Top dressing, bunker renovation and material handling are physically intensive tasks involving the movement of bulky and heavy materials. Kevin Marks visited Kings Hill Golf Club in West Malling, Kent, to see how Course Manager Duncan Kelso approaches these important disciplines.



# | BRAND NEW | HEAVIES



Right: The modern and stylish clubhouse at Kings Hill situated close to one of the major housing developments

Below: Duncan Kelso, Course Manager



The Kings Hill development at the former West Malling airfield in Kent is a mixed commercial and residential project based around the concept of combining work (offices), rest (homes) and play (golf course) to provide a high quality of life in a single location.

The golf course was constructed in 1995 and was opened in October 1996. It is a proprietary club, privately owned, and managed by Kings Hill Golf Ltd, with a management team that consists of three people:

the Club Manager, Margaret Gilbert, the Golf Professional, David Hudspith, and the Golf Course Manager, Duncan Kelso. It is run on a membership basis, but is not directed by the members.

Duncan, a BIGGA member, has complete control of the premises and the course. He sets his own budget, subject to the approval of the American owners, and signs his own cheques and has a huge degree of autonomy, probably more than most Course Managers in the UK.

The course was designed by a UK architect, David Williams, and construction took just over a year with seeding commencing in autumn '95 followed by a growing-in period during the spring and summer of 1996.

Tees and greens have been constructed to USGA standards and the course has been sown with fescue and bent grasses. It is over 6,700 yards long, a par 72 and includes 60 acres of woodlands and some heath land.

The entire 200-acre course is situated around a central area of

### #BRAND NEW HEAVIES







Top: The hand held remote control unit enables the operator to monitor the operation at the working end of the machine

Above: Large volumes of material can be accommodated in the 4 cubic yard capacity hopper

Top right: Low ground pressure is achieved utilising a four-wheel axle and 31 x 15.5-15 turf tyres woodland, with the startlingly modern clubhouse located close to one of the housing developments on the north side of the course.

The Greenkeeping Centre was built two years ago and is located in the central woodland. Being in this central position it offers five access points onto the course, which alleviates heavy wear on any particular route. It also results in fast access to the farthest points on the course.

The 6,000 square feet facility comprises a large storage shed, engineering workshop, chemical/fertiliser store, greens' staff rest room and changing facilities, refreshment area and Course Manager's office. As you would expect from a modern, forward thinking manager there is a host of IT equipment and Duncan's office houses the computer controlled irrigation system along with PCs and

software that provides a host of personnel and management information. Facilities have much improved as prior to the opening of this new centre, the greenkeeping team of nine were based in the airfield's former Control Tower.

Duncan runs a variety of equipment from three major manufacturers - Textron for top dressing and aeration, Toro (ride-on fairway and rough mowers) and John Deere (Gator utility vehicles, pedestrian mowers and compact tractors).

However, the main reason for my visit was to obtain Duncan's views on topdressing and bunker renovation and take a detailed look at how he is using one of his latest items of capital expenditure – the Turfco CR-10, a combined loader, top dresser and material handler.

Duncan is a great believer in the

need for top dressing and throughout the season will top dress the greens with a light dressing every three to four weeks. He also cores twice a year on greens and twice a year on tees – in March and in August – but will increase this if necessary.

As any greenkeeper will appreciate, top dressing is a time consuming task, requiring the material to be loaded at the storage site, then transported to the relevant part of the course, then shovelled into a top dressing machine, then applied to the tee or green. And this is exactly how Duncan's team undertook this task, using a 2-tonne trailer to transport the material to the dressing area. It was a three-man operation and took the team 12 hours to core and top dress all 18 greens. This involved four hours of overtime per man and proved to be not only a physically



intensive operation, but an expensive one as well. The physical aspect of the work ensured that the task was looked upon as a chore; it did nothing for staff morale and the team suffered from the fatigue aspect the following day.

An alternative was to look at a larger capacity, high-lift trailer that could deposit straight into a top dresser, eliminating the need to shovel the material by hand.

