Football onto a winner with borehole water

The new sprinkler system uses borehole water to keep the pitch in tip top condition. Picture courtesy of Stuart Gibson/ East Grinstead Town Football Club

From the Premier League to the Sunday leagues, football clubs up and down the country share one ongoing battle – how to keep their pitches irrigated and in tip-top condition for optimum player performance.

Those with bigger budgets to spend can invest in everything . For smaller clubs however, such major financial undertakings may be as much a dream as a successful run all the way to the final of the FA Cup.

That's not to say there isn't an alternative – a water solution that will help to both improve the pitch and save money in the longer term – as East Grinstead Town Football Club has found out.

The Club, whose home ground is at The OHOB Community Stadium, in East Court, plays in the Isthmian League South East Division. Recently, thanks to support from the Football Foundation and Mid Sussex District Council, it invested in a major pitch improvement project which has seen the installation of new drainage and an automated irrigation system and, thanks to donations, the club also invested in the installation of a borehole.

EGTFC chairman, Richard Tramontin, says the borehole is already proving its worth.

"We had previously considered installing a borehole as an alternative to the mains water but, as a Community Amateur Sports Club run entirely by volunteers, we would have struggled with the investment and payback," said Richard.

"When we were fortunate to be given the grant and a donation, we looked at it again.

"It is already helping us save on our mains water costs and gives us control of our water supply. Not only have we been able to switch off the mains water supply to the sprinklers, but it also means we no longer need to use precious drinking water to irrigate the pitch.

"And, because the borehole is permanently connected to our irrigation system, we can programme the sprinklers remotely via smartphone rather than having to be on site," he explained.

The club is however, careful to stay within the 20m^3 a day limit set by the Environment Agency for any private individuals or business pumping water from a borehole. Beyond that figure an abstraction licence is required.

The borehole project, which included a VS4-7" Submersible Pump E-tech from Franklin Electric, was drilled by West Sussex-based Nicholls Boreholes. The company's Mark Aylwin, who worked on the project, says it is just one example of more and more football clubs at all levels turning to boreholes as a way of controlling future water costs and guaranteeing consistency of supply.

"Cost is a major issue and for lower league clubs, providing they can get the investment, then they can reap real benefits in the longer term. We estimate that any organisation which is paying more than £5,000 a year on its water bills can save up to 40% by investing in a borehole – and of course, that means complete control over water usage and avoiding any sprinkler bans that may be enforced during the drier months, enabling them to keep playing and training for longer."

Typically, says Mark, smaller clubs with one main pitch will look to irrigate only during the summer, but large clubs will use their boreholes throughout the year. Considering that in top-flight football there may be at least six main full-size pitches, as well as training pitches and Academy pitches, that soon adds up to a lot of water.

The number of pitches and the quantity of water required will determine the number of boreholes and the drilling experts will also take into account the geology of the land.

The Nicholls team has worked with a raft of different clubs, including Stoke City Football Club. In 2017, it asked Nicholls to inspect problems it was having with two existing boreholes.

Both had a reduced flow due to iron and iron biofowling building up on the well screens, and Nicholls' experts were able to significantly increase the flow rates by undertaking a thorough cleaning programme using a BoreSaver Ultra C treatment solution from Geoquip Water Solutions.

Mark says the importance of regular maintenance cannot be underestimated.

He cites the north of the country as having a higher iron content in the water, often leading to the build-up of contamination inside a borehole. Other areas with, for example, sandy soils, may need regular filtration checks to ensure sand isn't blocking the pumping equipment or clogging up the casings.

Mark and his colleagues work closely with Geoquip, whose BoreSaver range of borehole cleaning and well rehabilitation treatments includes different formulas to tackle a variety of contamination issues.

These include iron and manganese oxide deposits or iron-related bacteria (IRB), as well as a general all-purpose cleaning treatment for use where a wide range of residues are present, or if the exact composition of the bacteria is unknown.

One of the major advantages of the BoreSaver range is that it can be applied into the borehole in situ – meaning there

is no need to go to the expense and time of removing the pump. This helps to reduce downtime and one treatment will usually be effective in as little as 48 hours in removing contamination and deposits that have built up.

Geoquip's Mike Deed says Mark is absolutely right when it comes to making maintenance a priority.

"Once contamination takes hold in a borehole it can quickly start to block water flow through the casings, the bacteria deposits will clog up the pumps and the motors and then both the quality and quantity of the water is affected," he said.

"For sporting organisations, such as football clubs, who rely on their turf being in tip-top condition, this can seriously impact on their performance. Having invested in their own water supplies in the first place, it a proactive approach to keeping the borehole bacteria-free is the best way to prevent an own goal."

KAR UK's new Hunter products

KAR UK, wholesaler of irrigation equipment and distributor of Hunter products, has announced some exciting new product launches.

NEW EZ-DT diagnostic tool: The industry's simplest two-wire system just got easier with the new handheld EZ-DT diagnostic tool from Hunter. It uses wireless technology to streamline installation and maintenance of EZ Decoder Systems.

Contractors can use the EZ-DT to assess quickly and easily system health from within the valve box – without having to uninstall the decoders – reducing time and labour.

The battery-operated EZ-DT lets EZ-1 decoder users:

- Detect faults and perform electrical troubleshooting in the field without uninstalling decoders.
- Quickly read decoder status, station address, current draw, and two-wire voltage to simplify maintenance.
- Program decoder station address via wired connection to speed up installation and save time on-site.
- Update controller face pack or decoder module firmware via ribbon cable connection for flexibility when updating systems.
- Communicate in their preferred language using the multilingual user interface.
- Work efficiently on the go with power supplied by four AAA batteries.

NEW MP Stake

Native plant restoration projects and subsurface drip irrigation systems often require temporary overhead watering to support delicate plants.

Designed for use with any water-efficient MP Rotator nozzle, MP Stake kits come preassembled for simple installation. Quickly give fragile plants the supplemental irrigation they need without adding significant labour.

Other key benefits include:

- Pair with any high-efficiency MP Rotator nozzle to simplify temporary irrigation.
- Preassembled for fast and easy installation in the field.
- Standard kit includes a 66 cm stake, nozzle adapter, 0.345" tubing, and ½" threaded male fitting for quick connection.
- For maximum water savings, upgrade to a 2.8 bar (280 kPa) pressure regulator and Hunter Check Valve.

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