Drainage expert Barry Cooper talks about a summer which has found out which courses have sufficient drainage. And more importantly which do not.

Water, water, everywhere

After a very wet winter and spring and a very unsettled summer many golf courses have been counting the cost of lost green fees and corporate revenue due to inadequate course drainage or in some cases no drainage at all.

Some of the most badly affected courses have been some of the most expensive to construct. I refer of course to the many American and Japanese designed golf courses where only surface water has been catered for and the only drains laid in the ground are non perforated solid pipes carrying water from a system of gulley pots that have been placed to intercept swales that have been created. This system of drainage is totally inadequate in this country, and unless ground water is controlled by laying conventional perforated drain pipes to a depth of at least 750mm the golf course will remain wet after heavy rain.

Many people believe that there is no such thing as a water table in clay land, but I can assure you that this is not true, and unless this water table is kept at least 750mm below the surface, the ground is not dry enough in the winter for the rains to fall on and percolate away. On most clay based courses a system of lateral drains laid across the steepest fall at 15 metre centres and 750 - 800mm deep will control and remove surplus sub-soil water.

It is difficult to believe, but many courses that have been constructed during dry summers and autumns have had no fairway drainage installed, because it did not seem necessary at the time. I do not need to dwell on the extra costs involved in draining a completed and seeded golf course, against draining the
same golf course during its construction.

Seasons such as the ones we have all recently experienced also bring to light drainage problems caused by certain trees having been planted on the golf course. These trees are mainly Poplars, Willows and Alders. All of these trees need water to thrive and during a "semi-drought" time such as 1995-96 the roots from these trees will have had to search harder for water, and any pipe within 20 metres of any of these trees is in grave danger of being penetrated and blocked by a mass of fibrous roots.

I have actually known these roots to travel as much as 50 metres along a pipe line. Drains that have been laid at a shallow depth ie:300mm to 500mm are also very prone to becoming blocked after a dry summer, because the ground cracks and this allows top soil to fall into the cracks, which in turn gets washed into the pipes when the rains come.

I will end this article by again pleading with Green's Committee Chairmen and Course Managers who are contemplating having drainage work carried out on their course, please employ either a qualified drainage consultant or contractor to design your drainage scheme. This way you can always query the reason why, if the scheme does not work.

Finally, all drainage schemes work very much more efficiently if they are undertaken during the Summer months and not during Autumn and Winter.

Barry Cooper is a Drainage Consultant who boasts some of the country's finest golf clubs among his clients. He can be contacted on Tel: 01858 467684.