

## GOLF COURSE MANAGEMENT: WORK DIARY - SEPTEMBER 2012

### Overview

The amount of rain that fell in most parts of the UK was second only to the level recorded in June, with around 140mm (5.7 ins) being fairly common. Figures from the Met Office indicate that this has been the wettest summer in 100 years and few would disagree with that. With irrigation systems being almost redundant this year, those paying for 'mains' water will appreciate significant savings but those will have been off-set by higher fuel bills which some estimate at being 30% higher than normal. The increase in mowing will also mean additional hours of use on front line cutting equipment which has an impact on machine wear and servicing costs. However, costs on wetting agents are likely to be lower, therefore there are 'pluses and minuses' in terms of costs. What is certain however, is that most clubs will have seen a reduction in revenue, especially on the public and daily fee courses. All in all it has been a difficult season for most course managers and a regular challenge in maintaining good turf quality and playing conditions. August was a key month for carrying out greens renovation with more and more clubs opting for this time of year in order to benefit from warm soil temperatures and a faster recovery rate while competitions and matches at 'member' clubs are generally low key. For courses that rely on holiday income from green fees however, August is a busy month and maintenance work would be deferred until later in the season: another example of one size not meeting all requirements. Courses that did forge ahead with coring, scarifying and top dressing did have to dodge the showers and days of heavy rain with the result that these tasks took longer to complete and golfer's patience and understanding was required. Good communication was therefore essential and very much part of the Course Manager's remit. Another key challenge last month was dry mowing, especially on fairways and semi-rough. Towards the end of the season, grass is often wetter in the morning than later in the day, therefore mowing these areas in the afternoon is more preferable in achieving a drier and cleaner cut. This however, will require a degree of flexibility in start and finish times but that is a requirement of golf course management. September tends to be a popular month for both club golfers and societies since it is the last full month of good hours of daylight and mild temperatures, although early morning ground frosts are not uncommon. Whether or not work to the greens has been completed in August or due to be carried out this month, the most important factor is to restore playing surfaces as soon as possible in order not to impinge upon the paying customer. The last few Septembers have been both dry and warm but that is by no means a guarantee that this month will follow suit, although by the law of averages, the UK is long overdue a period of settled weather. In terms of mowing there is usually a slight, albeit short surge in growth before slowing down as the onset of winter looms ever closer. However, due to the constant supply of moisture, the grass has never stopped growing this year. Since September is a busy month for most clubs, the needs of the turf have to be balanced against the economic requirements for running a successful business. With increasing levels of dampness at night and during the early morning when temperatures are cooler, the risk from disease attack increases and this can be a key issue for Course Managers at this time of year. With the likelihood that nutrient levels could be lower than expected due to constant leaching, the risk from Anthracnose Foliar Blight (AFB) becomes greater. Prevention is better than cure since once the disease is prevalent; protection from fungicides can only prevent damage to turf not already infected. Implementing sound agronomic practices is the key to the prevention of AFB as well as most other turf ailments.



**Deep scarifying & sand filling green then greens' surface 5 days later**

## Greens

Major renovation work on the greens tends to be completed before or after September, depending upon individual club and course requirements. That said, the focus needs to remain on producing dry, firm and consistent putting surfaces of reasonable pace while avoiding any turf stress which will increase the risk from disease such as AFB and Fusarium. September is also the last month where over-seeding can be completed with any guarantee of success, since air frosts are unlikely and soil temperatures remain well above the required growing temperature. Mowing should remain at summer height at the start of the month but likely to rise by 0.5mm before the month concludes. Towards the end of the month, the frequency of mowing may be reduced in favour of rolling, but grooming or verti-cutting should be relatively minimal to avoid mechanical stress, especially if over-seeding has recently been completed. The use of smooth front rollers should also be the norm for that same reason. Aeration needs to continue since it is essential that air is maximised into the root-zone. However, surface disruption must be minimal therefore a combination of needle, micro and star tining will meet the needs of both turf and golfer. Should rainfall be low, then limit the use of automatic irrigation to a minimum. Better for water to be applied manually and targeted where it is needed, although staffing levels may not be sufficient in number for this to occur. After such a wet summer, the use of wetting agents may not be necessary unless there is evidence of dry patch or drought stress. Even then, it will be more appropriate to be in 'target mode' as opposed to 'blanket spray'. Since growth is likely to remain constant in September, the need to supply the turf with sufficient nutrients is also necessary, albeit in very small quantities. Here, a balance needs to be retained in supplying only what the turf requires otherwise too much nutrient will lead to weak and succulent growth that is prone to wear and disease. Too little and the turf remains weak and impoverished, unable to deal with same stresses as mentioned before. Applications should include both Potassium and Iron at this time of year along with Silicon to help improve the strength of the plant cell wall. The addition of phosphite will also act as a mild fungicide and these type of tank mixes along with seaweed and humic acids should be part of the overall turf nutrient strategy, especially if previous turf stress was encountered. Surface dampness will steadily increase as cooler conditions prevail through the night, leading to a heavy dew forming. This is the danger period for disease to develop therefore the duration of surface wetness needs to be curtailed by both manual means and by using a penetrant or dew removal product.

