

Heatwave update

As we are all aware we have been experiencing some extreme conditions this year and never more so than the last 10 days or so.

With record temperatures being set right across the UK for both day time and night time temperatures, it has been a period where we've had to take a few measures in order to protect the golf course.

Firstly our new irrigation system has been working overtime each and every night.

We are able to apply 70 cubic meters of water (70,000 litres) per night. This equates to an average of 3mm of water applied to the greens, 2mm to the tees and 2mm applied to most approaches.

Once these priority areas have been watered we are left with roughly 3cubic meters of water (3000 litres) in the tank. To prevent the tank from running out of water before the full irrigation cycle has completed we leave a small amount of water in the tank, this is also used during the day through hand watering with hoses in order to apply extra water to areas which we know dry quickly. These dry areas could be because of different grass types, different soil composition, high traffic areas, undulations in the ground, sunlight exposure. For example the left hand side of the 12th green dries extremely quickly, because of the slope.

We have had a few queries as to why the 16th fairway isn't green, which I can fully understand but unfortunately with the data from above and the data figures below there are many factors. It is our absolute priority to ensure we maintain the greens to the highest standard.

If we remember why the 16th fairway was chosen for the sprinkler installation (due to the severe lack of topsoil and presence of gravel underneath the surface) there is far more to keeping the fairway green than water-unless we pay huge water rates to apply excessive amounts of water. What we will ensure is that with the use of supplemental irrigation we will get the 16th fairway back into shape much quicker than the other fairways once the heatwave has passed. It will also allow us to seed and ensure the establishment of some more resistance grass species, deep tine spike (encouraging deeper rooting and therefore greater drought tolerance) meaning we should see an improvement year on year.

Rainfall Data

Historical data from Whites Pit which is 1.1 miles from Knighton Heath shows an average yearly rainfall total of 802mm. Working from monthly averages we would be at 417mm by the end of July, currently in 2022, 287mm of rain has fallen, leaving us 130mm short of the average. Even this figure is slightly misleading as there was one storm in particular which saw 48mm of rain fall in just a few hours. While there is no denying this rain has fallen, as it fell within just a few hours in meant very little of this rain actually soaked into the ground.

Couple this data with the current heatwave and we can understand just how dry the ground is and as to why the course is on the 'firm and fast' side.

Wetting agent

Greens, tees and approaches have all had their monthly application of wetting agent which aids in the uniform percolation of water down through the soil profile while also aiding the soils ability to hold onto moisture for longer. These products will be vital to us improving our water management throughout the course over the coming years.

Greens treatments and works

Along with their wetting agent, greens have had liquid seaweed extract applied which aids the grass plants ability to with stand environmental stresses such as extreme heat. Once these two products are applied they MUST be watered into the soil profile in order to reach their target.

One product which I believe really helped us through the hot period was 'Ryder' which is a turf pigment. Coating the grass leaves in a green colour which helps with their look but it also acts very successfully as a UV light protector. Effectively sun cream for our greens.

We haven't raised our heights of cut on greens as we are currently cutting at 4mm which is a conservative summer height of cut anyway. We would normally cut greens at least 6 days a week through the summer months (more often than not we would cut 7 days a week) whereas this past 10 days we have cut 5 days but have rolled greens the other days, leaving the greens slightly longer to withstand the heat stress but not compromising greens performance.

Our summer fertiliser program on greens has been maintained through this period, including the spraying of Nitrogen fertiliser, a product called Te Mag which contains many micro nutrients required for the maintenance of healthy grass, along with a PGR (Plant Growth regulator). PGR's are used to prevent excessive growth, using the energy to promote deeper rooting and lateral growth which gives us thicker and healthier greens.

We're very happy with how the greens have come through this period and we hope you agree.

Now back to our rain dancing.

Your Greenkeeping team