. Pedestrian mowing should be introduced at the earliest opportunity to confer more protection to the surfaces and to the green perimeters from turning mowers.

- Intensity the seeding programme with additional drip seeding using a dimple type seeder on at least three to four occasions over the growing season where botanical improvement is desired or where greens are marginally thinner due to the remnants of drought. Seeding can be dovetailed with a light dusting of top dressing but ensure that the seeder penetrates the surface to drop a couple of seeds into each slit or dimple. More regular seeding should occur if greens experience any thinning during the growing season.

- Aim to open the green profiles to depth with the verti-drain, using a set of 13 mm dimeter tines with a little heave. Use the turf iron to restore surface levels for play following the process.

- The nutritional programme is on a sound footing but make provision to apply a proprietary autumn/winter feed around the time of the proposed end of season seeding in early September. Use a product containing 5-6% nitrogen and apply at a rate of 25-30 g/m^2. Use a lawn sand or similar in the spring to initiate growth at lower soil temperatures and once growth moves on to a stable footing then apply a proprietary granular product containing around 8% nitrogen. Liquids are valuable in that they provide small quantities of nutrient whilst avoiding excessive flushes of growth that can compromise pace. The current inputs utilise liquid fertilisers which are easy to use but alternatives would include the formulation of straights using technical grade ammonium sulphate and urea dissolved and sprayed on to the greens. A solution made up of 5-6 kg of urea and 5-6 kg of ammonium sulphate applied per ha which supply approximately 3.4-4.0 kg of nitrogen per ha and could be applied every three to four weeks as a guide to support sustained slow but steady growth.

- Use the small 6 or 8 mm diameter tines with the Procore on two to three occasions over the summer months to keep the surfaces open and receptive to moisture. Use the aerator following periods of heavy play, particularly in wet weather conditions to help counteract any surface thinning that may arise because of foot traffic.

- Grub activity was noted several green complexes including the 9th, 11th, 14th and 16th and the need to apply Acelpryn (see attached information leaflet) for leather jacket control was discussed. This product is available through your local Syngenta representative, i.e. John Lindsey which should be applied ahead of egg laying to control grubs at the one or two instar growth stages.

- To assist with disease control, improve turfgrass strength with monthly applications of potassium phosphite through the late summer period and through to the following spring.

Green Complexes

- The lifting of the crown of the evergreen of the rear of the 6th green has helped to improve air movement but the crown of the canopy still casts a shadow across the green and it would be prudent to remove this species in its entirety.
- The conifers at the rear of the 11th green would also benefit from being removed to improve the local environment and growing conditions of the 11th green site.
- The hydraulic leak that had just occurred on the approach to the 6th green could cause the sward cover to dieback which will then need to be repaired through localised spiking and seeding or returfing depending upon the extent of the damage. Fortunately, the hydraulic hose blew in the long grass which will be more resilient to damage.

Tees

- Broad-leaved weed growth on tees should be controlled before growth tails off in the autumn. These surfaces would benefit from an intensification of the maintenance programme to improve their resilience to play as well as enhancing standards of presentation.
- Increase nutrient inputs to support stronger growth and recovery from wear, a process that will also help to build grass density. To avoid excessively strong growth in a single application use a slow release fertiliser with around 50-60% of the nutrient and slow release form and apply when grass growth has stabilised in the spring. This product can be topped up with conventional fertilisers at the start of the season and then towards the end of the summer as the effects of the slow release product wain. Use a product containing around 8-9% nitrogen.
- Regular divotting is important to encourage recovery from scars and also helps to restore surface levels, we would expect a weekly divotting programme to be instigated with extra divoting on Par 3 holes or where irons are used off the tee. When divotting, plan to move tee box markers in a structured manner starting on one side before moving rearwards across and then forwards. Introducing divot boxes on tees may help if members can be encouraged to use these when playing but these are still no substitute for a regular ongoing programme. The divoting mix should comprise 60-70% sand and 30-40% compost with seed. Ensure the seed content is high enough to accelerate germination and establishment.

Fairways & Semi Rough

- Whilst the relationship between the mowing heights of fairways and semi rough were satisfactory at the time of the visit, some discussion was held regarding the playability of the semi rough for members at weekends considering semi roughs tend to be cut at the start of the week.
- During periods of high productivity, it would be prudent to move the mowing regime closer to the end of the week so that the course can be presented to a higher standard when members are playing.

