ARMY'S SPECIALIST PORT & MARITIME REGIMENT

Five divers, drawn from the Army's specialist Port & Maritime Regiment based at Marchwood, near Southampton, recently created quite a splash when they visited the East Sussex National GC, to assist with positioning and anchoring of two bottom circulator units in one of the club's four lakes used as an irrigation reservoir.

Powered by 3hp electric motors, the two circulators were installed to provide deep, horizontal water circulation -with additional 'up-flow', creating bottom to surface movement-to overcome a build-up of problems caused by anaerobic water trapped at the bottom of the lake, said Course Manager, Mike Watton.

"The lake is divided into an oxygen rich top layer and an oxygen starved bottom layer", he explained.

"Apart from the smell -which can be pretty grim- the bottom layer is the source of troublesome algae growth both in the water and in turf under irrigation. The circulators will help cure this by inducing oxygen deep down into the depths."

But the circulators are only part of a long-term strategy designed to improve the quality of water held in all four of the club's lakes. As the Army divers went to work -they treated the installation as a training exercise-water treatment specialists, Ringwood based Hydroscape Limited who supplied the circulators, were delivering a Sweetwater sulphur dioxide generator which will enable Mike Watton to adjust pH levels.

Mounted on a specially built flatbed trailer, the Sweetwater generator is being used to treat water in three lakes feeding into the irrigation lake cum reservoir, prior to watering selected parts of the golf course.

"We looked at various options -including fountains- but decided that a sulphur dioxide generator was the better (and safer) way to control pH levels in the water. Ideally, we are aiming to reduce the present 8.5 to 6pH. This will ultimately flockluate soil particles around the two courses, open-up the sub-surface, improving moisture absorption and drainage, said Mike Watton.

"Yes, it will take time-probably 12 months- before we see real benefits both in water quality and improved (turf) growth. For me, it is an interesting and exciting prospect. Side benefits? According to my calculations, treated water will reduce run times -and equally important, consumption- by some thirty percent This in turn, will enable me to save an estimated 40% on electricity used to power the irrigation system. These are impressive figures'.

Adding his own thoughts on the subject, Hydroscape managing director, Peter Roberts, said that the introduction of the Sweetwater sulphur dioxide generator will, when the unit's potential is more widely recognised by green-keepers and groundsmen, revolutionise fine turf irrigation techniques.

"Designed as an add-on to existing (irrigation) systems linked to water abstraction sources like boreholes, ponds and lakes or plumbed-in to reservoirs and storage tanks, the generator enables turf managers to modify and control pH levels in water stored for irrigation purposes, and subsequently absorbed into root zones'.

"In addition to modifying soil structures, treated water will assist grass use natural nutrients and micronutrients more efficiently -reducing the need to apply fertilisers- and, as a bonus, adds solvable sulphur into the soil, forming a fourth major nutrient'.

The sulphur dioxide generator not only reduces the growth of surf-ace algae, it prevents expensive irrigation pumps, valves and sprinklers becoming clogged by water borne fungus'.

For further information tel: 01425 476 261

QUALITY USED MACHINERY AVAILABLE ON THE WEB

An impressive line-up of quality pre-owned equipment for use by turf growers, groundsmen, contractors and greenkeepers can be viewed in confidence and at leisure by logging-on to the website of Staffordshire-based manufacturer and supplier, Turfmech Machinery.

Located within the Products and Services section of the Turfmech website at www.turfmech.co.uk, the used machinery page can be accessed also via the following direct link: www.turfmech.co.uk/pages! used-equipment! used-machinery.htm

Updated whenever a machine is bought in or sold, the used machinery section of the Turfmech website includes both ex-demonstration equipment and items bought by Turfmech in part-exchange against the supply of a new piece of machinery. From time to time, the used machinery section will also have details of a machine which Turfmech is offering for sale on behalf of a customer.

