## A TRIP TO FLORIDA'S **GOLF COAST**

IT WAS at a Christmas Eve 1984 drink with the committee that the captain of my late club. Thorndon Park in Essex, asked me if I would like to visit Florida to see some of the golf courses.

The offer had been made by William Regan, a member of Thorndon Park, whose company Globe International builds houses in Britain and America. Mr Regan had brought some friends over from the States and I was fortunate to meet Tom Fasio, the designer of The PGA National. It was thought that a reciprocal visit would be of benefit to Thorndon Park and interesting to my American counterparts, who would welcome an Englishman's view of their courses.

So, it was with some anticipation that I awaited my first sight of America! I was to visit The PGA National, JDM Country Club, Jupiter Hill Golf Club, Boynton

## By Robert Hornegold of Brickendon Grange GC, Hertfordshire

Beach Municipal, Seminole Golf Club, Frenchman's Creek Country Club and Loxatchee Golf Club.

On arrival at The PGA National, where the Ryder Cup was held in 1983. I was introduced to Colin Wright, the course administrator. Colin is English and has worked in the States for ten years. He explained that most new courses in the area are linked to real-estate projects and at The National there are some 2,300 acres of building land. Most of the housing is single-storey accommodation with large, well-landscaped gardens.

As you drive through the main entrance towards the hotel and administration area, on the right there's a large grey building that houses the headquarters of The PGA of America.

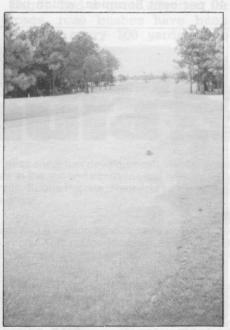
I was struck by the high standard of maintenance and design. The huge car park, which can accommodate thousands of cars.



Bob Hornegold (left) and Luke Majorki.

does not intrude or interfere with the parkland image.

Within this area, there's a tennis centre with 19 clay courts. The hotel has 200 bedrooms, banqueting halls, restaurants, swimming pools and numerous other facilities. A short distance from the hotel is one of the many practice grounds - some 500 yards in length, with large raised tees (100



Oval and kidney shaped tees are used on all four courses at The National.

yards wide by 50 yards deep) at each end.

As the weather in Florida is usually good, with temperatures of 70°-85°F in the winter and 80°-100°F in the summer, over 300 caddy cars are required to speed up play and with 800 to 900 rounds per day on the four courses, speed is essential to prevent traffic jams!

Luke Majorki, the golf course superintendent, told me that there are four courses at The National - The Haig, The Squire, and The Champion, being Tom Fasio designed, while The General, the newest course, is an Arnold Palmer design. The first course to be built was started in 1979 and the fourth course is just over a year old. Because of the climate. it is possible to sow a green and have it to putting condition within six weeks.

Luke has an assistant superintendent and other assistants who are in constant contact via a two-way radio. There is also a secretary to cover the office duties and 'man' his office in the main depot. The budget for course maintenance is in the region of 1.6 million dollars.

There are approximately 600 acres of golf course and an equal



The Everglades, from which the golf courses were carved.

amount of water to maintain. Luke has 60 staff, who are split into four groups with one chargehand and nine men for each course. There are also two large depots, each with a fully trained mechanic and assistant to service all the machinery. There is an irrigation team, a spraying team and a landscape gang, who deal with specialised tasks, but overlap and work together when needed.

Soil at The PGA National is nearly pure sand, as is most of the region. Everything has to be irrigated if it is to grow. A Toro sprinkler system is used and a great deal of time is spent checking soil moisture for accurate timing of the system.

Greens vary in construction two of the courses had tile drains, 12in - 14in sand/peat top mix of 80:20 ratio with colloidal phosphate (a phosphatic clay added to retain moisture). Unfortunately. Luke has run into trouble using this mixture - the water retaining qualities of colloidal phosphate have caused waterlogging.

I should say that Florida has a great deal of heavy rain and it is not unusual to get 15in of rain in one storm and 70in - 80in in a short period of time during the rainy season. To cope with this, there are huge pumps capable of pumping 50,000 gallons per minute into The Wetlands.

They raise the water to an elevation of some 18 feet above sea level and from there it drains into a C18 canal. Originally, the whole site was a swamp and the

complex now has large banks surrounding it.

The greens on the third course are constructed as the others, but without the colloidal phosphate and the fourth course is built to the USGA suspended water table specification. There are also two acres of putting greens.

