## GOLF COURSE MANAGEMENT: WORK DIARY - OCTOBER 2013

## **Overview**

Apart from a wet spell around the middle of the month, September has been largely dry, with temperatures holding up very well and an absence of any early morning ground frosts, apart from in a few sheltered sites in the north of Scotland. This is the fourth consecutive month with below average rainfall for much of the UK and this has been welcomed by golf clubs for helping to increase revenue streams. The likelihood of this continuing may not be encouraging however, but this is based purely on the law Other than the need to of averages. maintain good playing surfaces for the numerous competitions, matches and society



play, the main challenges for Course Managers have been turf renovations following summer drought and heat stress and the threat of disease. Even on courses with extensive irrigation, some areas around green and bunker banks plus walkways, may have suffered varying degrees of turf loss. The other challenge has been the levels of high humidity and warm overnight temperatures which are ideal for turf diseases such as Fusarium to attack Poa annua dominated surfaces. Fortunately, there is still active growth which is good on both counts, especially for those who completed late over-seeding work. Anthracnose Foliar Blight (AFB) also affected greens on some courses; largely as a result of previous turf stress which is caused by a variety of maladies such as drought, low fertility, intensive mowing regimes and compaction. The key objective is to provide healthy turf in a more favourable environment, thus reducing the likelihood of further attack. Irrigation has still been required, more so during the latter part of the month where there has been an absence of any rain. However, with heavy rain forecast during the first week in October, this should see an end to irrigation needs and for some, this will have resulted in higher water bills compared to those in previous years. In October, the hours of darkness are now greater than those of daylight as the sun moves south of the equator. The month is often characterised by mild or even warm day time temperatures but colder nights, sometimes accompanied by early morning ground frosts, which can bring any recent late growth and seedling germination to a sudden halt. Over the past decade, October's have been a 'mixed bag' with well above average rainfall recorded in 2004, 2005, 2006 and 2012. From a golfing perspective, the start of the month is often very good but as daylight steadily reduces, even a mid-afternoon tee time becomes too late for a full round to be completed. The main competition season usually ends on the first weekend of the month and this generally signifies the start of end of season renovation work if it has not been completed earlier. As the level of night time and early morning dampness increases and temperatures fall, there is an increasing risk from disease attack and for the remainder of the year, pressure from disease will be at its peak. This poses the biggest challenge for turf managers and one which requires constant vigilance. For those tasked with the responsibility of managing wooded or parkland courses, October also marks the start of Autumnal leave clearing which usually continues until the end of the year.

# Greens

For many courses, October is still 'traditionally' the main month of the year when major renovation work to the greens is completed. This is largely a result of a full and busy playing season and with it, the risk that recovery from coring, tining and especially scarifying will be slow. Fortunately this now seems to be the exception rather than the rule, so a definite step forward in terms of turfgrass management. As soil temperatures decrease, growth is also in decline and it may take some time for the surfaces to recover, especially if overnight ground frosts occur. However, that is a choice for individual clubs/courses to make and all concerned need to accept the reality of a late season renovation program. It is a balance between revenue, agronomics and the quality of putting surfaces during early Autumn. Late deep scarifying should be avoided unless absolutely necessary although a light pass at less than 12mm depth should still recover fairly quickly. Coring with traditional 13mm tines is the norm and unless root-zone conditions are wet, then this operation should be completed within a couple of days with a clean surface remaining. Top dressing with a straight sand mix or sometimes with a 10 to 20% addition of organic material, depending upon individual choice will follow immediately. On standard 50 x 50mm spacings and at 75 to 100mm