All of the equipment shown on the website is accompanied by a brief description and the majority will also feature a photograph showing the actual item "in the flesh". Customers have the choice of buying a selected machine "as seen" or with the benefit of a factory-backed warranty, following a thorough inspection, service or overhaul by skilled Turfmech engineers. Price of a specific used machine is available from Turfmech on request, depending on the purchase option selected.
2IC – INTERNATIONAL IRRIGATION CONSULTANTS REDUCE WATER COSTS WITH WINTER WATER

Irrigation efficiency is normally measured in terms of the amount of water used by an irrigation system compared with the amount of water benefiting the turf. But this does not relate to cost. In order for financial efficiency to be demonstrated it is necessary to reduce the unit cost of water. Irrigating with mains potable water is obviously the most expensive method of irrigating, but how many irrigators know that the unit cost of water abstracted in the summer is exactly ten times that of water abstracted in the winter? Winter water, especially from surface streams, is also often of a better quality than high pH, calcareous ground water, and can be a much more reliable prospect for long term irrigation supplies than any other water supply.

Designing flow monitoring systems, carrying out environmental assessments and applying for abstraction licences are in-house specialities of 2IC. Spalding Golf Club had a winter storage reservoir built during August 2002. This was designed by 2IC as a tailor-made fit for the site parameters. Previous installations have also been designed to fit odd shaped land and railway cuttings.

The other picture shows 2IC has also designed and automatically operated a broad crested monitoring weir. The flow data from these stations are used in the support of abstraction licences by 2IC. Having each progressive stage of development carried out by the same team of irrigation professionals, ensures continuity, reduces costs and maintains quality.

All irrigators should monitor the efficiency of their irrigation systems, not least in support of their next abstraction application, but by also considering alternative or additional sources of abstraction, they can help the environment, make their water supply more secure and they can save money.

FIELD SCIENCE LTD

Field Science Ltd, specialise in re-dressing the balance of trace elements in soil. Based on soil analysis, the Company creates tailor-made dressings to replace those vital trace elements missing from so much of the UK soils. "So little is understood of the importance of trace elements and their vital role in creating a healthy growing environment for grass plants. Without the correct balance of trace elements, nutrients are 'locked-up' and not available for uptake by the plants - a situation usually aggravated by the excessive use of artificial fertilisers in a bid to increase yield and colour of the award," said Martin Lane, Technical Director.

By correcting the nutrient balance, the Company claims the user will enjoy a denser greener sword, with increased tillering, reduced top-growth, deeper and broader rooting, faster recovering tees and fairways and improved drainage. Of special importance is the increased resistance to disease as the plant's immune system improves.

"It is essential that greenkeepers have an understanding of the importance that micronutrients play in the growing medium of their courses", said John Wanklyn, Sales Director.

The Company offers a free course visit and appraisal. For further information or to arrange an advisory visit please contact Field Science Ltd, Downeview House, Grove Avenue, Coombe Dingle, Bristol BS9 2RN Tel: 0117 856 550 Fax: 0117 900 2432 Improv.fieldscience.co.uk

RETONA LTD

Recently introduced to the UK by Glasgow-based Retona Ltd, ComCat® is a low cost and easy to use grass strengthening agent, which improves root development and gives better colour. Extracted from non toxic wild plants, this bio-catalyst is a natural and organic product that requires no special handling. ComCat® is absorbed either by the seed or by the grass through all parts of the leaf blade and root. The effect unfolds with the positive stimulation of the grass' defence mechanisms and the improvement of the root development, resulting in deeper roots with higher bio-mass. This enhances the grass' resistance to biotic and abiotic stress factors such as disease and drought.

ComCat® accelerates the uptake and assimilation of available nutrients that increases turf density, improves chlorophyll content and intensifies the turf colour. It also makes more efficient use of any added nitrates.

ComCat® is supplied as a powder and dissolves in water making it easy to apply with a spray. Developed in Germany, ComCat® is also certified under EU regulation 2092/91 for use in organic farming.

For further information contact:Jim Wotherspoon Tel: 0141 556 5755 Fax: 0141 556 7255 Email: info@retona.co.uk

Sharp eyed readers will have noticed that in last month's New Product section the photograph of the Complete Weed Control Weed-It Machine was placed alongside the Aquaflex moisture sensor. Apologies for any confusion.