Bermuda grass is the main species used in Florida and there are many different varieties. At The PGA National, greens were originally Tiffdwarfe Bermuda. However, this is difficult to keep through the colder periods so, in recent years, this has been overseeded with Penncross Bent to a point where the greens are now 60 per cent Penncross Bent and 40 per cent Bermuda, which has made the greens much faster than before. Fairways and tees are 419 Bermuda grass and the rough is Bohia.

Height of cut is varied with each season. At the time of my visit, the greens were 1/8 in, approaches 3/16in - ¼in, fairways ¾in - lin, semi lin - 1½ in and the rough 3in - 6in

Greens are cut daily throughout the winter with Jacobsen Walkers (hand mowers) and this was common practice at all eight clubs I visited. The only time they use a triplex is in the summer and then only at weekends. Jacobsen Triplex (Greens King) and Toro Greensmasters are used to cut the tees and approaches.

Surrounding and ornamental areas are cut with Allan Nationals. Ransomes 513s, Ransomes 350s and Jacobsen Trim Kings. Fairways are cut with Jacobsen F5s using seven or nine blade reels. These are power driven and give a very fine cut.

For competitions, Luke is now using the Ransomes three and five gang ride-on machines, which he is very pleased with. Sweepers, suckers and blowers are used to collect loose cuttings on all mown areas.

There are just too many pieces of equipment to mention, but at one depot I counted 11 Jacobsen Turf Kings and eight Ryan hollow tining machines.

Bunkering on all four courses is superb - there are over 100 bunkers on The Champion course, which are mainly raked by machine. They appear to have done away with normal tines and



Practice putting greens, with part of the complex, hotel and administration centre



Tee Markers. An overall plan of the hole and individual bunkering around the green is given. There are also iced water containers and ball cleaners.

replaced them with fan rakes, which give a very good finish.

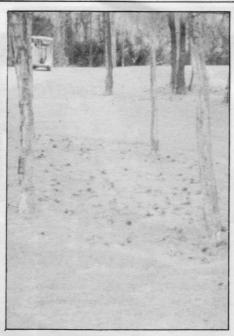
Numerous pests, diseases and weeds thrive at The National – spraying machines are kept in constant use. One insect that is proving a problem and causing a great deal of damage is the mole cricket. To combat this, they spray orthdyn at night so that it is absorbed by the plants and then, when eaten by the mole cricket, it affects the nervous system and makes the cricket move into the open where it is eaten by birds.

Records of spraying are held in Luke's office, as are records of all work carried out. These records must be kept meticulously and, Luke hopes to be using a computer soon, not only to store information but to work out the frequency of spraying, applications

of fertiliser, etc.

It has to be repeated - the golf courses are beautiful. Flowers such as begonia semperflorens and impatiens grow and flower for many months of the year. There are Australian pines, slash pines, fine leaved oaks, palm trees, malaucas and eucalyptus, as well as the common flowering shrubs bottle brush and oleander.

At the base of trees and shrubs, they spray Roundup, a total herbicide. Once the vegetation dies, the tree or shrub base is mulched with wood bark chippings, which are dyed green if there is a competiton. This dye is also used when spot spraying. As Walter Hagen had a great affection for roses, rose bushes have been planted every 100 yards along The Haig's fairways.



Bases of the trees sprayed with Roundup.

Just before my trip, there had been three frosts, unheard of in this part of America, which caused extensive damage to trees and shrubs. Many hundreds died and these are costing the golf courses a great deal of money to replace. Fully mature trees, such as the native cabbage palm, at between 15 to 20ft high, are being planted for an immediate effect where large trees have died.

After a most enjoyable day, I realised how useful it had been to see grooming of such a high standard. I returned home with renewed enthusiasm.

While in America, I promoted EIGGA and, hopefully, there can be further exchanges of opinion between British and American greenkeepers.

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## Taking the course to water

Herefordshire club splashes out £30,000 to defy the laws of nature



F. Bradley (hon sec), L. Griffiths (pro and course supervisor), R. Fox (captain), V. Galliers (chairman of greens) and G. Long (treasurer) at the opening ceremony. (Photo: courtesy of the *Hereford Times*.)

A DAY at Kington Golf Club is always one to remember. For the many visitors to the highest 18-hole course in England and Wales, there are spectacular views across seven counties.

But Kington golf is a serious business and Open champion Sandy Lyle was not to be distracted by panoramas stretching from the Welsh Black Mountains and Brecon Beacons to the Malvern Hills and the Shropshire Wrekin when he visited this Herefordshire borderland club and set the course record of 68 just before turning professional.

Even so, members recently had occasion to celebrate not with champagne, but thousands of gallons of water when the president of the Shropshire and Hereford Golf Union Doug Humphries turned the taps on Kington's new £30,000 watering system. This was the price that had to be paid for the course's superb situation – at its highest point, 1,300 feet up Bradnor Hill.

