GOLF COURSE MANAGEMENT: WORK DIARY - DECEMBER 2013

Overview

The first half of November was largely a continuation of steady rainfall and mild temperatures which was a challenge for many Course Managers in trying to produce acceptable playing conditions. With modest levels of growth continuing, there was a need to cut most areas of the course and at times this was proving challenging for many. Fortunately, a high pressure area over the UK led to a much drier, albeit colder end to the month and a much needed respite from the incessant rain. With this dry period likely to continue for a few more days at least, progress with work programs gathered pace as ground conditions became more favourable. Pressure on disease became less as overnight temperatures dropped to below freezing for the first time this season for many courses, thus ending prolonged spells of high humidity. However, worm casting has remained an issue for many clubs and a repeat application of Carbendazim is more than likely before the end of the winter. Clearing leaves which have steadfastly remained on trees until mid-November was a key requirement for many clubs and sometimes this had to be weighed up against possible turf damage from operating tractors, vacs and blowers. For those who embarked on any renovation or construction projects last month, it was a case of moving forward when conditions allowed and sometimes it became a case of damage limitation. For December, the month will start quietly with the opportunity to continue moving forward again with a mix of routine and renovation work. As normal at this time of year, turf conditions will be dictated by the amount of rainfall, temperatures and hours of sunshine in December. Since 2000, there have been 3 very wet December's: 2002, 2006 & 2012 as well as the extensive cover of snow in 2010 accompanied by extremely low temperatures. However and on average, December is usually interspersed with early

morning frosts and periods of high rainfall. As such, playing conditions can vary considerably, with those courses on open and free draining sites faring much better than those on heavier soils and shaded environments. As the levels of light are at their lowest at this time of year, the grass plant is largely relying on its energy reserves, therefore any additional stress imposed on the plant is unwelcome. Playability is the key requirement at this time of year and disease control, traffic control measures, light sanding and aeration will play a major part in most if not all maintenance programs throughout the UK.



Greens

With average UK temperatures in December of 3.8 Celsius, growth will largely be dormant except for odd days when temperatures remain mild. Under normal conditions, the key requirement is to maintain a dry, firm and open surface as best as possible. As mentioned earlier, the risk of Fusarium Patch disease remains at a peak this month, therefore all measures within an IPM strategy need to be implemented. Mowing is likely to be a weekly requirement, preferably with walk mowers to avoid any turf stress but staffing levels may dictate that this is not feasible. The use of smooth rollers and care with turning is essential and mowing height is likely to be between 4.5 & 5mm; higher on any fescue dominated surfaces. Regular aerifying at varying depths is the ideal but should only be contemplated when ground conditions are suitable. A mix of solid and deep tining with 12 to 15mm tines are the most common type of aeration but other types such as a rotary decompactor can be used depending on the objectives being sought. Following any aerification, light rolling or 'turf ironing' and a moderate sand dressing of about 5 to 8 tons per 18 greens can help 'settle' and smooth the surface but care must be taken not to smother the surface when there is an absence of growth. With low light intensity, algae and moss may also present themselves where the growing environment has been compromised, eg shade, surface drainage, low fertility, low mowing height etc. If this is the case, then seek to remove the problem as well as applying the appropriate treatment otherwise any improvement in turf quality will be short lived. If nutrient levels are constantly leached through the root zone following heavy rain, then applying a very small amount of nitrogen and a higher amount of Potassium will help to give strength to the plant, but too much then the risk of Fusarium attack becomes greater. Maintaining the right balance is the key. A useful practice at this time of year, especially over the holiday period is to

apply a dew dispersant to help maintain drier surfaces; this along with the more traditional application of sulphate of Iron in one of its many formulations. Any fungicide should be applied a few days in advance otherwise the active ingredients within the fungicide will be less effective at controlling the pathogen in its parasitic mode of attack. A useful ploy but correct timing is essential. Ensure that hole positions are spread throughout the green and again a good practice is to cut two holes per green, thus ensuring that pin placement can be changed if surfaces remain temporarily frozen. More about winter play next month.