## Tees

Mowing is likely to remain at twice or even three times per week unless conditions dictate otherwise. The HOC should remain at around 12 mm for most courses but should be raised for non-irrigated tees if a spell of dry and warm weather ensues. Should such areas be drought stressed, then apply a wetting agent if necessary but best to solid tine in advance. Playing levels are likely to increase due to the impact of society play and competitions, therefore daily movement of tee markers and regular divoting will be the norm to maintain good surface quality and presentation. Fertiliser requirements will be based purely upon the needs of the turf and largely dependent on when the tees were last fed. The standard requirements of low N and moderate K should continue, along with a Plant Growth Regulator (PGR) to maintain good turf density. If over-seeding is planned, then aim to scarify in advance in order to create the best possible environment for the young seedlings to germinate. Good seed to soil contact at about 4 to 6mm depth will give the best results and if possible cover with top dressing for added protection.



Dry patch on tees needs to be treated in the same way as per greens but underlying problem of thatch needs addressed

## Surrounds

The maintenance of collars should be similar to that of the greens, apart from the obvious difference in height and frequency of cut. Potential problems to be aware of are from drought stress and wear from either equipment turning or from golfers where 'bottlenecks' occur. Aerify before applying wetting agent for the former and introduce traffic control measures re the latter where possible. This is also a good time for over-seeding any weak collars but again, the emphasis needs to be on good preparation of the surfaces for germination to be successful. The main area of greens surrounds require little maintenance other than regular mowing at around 35mm. Should these areas be lacking in sufficient vigour then feed with a general compound containing a small

amount of N. Autumn/Winter slow release feeds work well for these areas but for most courses this will be unnecessary.

### **Fairways**

Full grass cover and good presentation should continue throughout the month since there is sufficient moisture in the soil. This will give a good contrast between semi-rough and fairway. Mowing should still be twice per week at between 14mm and 17mm unless on links or heathland courses where mowing heights are likely to be less. In September, 'dewy' mornings may become the norm therefore the avoidance of wet mowing is paramount for course presentation as mentioned previously. There are various options for dew removal, these include brushing and dragging a hose-pipe along the fairway between two run-around vehicles. After



Coring fairway with 17mm tines at about 120mm depth. Wiedenmann Super 500 used for core collecting

so much rain, turf vigour may be slightly in decline, especially on 'thin' or hungry soils therefore an application of Urea and possibly Iron may be all that is required as opposed to the more costly granular feeds. Divot filling is an on-going requirement but time consuming; therefore the solution may be 'divoting parties' with the enticement of a pizza and beer to reward the member's endeavours. Should fairways contain too high a fibrous content or suffer from compaction, then remedial measures need to be taken while conditions remain favourable. This requires an aggressive approach and may not be popular with golfers at this time of year, but on the other hand, the work may not be effective if carried out too late. The choice of scarifying, coring or deep tining will depend upon the work required, equipment available and the likely cost; suffice to say that the cleaning and removal of debris will be a key factor. This work may be better suited for contractor hire but that is for the club to determine. In some instances, over-seeding may be required, most likely via a slit-seeder, but only once much of the fibre has been removed or compacted areas alleviated.