Quality golf has been the name of the game at Kington

since Cecil Hutchison was invited to lay out the course in 1924. But, for 60 years, the greens were dependent entirely upon rainwater.

According to 1985 club captain Tony Wright, after the severe droughts of 1983-4, it was generally felt that the perennially parched summer grass "mitigated against the future of the club" and drastic measures were called for.

But, at that height, short of moving mountains, where was the water to come from?

Water-diviners were called in and various schemes found to be impractical before Vic Galliers, determined chairman of the greens committee, persuaded the Welsh Water Board to sell the club a spring and redundant pumping station at the foot of Bradnor Hill. All that remained was finding a way to make the water flow 600 feet uphill!

The engineering contract was put out to tender and the North Staffordshire Irrigation Company began work on the project in October. A massive amount of piping with electric wiring was laid to pump the water up to a vast 8,000 gallon holding tank half way up the course. It is then sent round two separate circuits of sprinklers.

Such a system required an equally ingenious plan to finance it. Some £20,000 was raised in interest-free loans from individuals among Kington's 400 members. The money came in £100 units, which will be repaid over the next ten years to the lenders whose names are pulled out of a hat each year. The final £10,000 was lent by the Sports Council.

The sprinklers will operate from May to September every year, dispensing an estimated 18,000 gallons of water a week in very dry conditions. "We're expecting to attract more visiting parties and casual visitors, as well as increased applications for membership.

"We would also like to see the course become a permanent fixture for county matches," Tony Wright added.

## Notebook

## People, Places, Products

The annual Parker tournament for greenkeepers was staged at Cuddington (Banstead) GC, Surrey and attended by representatives of 70 golf clubs.

Company chairman George Parker and his wife presented the prizes to: 1st (Parker Bowl) Stuart McMillan, Leatherhead, with 44 points: 2nd Martin Smith. Porters Park; 3rd Ian Smith, Cuddington; 4th Roger Glazier, Cuddington; 5th Derek Gould, Langley Park and 6th Neville Shade, Foxhills.

Parkers would like to thank David Scott, club secretary, for his help in organising the event and Hugh Riggins, head greenkeeper, and his staff for a course in top condition.

The British Turf Irrigation Association has produced an A5 booklet entitled Your Guide To The British Turf Irrigation Association to help clients understand fully golf course irrigation systems offered by BTIA members and the arrangements for installation.

The booklet also encourages customers to consult with the association's independent secretary to help remove any cause of dissatisfaction.

The guide will be distributed by association members with tenders and similar documents. It is also available free on request, with a list of BTIA members, from The Secretary, BTIA, 3 Ferrands Park Way, Harden, Bingley, West Yorkshire, BD16 1HZ.

Tufturf tee mats by Carpetition were introduced in August 1985 and after ten months sales had topped 500, with customers in the UK, as well as France, Holland and Switzerland.

PGA pro and leading teacher John Stirling recommended Tufturf tee mats for the National Sports Centre, Lilleshall and at the Mere Golf and Country Club, Cheshire, 48sq m of practice driving tee, consisting of a concrete base covered with 4×2m×1m tee



Stuart McMillan with Mr and Mrs George Parker.

mats and 40sq m of Tufturf Multisport Surface Material, have been built.

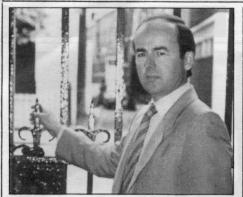
It is possible to build entire tees

with Tufturf, offering obvious labour savings and reductions in installation costs.



A building of modern design for the STRI establishment.

Many distinguished guests witnessed the opening of the new main offices and laboratories of the Sports Turf Research Institute by John Smith, chairman of the Sports Council. The STRI has occupied parts of the Mansion House within the St Ives Estate at Bingley since its inception in 1929. A decision, taken some time ago by the district council, to rehouse the institute resulted in the purpose-designed building within the former walled garden of the estate. STRI research staff will continue to occupy the separate coach house block, as well as the soil physics laboratory, which plays an important role in the drainage and construction consultancy service.



Richard Fry.

A new marketing and PR consultancy, specialising in the sports, recreation and leisure industries, has been formed by Richard Fry. Marketing Link Associates can be contacted at 24 Badgers Court, Langdon Hills, Basildon, Essex SS16 6AU. Tel: 0268 413798.

The new address of the British Agrochemicals Association is 4 Lincoln Court, Lincoln Road, Peterborough PE1 2RP. Tel: 0733 49225.