Tees

The main challenge with all teeing surfaces in December is to maintain a firm, dry and level surface as best as possible. The ideal is to use separate but designated tees constructed with a sand base. This should be the long term objective if not already in place. Newer and larger courses will generally have this facility in place but for many, it is a case of making the best of what is available. Many courses suffer from restricted space and therefore may have to rely on artificial turf, especially on par 3 holes. Whatever the outcome, maintaining surfaces free of leaves, divots or other debris is paramount, followed by regular sanding of the surface. Where aeration can be carried out, then it should be done so as often as deemed possible. Any worm control should have been completed prior to this month but in severe cases, a repeat application may be necessary. Attention also needs to be given to banks and nearby walkways to ensure an adequate surface. Mowing may only be required every fortnight and preferably above 12mm in order to give the grass as much protection as possible. Where ground levels are inconsistent, the turf can be stripped clear, the surface re-levelled and then replaced within a relatively short period of time. This and possible tee extensions should form part of the overall course development plan.

Surrounds

Requirements this month should be a continuation from that before with the emphasis of installing traffic control measures by greens and possible tees to alleviate any potential wear patterns; this is usually where bunkers restrict access. This aspect was covered in sufficient detail last month. The other main priority is to sand dress key walk-off areas to maintain a firm and improved draining and



playing surface. Aeration and worm control are other aspects of this planned program which is very much an on-going requirement. Each hole on each course will have its own potential 'pinchpoints' and wear patterns, therefore it is in these areas where such measures need to be targeted. The aims should be twofold; namely to provide adequate playing quality and to limit any turf damage prior to the new season. Achieving both will allow the course to be presented in better playing condition in Spring. Any severely worn or damaged areas, possibly as a result of summer drought should be repaired and re-turfed by the end of the year.

Fairways

Once any leave clearing is complete, the only real maintenance requirement is for aeration in the form of deep slitting or tining when ground conditions are suitable. Again, the use of a rotary decompactor may prove effective to remove water from areas between drainage laterals or into suitable outlets. Mowing is more likely to be a periodic requirement and nearer to 17mm in height but essential to choose a dry day if possible, even it means spreading this task over more than one day. Brushing in advance will remove any wormcasts and allow for a cleaner cut.

Roughs

It is unlikely that any mowing will now be required, but there are always exceptions. Where areas of out of play and deeper rough are present, this work can still be contemplated during settled dry and windy conditions. Any cut down deep rough should be collected and removed using either a 'hired' machine or one that is purchased for this type of work and be part of the overall environmental plan. Areas near trees or adjacent woodland will inevitably have a final leave clearing requirement but this work should be completed well before the end of the year.

Bunkers

Playability and consistency are the two main requirements at this time of year and this will largely depend on the effectiveness of drainage and removal of water. Since December is usually a wet month, the bunker's ability to deal with excess water is paramount. Apart from ensuring that sand is distributed evenly throughout the bunker, including any faces, the checking of any drainage

outlets will depend largely on whether or not any water remains. During periods of heavy rain, much time and labour may be spent moving sand and removing loose debris; this inevitably leading to sand contamination and poorer performance. Renovation work which is likely on most courses to some degree should be in full swing by December with the aim of completing as much of the turfing work as possible. The earlier that faces can be re-turfed the better, thus giving maximum time for recovery. Where this work is carried out, it is essential to dig out all excess sand and replace with a good quality soil or compost mix in order to give the turf maximum chance of establishment. On steep slopes ensure that the turf is 'pegged down' and that any gaps that subsequently appear due to slippage are filled with compost dressing.



Successful Bunker renovation at St Mellion International. Getting it right first time!

Other

Paths: As per last month, it is largely a case of ensuring that paths are free of pot holes and that they are maintained in satisfactory condition. Where holes appear, fill with suitable base gravel material and consolidate with a roller or wacker plate. Path ends in key areas may need to be sand dressed if the exit point is on heavy soil or that where drainage is insufficient. This may be a regular requirement for some courses and may also require additional traffic control measures.

