

## GOLF COURSE MANAGEMENT: WORK DIARY - SEPTEMBER 2013

### Overview

The warm and dry weather continued throughout August for much of the UK, interspersed with short bursts of rain, albeit localised and varied in terms of duration and amount. Courses in general recovered quickly from the heat stress in July and soon 'greened-up' again, but still remaining firm, providing ideal playing conditions. Since March, rainfall totals have been well below average and considerably lower than in 2012 which has resulted in regular use of irrigation systems. For those who completed their greens renovation work last month, the



Excellent late summer presentation on this Scottish resort course

timing was ideal and most Course Managers have reported excellent recovery, thanks to continued warm temperatures and low levels of rain. Areas previously affected by drought stress or dry patch have benefitted from these conditions along with any remedial work carried out such as coring, tining and dressing supplemented with wetting agent and/or compost. August also proved an ideal month for over-seeding as well as any late weed control for clover and broad leaved weeds. Pressure from Anthracnose Foliar Blight (AFB) disease was largely kept at bay by keeping a close eye on nutrient levels and avoiding turf stress wherever possible; an indication of better awareness and that prevention is better than cure. Towards the end of the month, humidity levels remained high resulting in increased morning dampness. Apart from the issue of early morning mowing, it also heightens disease risk therefore emphasising the need to maintain good air flow and oxygen levels within the root-zone. From a golf club standpoint, increased levels of play on many courses provided good revenue streams with very few golfers affected by poor weather conditions; a far cry from the previous August when rainfall totals exceeded 140mm throughout much of the UK. Weather conditions in early September look to be more of the same with regards to rainfall but with overnight temperatures starting to fall. Recent Septembers have tended to be dry, the last wet September being back in 2006 which ended a prolonged spell of dry weather. Could 2013 be a repeat? This month is popular 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 towards the end of the month. 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. In terms of mowing there is usually a slight, albeit short surge in growth before slowing down as soil temperatures start to fall. 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.

### Greens

Major renovation work on greens now tends to be completed in August or during October once all main club competitions, matches and society outings have ended; this of course depending upon individual club and course requirements. That said, the focus needs to remain on producing 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



Needle tining: An important practice yet minimal turf disturbance

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 considered 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 sarel rolling, needle, micro and star tining will meet the needs of both turf and golfer. Should rainfall amounts continue 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. Should areas of dry patch and drought stress prevail this month, then continue to target wetting agent use 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 possible disease attack from Fusarium. Too little and the turf remains weak, impoverished, and unable to deal with AFB as mentioned above. Fertiliser applications should include very low levels of Nitrogen along with Potassium and Iron and perhaps 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 has previously been 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 possibly applying a penetrant or dew removal product.

### **Tees**

Mowing is likely to remain at twice 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 dry and warm weather continues. 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 visitor 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; an alternative being to slit seed. 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.

### **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.

### **Bunkers**

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. Issues such



Turf loss around bunkers needs to be repaired before the onset of winter

as drainage and erosion wash-outs may not have been as troublesome this season due to lower rainfall but drought stress and turf wear around the bunkers may be greater. Mowing style, HOC,

tyre damage and sand build-up can all be contributing factors therefore a start can be made to alleviating the issues as deemed appropriate.

### **Fairways**

Full grass cover and good presentation should continue throughout the month although soil moisture levels may be low from the recent lack of rain, more so in the south of the UK. 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. However, the simplest method is for afternoon mowing. This will require at least one member of staff working a later shift, probably nine to five, thus mowing fairways when dry. Courses are often quieter during the middle part of the afternoon therefore this option should be considered. 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.



**LEFT: Fibre build-up on fairway leading to drought stress**

**RIGHT: Scarifying with Veemo units for fibre removal. Correct depth is important**

### **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 during the summer.

### **Other**

**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.

**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. Smaller amounts of algae can be removed by raking out the material if the water levels are low and it is safe to enter wearing appropriate waterproof clothing. This work should never be tackled alone for safety reasons.



### **Watchlist:**

**Disease:** During September, the main threat of disease is likely to come from AFB (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. Timing with regard to soil temperatures and choosing the right product, preferably with differing modes of action will give the best results. Applying at half rate mixed with soluble iron may also be an option for disease prevention. At this time of year, preventative action with fungicides will include applying a mix of active ingredients containing the chemical groups Strobilurins such as Azoxystrobin and Triazoles such as Propiconazole. If cooler soil temperatures prevail ie below 12° Celsius then better control is likely to be achieved by using Fludioxonil in conjunction with one of the Triazoles, since the Strobilurins become less effective during colder conditions. In summary, combining products with a different mode of action and relevant to soil temperature will give the best form of control.

**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 become 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 remains a lack of rain this month. Any water applied to greens or tees at this time of year should be minimal and really confined to the areas affected where possible. 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 normally be in 'wind-down' mode unless there continues to be a lack of sufficient rainfall. 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.