GOLF COURSE MANAGEMENT: WORK DIARY - NOVEMBER 2012

Overview

Autumn colours but leaves need constant clearing and collecting

Although October was not as wet as in some previous months, there was no let-up in the amount of rainfall and this already falling on saturated ground. This was also the seventh consecutive month where rainfall was either at or well above average for much of the UK. October also witnessed the first of the 'real' early morning frosts, even in the south of England and set the trend for cooler temperatures throughout much of the month. The challenge of maintaining playability, especially on 'heavier' inland courses continued; this at a time while regular mowing was still required. The balance between tyre tracking while mowing versus long grass is never an easy one, especially when early worm-casting is evident. Even many links courses did not escape the wet conditions, since water tables have remained high, causing many bunkers to be under water for lengthy periods. As leaves start to fall, a wet Autumn does no one any favours since disease pressure as well as that from earthworms increases the risk of damage to the playing surfaces. Course Managers have had to prioritise work programs, focusing first on playability and quality of playing surfaces before aesthetics, while at the same time ensuring effective communication and a degree of understanding from the golfers. For those able to aerify greens, tees, surrounds and fairways without causing unnecessary damage to the surface, then they should generally be in good shape. On courses where ground conditions are unsatisfactory, then the emphasis has to be on basic surface management through traffic control measures, sanding and mowing as best as possible. So what will November hold in store when traditionally it is one of the wettest months of the year? Probably more of the same as early indications dictate. The need for earthworm control will already be high on the agenda for many courses, along with disease prevention. 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. 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 decline 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 greens to survive the winter period and constant play, the grass plant must be healthy ie good root depth, cell wall structure 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 are generally lower than expected. 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 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. 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.

LEFT: Sand based tee that is likely to be liable to constant leaching of nutrients
RIGHT: Walkway by green to the next tee aerified and sand dressed

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 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

Carbendazim being applied to fairways, mixed with an acidifier to improve efficacy

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

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 may have been an on-going requirement this year. 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 order to give the turf maximum time to grow in and settle. All areas recently re-turfed should be kept out of play to avoid further damage.

Other

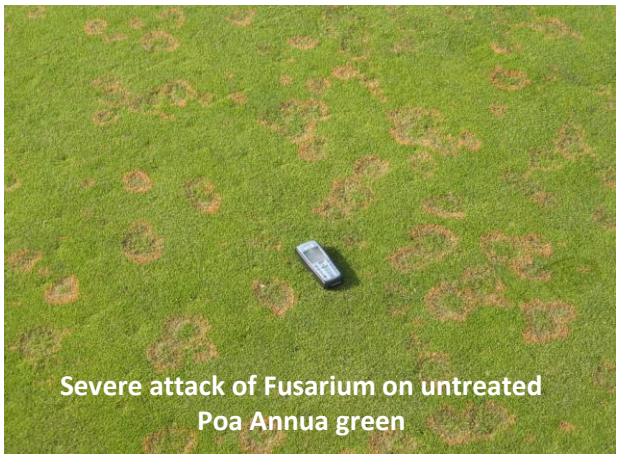
Lakes/Ponds/Ditches: General trimming and tidying around water features plus the need to ensure that ditches are free of debris and that water can move freely are the key requirements. Ditch crossings may need repaired or re-turfed, depending on what type of surface is present.

Trees: The clearing of leaves has already been mentioned and is undoubtedly the main task this month. 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 *Michrodochium 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 systemic and contact fungicides 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.



Severe attack of Fusarium on untreated Poa Annua green

Previous algae problems overcome following aerifying and addition of Axis soil amendment. Tree removal also to allow more light and air movement

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. 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.

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