### **Roughs**

Limited maintenance of rough areas will be required in September apart from regular mowing; the frequency of this being reduced towards the ends of the month. Management of deep or out of play rough should continue when time permits with a view to 'cleaning' and 'topping' all areas before the season draws to a close; the aim being to reduce nutrient levels by removing the cut grass. Early in the month it may still be possible to target weed control of docks and thistle although the success rate may not be as high as when tackled in the summer months, albeit dry days were often few and far between.

### **Bunkers**



Problems with drainage and steep sand face need to be resolved for this bunker to perform as originally intended

On-going maintenance will include regular trimming and edging plus blowing sand clear if grass faced bunkers are present. Stone picking and weed control should form part of the regular program along with periodic checks on sand depth in order to maintain consistency. A good supply of rakes is essential and any broken or damaged ones should be replaced as soon as possible. Flat raking sand faces is becoming more popular since this reduces the likelihood of balls 'plugging' and also reduces the risk of stones being dislodged. The high level of rainfall this summer will almost inevitably have resulted in wash-outs occurring, therefore this

troublesome aspect needs to be addressed for the long term future of bunker playability and on-going maintenance costs. This is often the key issue facing many clubs.

## Other

**Lakes/Ponds/Ditches:** Ditch lines should continue to be kept trimmed and adequately marked with appropriate hazard posts. This is probably the last opportunity to apply glyphosate to any banks therefore best to make sure that all areas are treated where necessary. Where ponds have become overgrown with bulrushes, September is usually a good time to hire in an excavator to clear out as much as possible while ground conditions are firm and pond/lake levels likely to be low. A skilled operator should be used for this operation and to always work from a level base.

**Paths:** Again, using Glyphosate for weed control to paths, steps and around ball washers, bins, signage etc needs to be completed by the end of this month. Any pot-holes should be filled, levelled and rolled before the onset of winter and while these areas remain dry.

### Watchlist:

**Disease:** During September, the main threat of disease is likely to come from Anthracnose Foliar Blight (listed previously) and Fusarium. With regards to the latter, this is the most common disease that affects turf in the UK and is largely a result of environmental and cultural conditions favouring this disease. These include, surface wetness, shade, lack of air movement, thatch, compaction, shallow rooting, poor oxygen supply within the root-zone, poor drainage, over fertilising & so on. In summary, it is all about managing turf in a more healthy condition. Where greens are prone to this disease then chemical control must be part of an IPM strategy. Preventative action will include applying a mix of products containing the chemicals Tebuconazole (systemic) and Prochloraz (Translaminar) along with a Strobilurin, tank mixed with an adjuvant for better product performance. Good disease prevention has also been achieved by using the new Fludioxonil ingredient from Syngenta, which targets disease pathogens in the soil and thatch as well as within the plant. Other alternatives are available but combining products with a different mode of action and relevant to soil temperature will give the best form of control.



Tank mixes can be applied very quickly and as part of a regular greens program

**Pests:** The risk of turf damage from any pests during September is generally low although secondary damage by birds in search of young chafer grubs may be apparent. If this is evident then applying a parasitic nematode should give good levels of control within a few weeks. Should ground conditions remain wet, then earthworms may start to pose problems on heavier or alkaline soils otherwise this should be a trouble-free month for the majority of golf courses.

**Turf Disorders:** Drought stress and dry patch may give rise for concern if there is a lack of rain and dry, windy conditions prevail. Any water applied to greens or tees at this time of year should be minimal and really confined to the areas affected. See previous 'Greens' article for dry patch control.

### Equipment:

Servicing and checking of equipment to continue, with the emphasis still being placed on hydraulic pipes, valves, safety switches and cutting units. Sharpness of cylinder reels needs to be checked since cutting with blunt blades can add to the risk of disease pressure by 'tearing' the leaf blade instead of a clean cut.

### Irrigation:

By September, systems should be in 'wind-down' mode unless conditions dictate otherwise. If the system is not being used, then this is an ideal time to 'catch-up' on any repairs to leaking valves, pipes, cable breaks and so on while there is an opportunity to do so and while conditions are still warm during the daytime.