

# **GREENKEEPER'S NEWSLETTER**

**FEBRUARY 2019.**

## **BUNKER MAINTENANCE.**

Recent discussions in the Clubhouse have brought the topic of bunkers to the fore again and I have been asked to give some background information as to our methods of maintenance.

## **SAND TYPE**

Complaints are sometimes raised about the sand that we use in the belief it is in some way of inferior quality. Many years ago the USGA carried out studies on what elements are required to consider sand types to be suitable for use in bunkers. As a result of those studies a system of testing and certification was introduced to help when choosing from a range of different sands. The sand we use is washed sand from MB Wilkes and is certified that it conforms to USGA specifications. The availability of sand types that have a USGA certificate is limited and whereas there may be plenty of good sands around if they don't have the all important certificate we cannot use them.

## **REPLENISHING FRESH SAND**

When bunkers are topped up with fresh sand the problem of balls plugging in soft sand can be a nuisance and we try to alleviate this by consolidating it down with a whacker plate. Our aim is to carry out most of this type of work in late autumn and early winter period which allows any fresh sand plenty of time to settle before the main season starts. Sand is of course constantly eroding away either by players splashing sand out when they play, or natural elements like wind erosion, or disappearing down cracks in the clay. These are the reasons that may lead to a problem of too little sand in summer months, more often than not just as the clay sub base has become as hard as concrete. Keeping sand in the Goldilocks zone, not too hard not too soft, and not too deep and not too shallow is probably the most difficult part of bunker maintenance to get just right. Even more so since different golfers seem to prefer a variety of conditions according to their playing ability, some like plenty of sand under the ball whilst others prefer the barest minimum.

## **DRAINAGE**

Flooding is not as much of a problem as it was in the past, since every bunker has now been drained and is connected up to the main drainage network. However drains will deteriorate and block up over time from ingress of sand through the blinding layer. Some bunkers are prone to contamination with silt, particularly bunkers at the bottom of a hill or wherever water collects. Silt from surface water runoff becomes mixed in with the sand over time which reduces percolation rates leading to a deterioration of the sand and inevitably ponding after heavy rain. Bunkers prone to this problem need completely excavating after several years, cleaning out the drains and replenishing with new sand.

## **TREE ROOTS**

Poplar trees growing close to bunkers will often cause a problem where long tap roots lurk just under the surface. Cutting through with a decent pair of loppers and some enthusiastic tugging will usually solve the

problem for a while. But Poplar roots are persistent and soon grow back, so much so that a bunker by the twelfth fairway had to be turfed over because the problem became insurmountable.

## ANIMALS

The etiquette of the local animal population is appalling and rabbits in particular create many problems with their burrowing. Ten and Eleven are the worst affected holes and though we regularly repair the damage they generally come back that same night and undo all our work.

## BUNKER LININGS

Bunker Linings are sometimes suggested as a solution to bunker maintenance. Linings come in all sorts of materials from fabric liners to concrete and even recycled rubber tyres. It is a topic that has been discussed amongst the greenstaff on many occasions and we have tried out geo-textile liners here at Weymouth in the past. Our experience with them wasn't good. Sand runs off them on the slightest gradient and where the liner becomes exposed it catches on clubs, rakes and machinery. Of course since then new methods have been introduced such as concrete or rubber crumb, but do they stand the test of time? Personally I am not convinced. They might stop sand running down cracks in the clay but I doubt they will stop tree roots, or silt pollution, or rabbit damage. What happens in five or ten years when (not if) the time comes to renovate the bunker again? There will be a lot of rubber or concrete to get rid of which could be a costly exercise. I think this is one idea that is best to learn from other peoples experiences before we commit a lot of the clubs finances to a major reconstruction project such as this.

## RAKING AND EDGING

Sand is raked regularly during the week with plastic toothed rakes but after heavy rain steel rakes are used. Steel rakes cut lines into the wet sand which speeds the drying process and helps break up compacted layers of sand. Where sand has washed down a bunker following heavy rain then we have to resort to moving sand back up again with shovels. Trimming the edges and removing weeds is a regular task undertaken throughout the year frequently enough that bunkers are usually kept tidy. Rakes are provided in every bunker for members to smooth out their own footprints, these sometimes break or go missing which we aim to replace quickly but we are only human and so it's possible we miss the odd one now and again.

## MEMBERS COMMENTS

That just about covers it but we still rely on members' feedback so if you spot a rake missing or a bunker that's getting a bit low on sand then please report it either to a greenkeeper or a member of the committee.