

# TALKING HEADS

Compiled by Melissa Toombs

# 1

**Are there drought orders in place in your area, or are there some threatened?**

So what is going on in your Section? I spoke to British and International greenkeepers, in search of how/ or if the drought was affecting their golf courses.

# DROUGHT



**Name:** Bernard Findlay  
**Position:** Head Greenkeeper  
**Club:** Portstewart GC  
**Course Type:** links/parkland 54-hole course  
**Region:** Northern Ireland

In Northern Ireland we have not shared the same severe drought conditions as southern parts of the UK but that is not to say that we do not get long periods of dry weather during the summer months. There are no drought orders in place or threatened at this time.



**Name:** Steve Evans  
**Position:** Course Manager  
**Club:** Yelverton GC  
**Course Type:** 18-hole course  
**Region:** Devon

There are no drought restriction orders in Devon at the moment although it has been well publicised that the situation could change if we don't get significant rainfall. (140mm last week!)



**Name:** Anthony Davies MG  
**Position:** Course Manager  
**Club:** Prestbury GC  
**Course Type:** 18-hole course  
**Region:** Cheshire

There are no drought orders in place in Cheshire and not likely to be.



**Name:** Iain Barr  
**Position:** Course Manager  
**Club:** Largs GC  
**Course Type:** 18-hole parkland course  
**Region:** Scotland

No, No, No, this is the west coast of Scotland. We are just short of 500mm of rain so far this year at the end of May and inland towards Glasgow gets a fair bit more than Largs.



**Name:** David Wood  
**Position:** Course Manager  
**Club:** Hever Castle GC  
**Course Type:** 18-hole Kings and Queens course  
**Region:** Kent

A drought order was put in place by our water company on May 27 and will last until at least November.



**Name:** Jonathon Scoones  
**Position:** Course Manager  
**Club:** Caversham Heath GC  
**Course Type:** Championship & standard length heathland  
**Region:** Berkshire

Thames water have applied for a drought order although our area (Thames valley) is not covered by it, because we have had slightly higher rainfall than London. If there is going to be one we will expect it by about August.



**Name:** Scott Young Liddle  
**Position:** Course Manager  
**Club:** Penna Longa Resort  
**Region:** Portugal

So far there hasn't been any drought orders this summer, but last year in the Algarve and for the rest of the country there were drought orders.

# 2

## What provision does your club take to ensure a regular water supply?

The DoE is currently developing proposals for new legislation, to introduce a system of licensing for water abstraction. However, there is currently no water abstraction licensing required in Northern Ireland. Consequently, we use three sources of water for irrigation: On course water feature (approx 6000m<sup>3</sup>) fed by land drainage and used as a last resort. Borehole and mains water. These water sources can be held in a 300m<sup>3</sup> reservoir for use as required.

We have just installed a new 130,000 litre holding tank to replace the old one which only held 55,000 litres. This is fed by mains water although we are currently exploring the possibility of installing a borehole.

The club extract the irrigation requirements direct from a stream that runs through the course and have done so for the past 70 years.

Our Irrigation system is supplied from a pond. We have a Borehole to back up the pond if it can't sustain itself naturally.

Fortunately we abstract from a stream into lakes on the golf course. However we are limited to 18,000 m<sup>3</sup> per annum for 27 holes. The abstraction licence has certain conditions attached preventing us from abstracting at certain times when river flow falls below a certain level downstream from us. We have not been allowed to abstract so far this year, so have to rely on water stored.

Our water is supplied by borehole. It goes down about 90m into chalk and we extract 22 m<sup>3</sup>/hr. We have irrigation to greens, tees, approaches and fairways, about 400 heads.

The water that irrigates the course is provided from a dam called Arade near Silves (nearly 40%) and the other 60% comes from wells. The water that comes from the second source is blended in because it is very high in salt content and we need to diminish it. We maintain our lakes for each course nearly full or half full, before we start pumping for each irrigation during night.

# 3

## Have you changed the way you have utilised your water resources recently, in light of climate change talk?

No, at Portstewart, which is predominately links, I take a minimalist approach to irrigation. The aim being to keep the grass alive rather than lush, green and stripy, the results of such a policy are firm fast playing surfaces where fescues predominate.

Up until the spring of this year we used to water greens and tees with a tractor and bowser. Stage 1 of a new irrigation system was installed last summer (05) consisting of a 125mm ring main branching off to a valve box at the greens, a set of pumps and a holding tank. This will allow us to hand water the greens in a couple of hours as opposed to a couple of days with the old system. Automatic irrigation is in the pipeline (forgive the pun), but not for a fair few years yet.

