

Steve Isaacs gives some advice on the health check you should give your course to give it the best chance of surviving winter. A time for hibernation... not likely!



ing in and winter beckons. The course has looked fantastic all summer and now all you want to do is put your greens safely to bed to ensure they survive the winter so you can repeat that performance next season.

The

days are draw-

Sorry, you're living in the past. You can't rest the course over winter anymore, the demand from members is for year round play and year round play you must provide, oh, and on near perfect surfaces as well thank you. There will, undoubtedly, be courses where poor drainage or harsh weather conditions limit winter use.

Only a massive investment in fairway drainage and green reconstruction is likely to make the worst of these playable through the wettest part of the year. Nevertheless, the majority of courses are playable for much of the winter and there is a need to plan for the winter's play if the course is to emerge the following spring in a condition where you can take full advantage of any early growing weather.

#### Prepare for winter all year round

Winter preparation is not a case of working hard on the greens for a couple of weeks in the autumn. It used to be, autumn scarification, coring and top dressing was the norm. However, in those days there were few hardy souls who ventured onto the course over the winter months. Your modern day golfer is a much tougher beast, seemingly determined to play golf in all weathers. Some believe that courses close themselves when the weather is extremely inclement. You need only look out of the clubhouse window to see golfers so padded with extra layers of woollies and waterproofs that they can hardly make a swing to appreciate that this is not the case. So, you must prepare your course for winter play and this must be seen as a year round exercise, implementing treatments all aimed at producing dry, firm surfaces with a good, dense and healthy grass cover.

Aeration is probably the most important maintenance procedure to produce firm, dry greens but isolated coring or Verti-Draining of greens in October or later is not the way to prepare them for the ravages of winter. Coring and Verti-Draining (or an equivalent such as the Soil Reliever

Below: Intensive aeration is essential to winter preparation, but is your timing right?



or Terra-Spike) may well form part of your aeration programme but with much more efficient aeration equipment available to us these days routine pencil tining throughout the year, backed up with further Verti-Draining, micro-coring, slitting and the rest, helps keep on top of thatch, retains decent root systems and sustains free drainage. It is even possible to continue with deep spiking through the summer with minimal disruption to putting surfaces. This is not to say that everyone needs to be out on their greens every fortnight punching some sort of hole into them. If you have a serious thatch problem this could well be necessary but nowadays aeration programmes take on a tremendous range of tine types, spiking frequencies and individual attention to problem areas of specific greens.

The days of hiring in a corer or deep spiker once a year and going through all 18 greens should be over. Every course should have a bespoke aeration programme for their greens, one designed to suit it's needs rather than convention or historical precedence. The little and often approach to top dressing that has been advocated could just as well be applied to aeration work these days.

## Dealing with thatch and poorly draining greens

There will be situations where an intensive aeration attack is called for. If you have inherited a severe thatch problem which causes the greens to turn to bogs at the first drop of winter rain then annual coring is not going to be much help. Steve Dixon, at Kingsknowe Golf Club in Edinburgh, cored his greens 18 times in two years (a combination of micro and Jumbo coring) to get on top of thatch. The Club now enjoy much firmer, drier surfaces throughout the winter months. Obviously, communication within the Club is vital if this sort of programme is to be accepted and Steve was fortunate enough to have a very supportive Committee. Even so, it takes guts to follow such a programme through.

If you are managing greens on a heavy soil base then the timing of prewinter aeration is critical. Links managers and others fortunate enough to have sandy greens can get away with October, or even later, Verti-Draining. On soil based greens you need to get in much earlier, when the soil is relatively dry and when the shattering effect of the tines will prove beneficial. This means August or early September work, never popular with the members, at least initially. Deep spiking at this time will disrupt golf but for a much shorter time than later operations. It also allows time for a fairly heavy top dressing. Verti-Drain at the height of growth and the greens recover within a week or two, leave it until growth is in decline and true surfaces may not be restored until you can get a few light dressings on them the following spring. By deep spiking this early it is also possible to get away with far less heave to achieve the desired effect which means less surface upheaval and no major softness problems once the surfaces have been smoothed back down. Be brave, explain to members why you need to get in early and reap the rewards firmer greens through the winter and better greens coming into the spring. A Club in Glasgow took this step and it proved so successful that there is an outcry from the members if there is any suggestion of putting the work back by even a week or two.