Trees: The clearing of leaves should be at an end by the end of the year but general trimming of trees and branches can be on-going. Major scrub clearance or raising of canopies, especially near greens and tees is often best left for times when other course work is less favourable due to ground conditions being either too wet or frozen. If tree planting is being considered and December is a key month, then remember 5 key aspects. These include size and width when the tree is mature, shade effects, roots & their effect on mowing, likely life span and lastly, does it fit within the natural environment? Too often trees are planted without much forward planning so best to ensure that future problems will not arise.

Renovation Projects: Although some clubs may be 'scaling' back on capital expenditure, many will still be committed to improving playing conditions. Such projects are likely to consist of drainage, ditch work, bunker renovation, tee levelling/extension, irrigation upgrades, path installation, landscaping & so on. Whatever the projects, they need to be planned, costed and approved well in advance with a proposed start and finish date. Good communication is essential and the use of digital photos of the work in progress will help to keep members or customers informed. It also serves as a record of such work carried out.

Watchlist:

Disease: During December, disease pressure from Fusarium in particular is likely to remain high for many inland courses. Much has already been written in previous articles regarding conditions favouring this disease and the cultural practices recommended in limiting any damage. The key with all disease control is to avoid putting the turf under stress from both an environmental and management aspect. As soil temperatures fall then the mode of action from chemical control needs to be one of contact and curative as opposed to systemic, as well as preventing further attacks. Select a product that is appropriate for this time of year, containing active ingredients such as Iprodione and Fludioxonil which will give the best degree of control.

Pests: Earthworms are by far the most common pest to affect turf quality at this time of year. It is not the earthworm that causes the damage but the cast which is brought to the surface that causes problems which have been listed previously. Recent updated studies reveal no real progress on their control other than the use of Carbendazim. Regular sand dressings will help to reduce numbers but that is a long term process and one that only yields a reduction in activity. Acidifying the surface using sulphur based products eg Sulphate of Iron in solution, can also help but this should not be over-used since it can lead to other problems such as leaf burn and fibre build-up.

The use of Carbendazim remains under threat from the EU and to date there is no suitable alternative. Leatherjackets or rather the grubs are the next most common pest than can afflict damage on turfgrass whereby emerging larvae feed on the roots of turf. See previous article for more information regarding their control.

Turf Disorders: Both Algae and Black Layer continue to be the most likely turf disorder at this time of year and both have been mentioned in detail in previous articles. Both are a symptom of poor growing conditions caused by poor drainage and a lack of oxygen in the soil. Both can be treated chemically but it is the condition in which they exist that needs to be changed.



LEFT: Drainage in semi rough and effective woodland management between fairways RIGHT: Removing trees and raising canopies to allow more sunlight and greater air movement

Equipment:

Servicing, repair and overhaul of equipment should now be in full swing as many items are now no longer in use bar from the occasional need for mowing. As such, thorough cleaning of equipment and possible repainting of some parts should take place once all major work is completed. Maintaining machinery in good order is essential since replacement costs in terms of capital requirement can be expensive. Therefore it is essential that each item receives a full and regular service. Most items of equipment should last well beyond 3000 hrs which is akin to around 135,000 miles in a 2 litre car. A well maintained fairway mower for example should last for 3,500 hrs giving an approximate life expectancy of around 7 to 8 years if annual usage is around 500 hrs. This of course is only a guide but nevertheless gives an indication of what can be expected and allows for future planning of capital expenditure.

Compound:

The aim should be to end the year with a tidy and well organised compound, free of all debris and clutter, especially around loading bays and wash down area. This work may include a partial resurfacing of the yard area if gravel is the main constituent. It should also be the time of year when supplies of sand and gravel are replenished since this is the main season when both products are likely to be required. An end of season stock take should also be undertaken and key products and materials replaced along with the necessary spare parts for equipment servicing.

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