However, at a demonstration of this type of trailer, the equipment did not work well with wet materials and still needed manhandling. So there was no advantage, as three men were still needed for the operation.

It was obvious that some form of specialist material handling equipment would be necessary and Duncan sourced a possible solution and took the opportunity to view it

at Saltex last year. Although it appeared that it would do the job, it wasn't versatile enough. Then, as he was passing the Textron stand, he happened to see the Turfco CR-10 and stopped to speak with Scott Kinkead, one of the directors of the family-owned company.

"It was by chance that I noticed the CR-10 at Saltex. It's a versatile, combined loader, materials handler and top dresser and appeared to be exactly what I required. A demonstration was arranged and the CR-10 joined the fleet here at Kings Hill," said Duncan.

"The 4 cubic yard capacity is excellent and the self-cleaning hopper design means that a wide variety of materials can be handled. The 4-wheel axle results in low ground pressure and because of its versatility and speed, top dressing can now

## FIRST IN THE FIELD STILL OUT IN FRONT

It may surprise you to know that it was over thirty five years ago that a small Dutch company first solved a problem that will be only too familiar.

For years people had been scratching their heads looking for a speedy, efficient and economical way of collecting litter, leaves and grass cuttings.

The engineers at Trilo came up with the perfect solution – an ingenious vacuum sweeper which they called the Trilo Grass Collector.

The idea was a huge success and the company's reputation for expertise and quality soon spread world-wide.

And Trilo is still leading the way with a wide range of machines that will not only vacuum, but also scarify, cut and collect.

Find out how a Trilo can make your job easier and more efficient by calling us direct today.





TR40



SG700



SG 1100



The first name in Vacuum Sweepers



FOR HIRE OR SALES CONTACT:

#### MJT Contracts Ltd

Wadebridge Farm, Landwade, Exning, Newmarket, Suffolk CB8 7NE Tel: (01638) 720123. Fax: (01638) 720128 www.mjt.co.uk

### **BRAND NEW** HEAVIES

Right: Old bunker sand can be broadcast onto adjacent fairways, saving a journey back to the storage facility

Below: The cross conveyor with swivel action deposits materials exactly where they are needed





be done in 6 hours with just two men. A major saving in both time and expense. Hand shovelling has now ceased, which is good from a health and safety point of view and the reduction in sheer physical effort has had a positive impact on staff morale.

Duncan's philosophy is that you can never do enough on a golf course, so with the labour and time savings made there's more time to tackle numerous other tasks. One of those tasks is bunker renovation and again the CR-10 has proved invaluable.

No matter how efficient a bunker drainage system is, over time debris will build up and drainage will deteriorate. The main cause is the deluge-type rainfall that now appears to be more common in the UK. More run-off from surrounding areas is generated by this type of rainfall resulting

in silt, leaves, grass and other debris collecting at the lowest point of the bunker, which over a five-year period results in standing water in the bunker and the need for a renovation programme.

As most of you reading this will appreciate, there are around 2000 tonnes of sand in the bunkers of a typical golf course and the normal renovation process will be to pile the sand into the centre of the bunker, either by hand or mechanically, backhoe it into a trailer, then transport it to a storage/recycling area somewhere within the boundaries of the course.

New drainage pipe work is then installed, new sand is transported to the bunker and deposited directly into the centre if access is possible, or deposited at the side, close at hand. This is then spread, again either mechanically or manually. It takes 2

days per bunker using this traditional approach.

Disposing of the old sand always presents a problem, but with the CR10 the old sand can be used as top dressing on the adjacent fairway using the twin spinners that are an integral part of the machine. This saves a journey back to the storage site and speeds up the operation

The real benefit becomes apparent when the bunkers are refilled. Sand is loaded into the hopper, and is then transported directly to the bunker edge. Using the swivel action conveyor system, the sand can be deposited in various positions around the bunker and then spread with a mechanical bunker rake or by hand. The time saving and reduction in physical effort is enormous - two of the largest bunkers at Kings Hill were refilled in one afternoon!