## The evil that is Fusarium

The Course Manager should always be thinking at least six months ahead when it comes to maintenance and presentation of the greens. Do not think of winter preparation as simply

a means of reducing course closure but as an exercise in ensuring that there is a decent surface ready for your spring works so that good quality playing conditions can be prepared as early in the year as possible. One of the potential hazards in this regard is outbreaks of Fusarium patch disease which can result in severe scarring and a spring of repair rather than grooming towards sum-

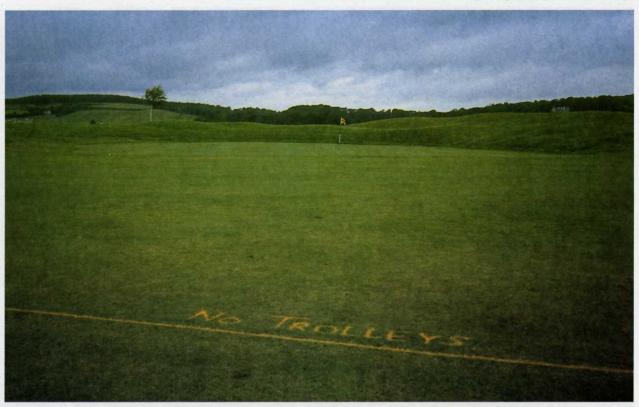
mer condition. The Talking Heads feature in the July 2000 issue of Greenkeeper

International showed that Fusarium is still the greatest disease threat faced by greenkeepers in the UK. The changing climate has not helped matters with milder, wetter winters seemingly the norm, a weather pattern that, if anything, should promote the disease. However, at many clubs I visit we have seen a decrease in Fusarium in recent years and much of this can be attributed to adapting to the changing weather.

This may incorporate: Avoiding late top dressing. Any dressing applied after the end of September has the potential to bring on Fusarium, particularly if combined with intensive aeration which always produces a growth spurt. This may not be as applicable the further



Bottom: The dreaded fus! Protect against disease by reducing autumn stress
Below: Line marking is a good way to divert trolleys



south you go but if you are plagued with persistent Fusarium attacks then it is something to consider.

Boosting potassium levels through the late summer months can also help reduce the level of Fusarium. Paul Murphy, the Course Manager at Downfield, cited this as part of his disease management programme in the Talking Heads feature.

While the conventional approach to fertiliser remains true, i.e. no significant nitrogen input after the end of August, the milder weather seen through October and November in recent years has led to a slight rethink on this issue. Certainly, those blessed (not!) with a high annual meadow-grass content have often seen the turf turn a sickly yellow

through the autumn months if their final feed was made in August or earlier. This turf is clearly under stress and is far more prone to disease than healthy grass. We have seen a return to autumn fertiliser treatment to compensate for this, though only with low nitrogen tonics to keep the grass healthy and less prone to disease attack through this period of late growth.

### **Course protection**

In spite of all your efforts there will be times when temporary greens have to be brought into use. So, prepare temporary greens early so that you present a decent alternative. Siting of temporary greens is vital. So often we see temporaries in wet or shaded situations which are, at times, worse winter environments than the main putting surface. We would always advise against using green aprons as temporary putting surfaces. This moves us into another aspect of winter preparation, traffic management. Most of our courses were not designed for today's level of play, particularly not through the winter. Trolley traffic should be banned altogether or must be kept away from funnelled access points into greens. For some reason line marking seems the most effective means of preserving turf to surrounds. Yes, it can simply transfer the damage but surely this is far better 20 yards off the green than in the immediate fringe.

In an ideal world every course would have separate turfed winter tees. If available, great, if not then mats may be needed but whatever form of winter tee is employed an important part of the principle is changing the line of traffic flow. This will not necessarily mean altering the length of the hole. Balls fly and run shorter distances through the winter so the usual practice of pushing winter tees forward merely retains wear on the main landing area down the fairway. Additional measures may have to be implemented to protect fairways over the winter as these are often the wettest part of the golf course. If such a policy is implemented the means of protection should to be a decision for the members, under guidance from their professional Turf Manager. Small artificial grass mats (approximately 270 mm by 130 mm) have gained a following in Scotland. Their use originated on links to help preserve the shallow depth of topsoil found here but more and more courses inland are adopting this policy. At one club I visit the members like them because they help keep their balls clean! At another a lady member thought they were great as they kept one of her feet dry, the Captain of the day didn't have the heart to tell her that you were supposed to play your ball off it, not stand on it! Others go for pegging up, but look at how much protection your tees get from this practice. Roping off main landing areas and replacing balls in the semi is another alternative. At least all of these ideas show more imagination than the traditional winter rule of placing on fairways; why have one scar when you can have two!

# Firm and dry, there is no other way

So, to get through the winter in better order be prepared. Follow traditional greenkeeping ideals of promoting firm, dry surfaces. This will involve a vast array of techniques, many employed year-round not just in the immediate run up to winter, providing a sensible level of protection for the turf through good greenkeeping practices rather than through panic induced closure.

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