depth, an average green will require nearly 3 tons of dressing in total to completely fill the holes. This may prove difficult at this time of year if surfaces remain damp, especially in one application. The material must be thoroughly brushed, matted or blown into the core holes. A further light dressing will probably be needed to smooth the surface and fill the remaining holes but care must be taken not to smother the surface and increase the risk of disease attack. Any amendments such as Axis can be added to the mix or applied afterwards; this being especially beneficial in shaded areas or in hollows that tend to gather moisture. The benefit here is the increase in pore space which improves drainage and air circulation within the root-zone. For those opting for deep tining, much the same criteria applies but even more material may be necessary, but again there is a need for caution to prevent smothering. In all cases, periodic light rolling will help to restore surface smoothness. Mowing frequency will steadily decrease and by the end of October the HOC should be around 4.5mm but there are of course exceptions depending on the standard of course and grass species present. The use of smooth front rollers as opposed to grooved versions will help to minimise any turf stress. There will be a need to maintain a balanced nutrient level within the turfgrass, more so if the greens are to be renovated since this will aid recovery. However, too much Nitrogen and succulent growth, leads to an increased threat of disease. Any feeding program should contain a mix of low N, higher K plus a small amount of Sulphate of Iron. Other small additions of Calcium, Magnesium and Seaweed extracts can help to form part of the overall feeding program which gives the plant sufficient nutrient and helps to strengthen the plant cell wall; this being a key aspect for disease prevention which is a top priority at this time of year. Another useful addition to any mix is phosphite as mentioned in last month's article; this acting as a mild fungicide. The same applies to using a dew dispersal product but these products are merely an aid, not a replacement for sound turf management.





ABOVE: Dew brushing to remove surface dampness. An essential part of an IPM program to reduce disease activity

### **Tees**

Mowing requirement is likely to remain at twice per week to start with but probably reducing to a single cut by the end. Once the last main 'summer' competition is over, the teeing areas should be scarified or tined (possibly both) and then top dressed afterwards. Where dwarf rye is the dominant or preferred choice of grass for wear tolerance, then over-seeding can still be contemplated; perhaps more so in southern England. Once any renovation work is complete, then the HOC can be raised by 1 or 2 mm to give greater protection from wear. An Autumn feed may be required but this will be based purely upon the needs of the turf and largely dependent on when the tees were last fertilised. The standard requirements of low N and medium K should continue. Where earthworms are a problem, the first application of Carbendazim may be necessary although generally this is not usually required until the following month. An application of Sulphate of Iron, similar to greens may give temporary relief as well as enhanced colour. A common issue on small tees is the damage caused by the inside wheel of a triple mower. Operators need to avoid any tight turning and where damage has occurred, these areas should be re-turfed as soon as renovation work is complete. Shaded teeing areas are at greatest risk from wear therefore may need to be more intensively managed to maintain adequate grass cover.

### Surrounds

Collars and front approaches or 'aprons' may require end of season aerifying, top dressing and over-seeding work and if so, this should be similar to that carried out on the greens. In general, this work is limited to key areas normally affected by drought stress such as ridges and mounds and in those areas around the backs of bunkers where there is no irrigation. This has been more

prominent this year and many courses will be faced with having to re-establish grass cover in these 'non irrigated' areas before the onset of winter. Care must be taken around sprinkler heads and the depth of tining must not be at risk to underground irrigation pipe. Similar to tees and banks, worm control may be required if the course has a high presence of earthworms. The application of a sulphur based fertiliser may suffice but this must be part of a planned program to avoid over acidifying the surface, albeit unlikely on greens surrounds. The use of sharp sand in key areas is another best practice, especially if ground conditions tend to be heavy and wet during the winter months. October may also see the start of using traffic control measures for controlling wear around greens and bunkers, especially if these areas have just been over-seeded. The use of post and rope must be discreet and fortunately there are good product examples on the market which are unobtrusive to the golfer but give the desired effect.

## **Fairways**

Mowing requirement should be reduced to being a weekly task unless the mild conditions continue and growth dictates otherwise. However, the HOC should remain at between 14mm and 17mm for the majority of courses. Much will depend upon individual circumstances, current moisture levels and soil temperatures. With the pressure on mowing reduced, it should be less of an issue to choose a dry time for mowing and possibly spread over two afternoons when courses are often at their quietest in terms of daily play. A cleanly presented playing surface should be the priority at all times and this may require some degree of flexibility in staff working time. Scarifying in October remains an option for those courses where a build-up of fibre has occurred, although this task is better carried out earlier due to a faster recovery period. However, the same criteria apply re depth and cleaning up debris as mentioned in the previous article. October is usually the month where deep tining or slitting can commence but again, this will depend upon individual course conditions and requirements. Following a prolonged, dry summer, the need for turf renovation and over-seeding may be a key requirement therefore the quicker this work can commence, the greater the likelihood of success. For courses with trees or surrounded by woodland, leaves will start to fall in greater amounts as the month progresses, therefore periodic use of a blower will be needed to

keep the main playing areas clear. With regards to fertilising, a few courses may benefit from an Autumn/Winter feed but this is likely to be limited to either high end properties or those on particularly weak or stoney soils and where grass cover is poor. Worm control could be necessary before the month ends but generally this is held back until November unless conditions dictate earlier control. Bearing in mind a full course treatment costs around 1k, a second application can prove a costly hit to many clubs. The use of a wide multi-brush unit can be used when conditions are dry to disperse any wormcasts although this is no substitute for effective control.



