

GOLF COURSE MANAGEMENT: WORK DIARY - NOVEMBER 2013

Overview

It was a case of hold on tight and batten down the hatches during the latter part of October. After a quiet start and the month continuing with above average temperatures, a series of storms and heavy rain brought an end to the 'Indian summer'. October was by far the wettest month of the year, with many regions of the UK recording well over 150mm (6 inches) of rain. For those who were relying on a good October for end of season renovation work to greens, it was indeed a challenge after the first week. Growth remained strong for the time of year, while wormcasts were starting to make their presence felt. Disease pressure was a constant threat due to the prevailing conditions and high levels of humidity, while falling leaves started to gain in momentum. The almost constant rainfall during the latter part of the month, gave course managers few dry days to spray greens, while bunker wash-outs affected many courses, especially those with high sand faced bunkers. Storm damage was limited to the south of England with falling trees and debris adding to the workload although nowhere escaped the high levels of rainfall and any drainage issues that ensued. Apart from the odd day of ground frost for some, October was a relatively mild month. In summary, it was a case of having to deal with priorities due to the prevailing conditions, while still presenting the course in as good a playable condition as possible. It is in times like these where maintaining a balance between agronomics, presentation and playability comes to the fore and with it, the skill of those managing golf courses having to juggle the resources available. For November, it looks like the theme of heavy rain and strong winds will continue for at least the first few days of the month, with no major change in weather pattern on the immediate horizon. Mild and wet Novembers are more likely and in recent years only 2010 'bucked' that trend whereby there was a run of hard frosts and very cold temperatures. Historically it is one of the two wettest months of the year, therefore earthworm control along with disease prevention will be two of the main priorities. Constant leaching of nutrients from root-zones, especially those which are sand based, may result in a lack of turf vigour and be prone to wear as well as disease. With reduced hours of daylight, morning play can be particularly busy but afternoons quiet and it is during this time when most work can be completed with only minor interruptions, including fairway mowing if growth continues. November is also the month when clearing leaves becomes the daily routine although not all courses are affected. Courses blessed with free draining soils and not too many trees, may be able to embark on project work or renovations whereas probably the majority will be pre-occupied with routine maintenance requirements which are most relevant to the paying customer.

Greens

As temperatures fall and daylight decreases, growth will have slowed down considerably, more so on sand based greens. Any late season renovation work should have recovered by now and the aim for all courses is to enter the winter with turf in good health and free from any 'summer' stress issues. In other words being fully prepared for what lies ahead! For greens to survive the winter period and constant play, the grass plant must be healthy ie good root depth, cell wall structure



Good, clean and presentable course condition in November



Walk mowed green in excellent condition and with no damage to around the perimeter

and carbohydrate reserves. The surface should also be firm and both drainage and airflow good. Every step must be made to maximise this situation otherwise there will be a high dependence on the use of fungicides or even temporary greens; neither of which equate to good business sense, especially at a time when income levels continue to be challenged for many. Mowing frequency will gradually reduce and become more of a 'clean-up, come roll' operation to maintain good, smooth playing surfaces. HOC for most will now be around 4.5mm although some courses will wish to maintain lower heights for as long as possible.

It all comes down to a balance between turf health vs green speed and the risks involved. Walk mowing greens during the winter months is preferable but not every club has the resources to do so. Ideally smooth front rollers should be used until next Spring to avoid further stress to the turf. The weaker the turf the higher the risk of disease infection and reduced tolerance to wear therefore caution is recommended. The 'clean-up' cut using a triplex is where most greens tend to be vulnerable, especially if shaded or where 'tight' turns are required. Therefore, using a walk mower for this purpose alone can make a difference to turf quality and this aspect should not be underestimated, especially after so much rain during the previous month. In general, regular aerifying should now be the norm and this is likely to be in the form of deep tining, solid tining or slitting. A very light sand dressing can be applied afterwards to restore surface firmness, but care must be taken not to smother the turf. Disease control measures will be at the forefront for many Course Managers and it is all about maintaining dry and open surfaces. This of course can be a considerable challenge if high levels of rainfall continue. The use of one of many Iron products on the market has been shown to reduce disease pressure as long as other practices are carried out and that good Potassium levels are also maintained. Adding phosphite on a monthly basis, hopefully since July should also help to give some control of disease. Using a dew dispersant can help, but the cost and duration of effectiveness may also limit their use. Rolling, as opposed to mowing will help prolong their effectiveness since no part of the leaf is being removed. Greens brushing should also be part of a regular program; an older practice that can sometimes be overlooked. Any fertilising at this time of year must be minimal and only what the plant requires; this being generally restricted to sand based greens where nutrients are more likely to have leached through the root zone.