Roughs

- The naturalised areas of grassland require management to encourage the development of a thinner and wispier stand of grass that will become in time much more playable and facilitate ball retrieval.
- Areas of naturalised rough should be maintained through a programme of close mowing and scarification, removing the clippings and debris following each operation. Rank areas of grassland would be best treated in this manner in the spring and again at the end of the growing season. The objective is to thin out the sward cover and hence mowing and scarification needs to be aggressive so do not be afraid to scalp the surface when undertaking the work.

Signed

Ian McClements
Senior Consultant
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A suspension concentrate formulation containing 200 g/l chlorantraniliprole.

For the control of leatherjackets and chafer grubs on golf course greens and tees, horse race courses and airfields.

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For use only as a professional insecticide
Crops: golf course greens and tees, horse race courses and airfields
Maximum single dose: 0.6 l/ha
Maximum number of applications: 1 per year
Latest time of application: 30 September
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To protect aquatic organisms respect an unsprayed buffer zone to surface water bodies in line with LERAP requirements.

DO NOT ALLOW DIRECT SPRAY from horizontal boom sprayers to fall within 5 m of the top of the bank of a static or flowing water body, unless a Local Environment Risk Assessment for Pesticides (LERAP) permits a narrower buffer zone, or within 1 m of the top of a ditch which is dry at the time of application. DO NOT ALLOW DIRECT SPRAY from hand-held sprayers to fall within 1 m of the top of the bank of a static or flowing water body. Aim spray away from water.

This product qualifies for inclusion within the Local Environment Risk Assessment for Pesticides (LERAP) scheme. Before each spraying operation from a horizontal boom sprayer, either a LERAP must be carried out in accordance with CRD's published guidance or the statutory buffer zone must be maintained. The results of the LERAP must be recorded and kept available for three years.

Do not contaminate water with the product or its container. Do not clean application equipment near surface water.

Avoid contamination via drains from farmyards and roads.

RISK TO NON-TARGET INSECTS OR OTHER ARTHROPODS. See DIRECTIONS FOR USEȄ

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WASH HANDS before eating and drinking, smoking and after work.

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

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Keep out of reach of children

Keep away from food, drink and animal feed stuffs

This material and its container must be disposed of in a safe way

KEEP IN ORIGINAL CONTAINER tightly closed and in a safe place

Syngenta UK Ltd.
CPC4, Capital Park, Fulbourn, Cambridge, Cambridgeshire, CB21 5XE Tel: 01223 883400

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IMPORTANT: All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

Avoid spraying within 5 m of the field boundary to reduce effects on non-target insects or other arthropods.
The best available application technique, which minimises off-target drift should be used to reduce effects on non-target insects or other arthropods.
To protect bees and pollinating insects do not apply to crops when in flower. Do not use when bees are actively foraging (i.e. apply in the early morning or late evening). Do not apply where other flowering plants are present.

[illegible]

Golf course greens and tees, horse race courses and airfields

[illegible]

Leatherjacket (larvae);
Common crane fly ([illegible])
European marsh crane fly ([illegible])

Chafer grub (larvae);
Cockchafer ([illegible])
Garden chafer ([illegible])
Summer chafer ([illegible])
Welsh chafer ([illegible])

[illegible]

[illegible]

Acelepryn is active on the 1st and 2nd instar stages only.

[illegible]

Leatherjackets:
Egg laying is likely to start in August and continue through to the end of September.
For best activity apply Acelepryn from start of July to end of August. Later applications may not be effective since the peak of egg laying may have already begun.
Chafer grubs:
Egg laying is likely to start in May and could continue through July.
For best activity apply Acelepryn from mid-April to end May.

[illegible]

0.6 litres per hectare, applied in 500-1000 l/ha water.
Acelepryn should be irrigated immediately after application.
Do not apply more than 1 treatment per year.

[illegible]

Make sure the sprayer is set to give an even application at the correct volume. Apply as a medium spray.
Fill the spray tank with half the required volume of clean water and start agitation. Add the required amount of ACELEPRYN and continue agitation whilst adding the rest of the water. Agitate the mixture thoroughly before use and continue agitation during spraying.
Take particular care to avoid overlapping of spray swaths.
Thoroughly wash all spray and measuring equipment with water and a wetting agent immediately after use.

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For further information: Contact Syngenta Technical Enquiries: 0800 169 6058
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CPC4, Capital Park, Fulbourn, Cambridge, Cambridgeshire, CB21 5XE
Tel: 01223 883400
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Manufacture date 29/05/2018 for batch codes MHA8B23ID1 and MHA8B23ID5