## Roughs

The mowing requirement will be reduced and many clubs may only need to cut the rough a couple of times during October; more so on the band of intermediate rough if this is present. 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. Clearing leaves and debris will possibly gain in importance unless the course is largely devoid of trees. Any remaining weed will now have to wait until the following year but for most courses this should no longer be an issue.

### Other

**Lakes/Ponds/Ditches:** In October the main task will be a general trimming and tidying of water edges and ditch lines. This is also the last month where water levels are likely to remain low, therefore planned excavation work should be completed before the month ends. See previous comments in September regarding this type of work.

**Trees**: Continue to remove any overhanging branches that pose a nuisance to both golfers and equipment along with any unwanted growth around the base. With leaves starting to fall, the need to clear these up will gain in importance therefore ensure that all blowers are ready for use. Where hedgerows are present and an integral part of the course, trim only straggly growth since these are important habitats for a multitude of small creatures and insects and should remain largely untouched, unless causing a nuisance to play and only when absolutely necessary.

## **Bunkers**



Maintenance will continue with regular edging and trimming but with growth fast reducing, there should be less routine work to complete other than raking and blowing sand clear from the surrounding banks or faces. As the month progresses and the main renovation work to greens and tees are completed, then a start can be made to any bunker renovations that are planned for the winter season; this including any 'unplanned' drought renovation work where turf may have succumbed to previous heat stress. The main work will have been planned and costed in advance and should be part of a rolling capital improvement. This work is usually carried

out in-house unless on a large scale project. With drainage, erosion and wash-out the likely key challenges to overcome, it is important that any planned changes are effective in over-coming such problems. There are many different methods of renovating and 'lining' bunkers so choose one that is relevant to the objective intended, within the agreed cost and with future maintenance taken into consideration. In general, too many clubs are spending large amounts of time and money maintaining 'hazards' and in challenging economic times, this aspect should be addressed sooner rather than later.

### Watchlist:

**Disease**: During October, the main threat of disease is likely to be Fusarium although if temperatures remain mild, Anthracnose may also prove troublesome where the turf has previously been under stress from heat and drought. With regards to Fusarium, this is the most common disease that affects turf in the UK and was covered in reasonable detail in last month's article. Apart from the necessary cultural and environmental practices that need to be in place as 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. The more recently introduced active ingredient containing Fludioxonil has also shown to give good preventative control. While temperatures remain reasonably good at this time of year, the systemic or preventative route is the one to take if chemical control is necessary. Attention should also centre on any nutrient input listed earlier under 'Greens'.

**Pests:** The risk of turf damage from any pests during October continues to be relatively low. However, as ground conditions become increasingly moist or even wet, then earthworms may start to pose problems on soils which are heavier in nature or are alkaline based. Low pH soils and those on sand are less likely to be affected. Only badly affected areas should be treated with Carbendazim this early in the season due to the cost of the product required.

**Turf Disorders:** Weak or bare turf following previous drought stress may be more prolific this year therefore remedial work will be required as mentioned previously. Should Black Layer exist in any green then this should be treated as a matter of urgency with the key aim of oxygenating the soil by frequent aerifying and thatch removal. Applying activated charcoal will help to neutralise the hydrogen sulphide but the BL will return if the root zone conditions are not improved. Adding a soil amendment such as Axis following aeration work will help to remove excess moisture and create greater air space within the root-zone. However, it is important to treat the cause, rather than just the symptom.

## **Irrigation:**

In October, the system should no longer be in use and by early November, it should be scheduled to be drained down for the winter. Any repairs to leaking valves, pipes, cable breaks and so on should be completed before being shut down, in order that the system is fully up to speed as best as can be assessed and to limit any down time at the start of the next season.

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