Tees

Many courses will use designated winter tees for the next few months, thereby giving the main tees time to recover before next Spring. Where this holds true, then the aim should be to aerify and dress these teeing areas. Unless the teeing areas are rye free and consisting of bent and/or fescue then over-seeding can still be worthwhile, since dwarf rye can germinate at temperatures below 10 Celsius. Any badly worn or damaged areas, eg from tyre turning or rabbit damage, should be re-turfed now in order to give maximum recovery time. For those tees in regular use, then routine divot filling and periodic light sand dressings will be essential to maintain good playable surfaces. Maintaining dry surfaces should also be a daily requirement for improved turf quality as well as being appreciated by the golfer. Clearing leaves may or may not be required depending upon each individual tee and likewise earthworm control. Regularly sand dressed tees are more likely to be worm free but there are always exceptions and banks can be more prone to worm infestation than the teeing surfaces. Either way, an application of Carbendazim will give effective control for around 2 to 3 months. An application of Sulphate of Iron will also help, giving a quick 'green-up' as well as acidifying the surface. The mowing requirement is likely to be a weekly pass and the HOC should be between 12mm to 15mm for the majority of courses.

Surrounds

The key maintenance requirements around greens are for traffic control measures, aerifying and sand dressing, followed by worm control where deemed necessary. The objective is to protect the turf from excessive wear and this can only be achieved if the ground is dry, firm and the turf is in good health. It is also best to attend to these tasks early as opposed to dealing with the problem reactively. Every course has its own 'pinch points' due to design and limitations for traffic movement and it is these areas that should be the first priority for such work. The side of the green adjacent to the next tee will be at far greater risk than the opposite side, therefore such work should be limited to where it is necessary in order to maximise labour and material costs. Various methods of traffic control can prove effective, whether it is via white line or post & rope and it is down to individual circumstances for what works best, ie the latter is ineffective if the course has the presence of deer or is constantly vandalised. Once routine measures are established, then playing quality will improve each year and the need for such work will become less. Collars should be treated as per greens with regards to treatment



Deep tining walk-off area on green surround



Good traffic control measures as part of overall strategy

since there is little point in having dry, disease free putting surfaces and damp, disease scarred collars. Mowing height for collars should be the same as per tees, whereas green surrounds are unlikely to change from the norm of around 35mm.

Fairways

Mowing is now likely to be a weekly to fortnightly requirement, depending on individual circumstances although the HOC is likely to remain the same or marginally higher. Between 14mm and 18mm is the industry norm for winter fairway height. The use of a large multi-brush ahead of mowing works well but may not be viable for some courses. If worm control is required then this should be carried out as soon as conditions are favourable. Where worm casting is present then fairway quality will diminish and in severe cases, it can impact surface drainage. Carbendazim remains the only effective method of control but tends to last for only 2 to 3 months. For best results, the water supply needs to be slightly acidic, therefore adding an acidifying agent come penetrant such as Headland's Intake will improve effectiveness. Other acidifying products such as sulphate of Iron may also prove as effective. For courses on higher budgets, some relief may be achieved by sand dressing fairways but this is both expensive and will take many applications before any notable difference is achieved. For clearing leaves, a tractor mounted blower probably offers the best line of defence since large areas can be cleared relatively quickly and leaves moved to areas where they can be collected via a sweeper or manually loaded into a trailer. The latter can be time consuming but fortunately it is limited to about a 6 to 8 week period. Aeration work should now be underway, either deep tining or deep slitting as long as ground conditions are suitable, ie not overly wet. Where drainage has been installed, possibly at 10 m spacings and the areas in between lie wet, then the use of a rotary decompactor such as a Shockwave can help move water into the drains relatively quickly. On more troublesome areas, sand banding can prove effective but only to move water short distances since this is a form of secondary drainage, albeit a very good one.

