Ian Tomlinson has experienced more snow than most greenkeepers during 27 years working in Switzerland and Denmark. In the first part of a timely two part article, he advises you how to deal with the white stuff.

During the last couple of winters there has been lots of talk about snow on greens. Should you remove it or leave it were it is?

What about a layer of ice on the greens, will the grass die under such a layer, should you try to crack it or leave it alone?

If you remove the snow and then have weeks of freezing easterly winds will the grass die of desiccation or should we leave it there but risk snow mould damage?

Lots of questions and you will not find the answer in a textbook!

After 14 years working in Switzerland and Denmark and now 13 years in Denmark I have had my fair share of experience but you are always surprised by mother nature.

In Switzerland it was normal to have one metre of snow most winters and very low temperatures. Snow could fall anytime from October to April. At that time we were all lucky to have a fungicide product containing PCNB (pentachloronitrobenzene). This has since been removed but the results were outstanding. We applied the product hours before the first snowfall then usually dug the greens free of snow on 1 March… and found perfect greens.

But where do we stand today?

In Denmark where legislation has removed almost all pesticides and we have only a systemic fungicide available to use (which is no use whatsoever in autumn and winter) how do we keep greens disease free?

The first issue is to address the botanical composition of the turf on your greens and the growing environments around green sites.

It is certain that if you are promoting poa annua dominated swards in our environment you will lose your turf every winter. I am not saying that if you are promoting fescue/bent turf that you will have no problems, you will. The difference is that when the poa is attacked the whole plant is damaged including the crown and you end up with a bare depression on your playing surface. With fescue the plant will be attacked but survives and as soon as favourable climatic conditions allow the greens will regenerate and be perfect again in a matter of weeks. The poa greens will be scarred and bumpy and may take two or three months before an acceptable putting surface can be produced.

Our best greens are the ones with 80% fescue/bent grasses in them and no shading issues from trees. Other greens growing in wooded areas where sunlight and air movement is an issue have more poa annua and invariably end up with major snow mould damage.

We experienced a hard winter in 2009/2010. We were lucky that the greens were frozen before the snow fell. This situation will certainly help limit your disease damage to the turf.

You then have another issue as halfway through the winter there is a thaw. But the green is frozen and the melted snow has nowhere to go and you end up with water on the putting surface. Then, it freezes again and you have a few centimetres of ice on top of your turf. Under this situation poa will survive up to 20 days before it dies of asphyxiation. Fescue/bents can go between 60 to 100 days. Another issue is that if there is a great deal of direct sunshine on the ice but it’s too cold to melt it the ice can act as a magnifying glass scouring the grass.

So many occasions I have run the verti-drain across the greens with the times set just deep enough to crack the ice and stop at the grass canopy. You cannot remove the ice as the grass leaf blades are frozen into the ice but this will allow for vital air to get through to the grass to avoid suffocation. I prefer to risk a little turf damage by doing something rather than leaving the ice and risk running into scouring greens which happened to me one year in Switzerland.

Next month Ian offers his conclusions on dealing with snow and take us through the past few Danish winters...