I have not changed my view on water requirements in light of drought problems as I have always adopted the view of using water sparingly, more so to encourage deeper rooting.

SEPA are introducing Abstraction and Impoundment regulations in Scotland this year and I suppose it has got me to think more about water. Being a traditionalist with a minimal water view anyway and all the sustainable golf course hype, I will use it to assist me in further reducing my use of irrigation.

As we are limited to how much we can abstract we always water as efficiently as possible making 2006 no different from any other year. This includes a well maintained irrigation system, the use of wetting agents and aeration to improve root development. Hand watering is also very important. In fact this year we have not irrigated yet.

Yes. By using a more regular wetting agent application we have seen quite a reduction in irrigation to greens - almost half in fact.

These last summers in southern Portugal and in the whole of Portugal, have been demanding in terms of water consumption but we only apply the water volume that turf needs to grow or even less to replenish the water necessities of turf. Our fairways are Bermuda Tifgreen 328, so they don't need to be irrigated every day (in the summer, day in day out).

# 4

## How would a significant reduction in water usage affect your course?

I feel we have the species in place to cope with periods of drought and we have irrigation for greens and tees only and none for the fairways. In 2002 we built an additional 9 holes to one of our courses. The greens were built to the USGA spec in terms of rootzone etc. The greens were originally sown out with bent and fescue, but suffered a take-all attack. I decided not to water and today these greens are 99.5% fescue and easier to maintain (at 6mm) than many of our older greens.

Not that much really. Yelverton is quite unique in the fact that we have never applied much water to the greens. This is purely down to actual time taken to fill the bowser, take it out to the greens, apply the water, bring the bowser back and fill up again - 4 hours to water 6 greens @ 600 litres per green.

There would be little difference to the course upkeep or condition if restrictions were enforced.

A significant reduction for us would probably mean only hand watering as we only use the sprinklers very occasionally. 9 years out of 10 that would be sufficient to service our course as I advocate minimal water, but the once in every 10 year drought we normally get would see the fairways burn up, but grass has a great power of recovery when the rain comes. It would probably have no long term effect.

The greens and tees are very prone to drying out so it could become a major problem. Our course management policies would have to adapt.

We are a 6 year old course, with very undulating (David Williams design) sand greens. Last year we lost irrigation for 3 weeks. In the end we lost about 30% cover to greens and tees. Luckily the fairways just about held on. I dread to think what will happen if/when this drought order is enforced it will have a massive effect on this course, and to our industry.

I think if we reduced the amount of water volume applied to the turf, fairways would become yellow and the board and members would start making complaints about the course because it was less green. They are not accustomed to fairways resembling those in United Kingdom and the board is demanding on having lush turf.

# 5

## Are you starting to amend your long term thinking towards course management as a result of water becoming an ever more precious resource?

I consider myself very lucky to be greenkeeping in a part of the world where water shortage (to-date) is not a problem. However, I have experienced drought conditions and have been constantly amazed at the ability of fescue species to recover after prolonged drought. Maybe amendment to thinking should come through the expectations of the golfer - Who was it that said you don't play golf on colour?

The use of tried and tested wetting agents is very important at our club and we are constantly monitoring new products that are becoming available. There is also the constant battle to control poa coupled with a regular overseeding programme using bents and fescues. This has been part of our course management policy for some time now.

My only reaction to water shortage in the future is to increase further, aeration on the golf course. A deeper rooting system will find the necessary water supply needed to survive.

My long term thinking has always been the same in my 8 years at Largs. It is with the promotion of the finer grasses in particular Browntop Bent on our greens and this has involved less water each year as the root structure improves increasing sustainability and improving all year playability. I will take this approach as far as I can as long as I have the support of my club.

Winter storage of water and increased efficiency of the irrigation system, coupled with development of more drought resistant grass species has to be the way forward.

Following last year's disaster! We have been overseeding, with fescue/bent, have maintained a height of cut at 5.5mm and are verti-cutting and topdressing (800Kg/ha) on a fortnightly basis. If we need to pick the pace up for a competition we double cut and roll. We are doing this to try and give the fescue a chance and its actually working quite well, we are getting really good feedback from the members! Looking long-term we have identified the need for larger water storage, and are planning to extend our irrigation lake - I want to quadruple it.

In terms of course management in the Mediterranean zone and dealing with this course, I am aware that we need to apply the resource water with a lot of criteria as the quality of the water here in the south is very bad (high saline content). In the future I believe desalination plants for certain courses will be needed in order to diminish the consumption of water from the dams needed for domestic use.