Roughs



Deep rough cut and collected prior to winter as part of environmental policy

Mowing should now be at an end although odd areas may require a final cut before the year draws to a close. Leave clearing will be high on the agenda for many clubs and the same criterion applies as per fairway clearing. If worm casting is a problem then key areas such as corners of dog-legs can be treated otherwise it can be an expensive operation to treat large areas where grass height is 50mm. Management of deep or out of play rough should continue when time permits with a view to 'cleaning' and 'topping' all areas. This will also prevent leaves from being stuck in long rough and then rotting down over the winter months.

Bunkers

Routine maintenance work such as trimming and edging should largely be finished since growth will all but have ceased. This being the case, the emphasis will be on reducing sand build-up on the faces of well used bunkers and moving sand back up the face after wash-out: this being a regular requirement for some last month. Any planned bunker renovations (see last month's comments) should now be underway and regular updates and photographs should be made available via the club's website and/or notice board. For most courses, it is a case of maintaining bunkers in a good playable condition and to this end it may require opening up existing drain lines and cleaning out blocked pipes or adding additional drainage. The other likely requirement is for re-turfing of droughted or worn/damaged banks. Where this is the case, this task is best completed early in the winter in order to give the turf maximum time to grow in and settle down. All areas recently re-turfed should be kept out of play to avoid further damage.

Other

Lakes/Ponds/Ditches: General trimming and tidying around water features plus the need to ensure that ditches are free of debris and that water can move freely are the key requirements. Ditch crossings may need repaired or re-turfed, depending on what type of surface is present.

Trees: The clearing of leaves has already been mentioned and is undoubtedly the main task this month on tree lined courses. General tree trimming is an on-going requirement but usually a task left to when ground conditions are unsuitable for other work to commence; the exception being to provide more light and air movement around tees and greens.

Watchlist:

Disease: During November, disease pressure from Fusarium is likely to be high for many courses. Just to re-iterate what was stated in the September article, the disease is caused when the pathogen *Microdochium Nivale* changes from saprophytic mode to a parasite, once environmental and cultural conditions are favourable. 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. Depending upon soil temperatures at the time of disease, applying a mix of a cool season systemic and a contact fungicide will give the best form of control. Using chemicals with different modes of action will give a broader spectrum of activity whereby the disease is tackled at different stages of its development. Recent studies have shown that combining a fungicide with a liquid Iron (Sulphate of Iron as opposed to Chelated Iron) will give the best results and greater longevity.

Pests: Other than earthworms which have already been listed as the main pest to be controlled at this time of year, leatherjacket grubs may also be apparent as they emerge from pupae stage at the end of Autumn to feed on the roots of turf. These larvae are still relatively small but can inflict considerable damage if present in large numbers. Fortunately they are controlled relatively easily with the active ingredient Chlorpyrifos and mixed with a penetrant to ensure maximum effect below ground.

Turf Disorders: For Black Layer see last month's comments. November is also a good time to treat moss, especially now that there is sufficient moisture below the surface. There are many iron based moss killers on the market which can be spread as a granular product or sprayed as a liquid; the former being in more need of rainfall immediately after application to prevent 'blackening'. Another turf disorder that may be troublesome is algae, which is an indication of surface wetness, often brought on by poor surface drainage, shade and thatch.



The key to controlling algae is to correct the physical condition that is causing it to be there in the first place. Aerifying and adding Axis soil amendment will help to dry out the surface but this has to be part of the answer in overcoming poor surface drainage and wetness. Applying an algaecide chemical is not the solution although it may give temporary relief.

Equipment:

As regular usage of mowing equipment is fast diminishing, this is the time of year when equipment can be thoroughly cleaned, serviced and units sharpened. Any repairs can be made and parts replaced where worn, such as ball joints, bearings and housing brackets etc. A check on all hydraulic motors and pipes must also be made at this point and any wear of such items noted for replacement. A check of filters and other stock parts should be made to ensure that necessary spares are in stock and ready for use. It is also important to spend time recording all service & repair work using service records or other alternative recording system.

Irrigation:

The system should now be drained down and any repairs should have been completed last month while water was still available for testing. It is essential that this work is thorough to ensure that no water is left in the pumps which are most at risk from freezing otherwise damage can be extensive and costly to repair.