Trident of Compstall is now known as Trident. The company is located at Poplar Site, Knutsford Road, Lymm, Cheshire WA13 0TD. Tel: 092575 6070.

Richard Lawrence, managing director of Trident, commenting on the move said: "This move to larger premises will enable Trident to continue offering customers a most efficient service as the demand for our products continues to grow."

## New Ground Driven Fertiliser Spreader



The new mini-spreader from Wessex Farm Machinery.

Wessex Farm Machinery has introduced a new trailed fertiliser distributor suitable for professional or domestic use.

The new mini-spreader has a spinning disc distributor plate, with four deflector blades, protected by a special anti-corrosive finish. The spinning disc is ground driven through heavy-duty bevel gears immersed in an oil bath. The wide-profile pneumatic tyres have a turf-tread pattern to minimise compaction on fine turf areas.

The conical hopper holds some 150lb, depending on the type of fertiliser, and has a corrosion resistant paint finish. The hopper

is mounted on a sturdy tubular frame, with the drawbar adjustable according to the position of the tow hitch on the tractor.

The Wessex mini-spreader is suitable for use with most garden tractors and specially suits diesel engined ride-on mowers, such as the Kubota G3HST.

The mini-spreader can be used for granular and powdered fertilisers, grass seed and salt. Spread widths range from 6ft 7in to 26ft, depending on ground speed, with application rates from 52-410 grammes per square metre for granular fertiliser.

The Wessex mini-spreader costs £265 (plus VAT).

SISIS Hydromain tractor units now incorporate higher rated engines. The Mk II Hydromain Fourteen has been restyled and the foot controls, fuel tank, brakes and stabilisers improved. Power steering is available. Two engine options are available – a twin-cylinder air-cooled petrol engine of 18hp SAE rating (13.4kw) or a twin-cylinder water-cooled diesel engine of 13.8hp SAE rating (10.35kw).

The Hydromain Twenty replaces the earlier Seventeen and is also available in two options – a twin-cylinder air-cooled petrol engine of 20hp SAE rating (14.92kw) or a three-cylinder water-cooled diesel engine 19.8hp SAE rating (14.8kw).

These new engines provide increased power and the diesel units give the additional advantage of operational economy.

Prices of the machines have been held.

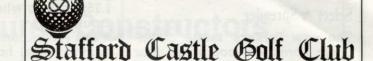


The SISIS Hydromain Fourteen Mk 11 fitted with a deep slitter.



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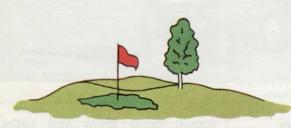


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### Select A Spreader

The new Parkers' range of fertiliser spreaders comprises four models – the Standard, Professional, Super Professional and Master. All feature ten position controllers to adjust spreading rates, vibrating gate and steel frames finished in baked and epoxy enamel, stainless steel rotary agitators and spread widths of between 5-8ft.

The Standard has a zinc plated steel hopper, 16/49 gears and

gearbox and standard duty  $8in \times 1.75in$  plastic wheels. Capacity is around 40lb.

The Professional incorporates a stainless steel hopper with high polish, brushed finish, 16/49 gears and gearbox and heavy duty  $8in \times 2.25in$  plastic wheels. Capacity is similar to the Standard.

Parkers' 40lb capacity Super Professional spreader, again, has a high polish, brushed finish stainless steel hopper, 16/49 gears and gearbox, but 8.75in × 2.8in pneumatic tyres. Top-of-the-range, the 90lb capacity Master, features 10in wheels with nylon bearings and smooth tread tyres. Hoppers are made from low polish, smooth finish stainless steel, protected with a bump bar/hand hold. Handles are double bolted and double braced and the axle, spinner shaft, rotary agitator, on/off control cable and all nuts and bolts are stainless steel.

Full details from T. Parker & Sons (Turf Management), Worcester Park, Surrey KT4 7NF. Tel: 01-337 7791.



The Master, Super Professional, Professional and Standard - all from Parkers.

## Agar Goes Jumbo Sized

Agar Equipment has added a semi-trailed sweeper-collector with a jumbo-sized box to its range.

It is available in three widths, 4ft, 5ft and 6ft in capacities of 1.30cu m, 1.60cu m and 1.87cu m (approximately) and can be supplied as a complete sweepercollector unit, or the box and trailer only can be provided for

fitting to existing sweepers.

Agar claims that, by positioning the front wheels on a centre line of the brush, accurate height adjustment is possible from 0 to 3in, enabling the sweeper to follow ground contours closely. And by fitting fully castoring wheels to the rear, Agar says the jumbo is more easily reversed and overall manoeuvrability improved.

The sweeper will collect leaves, grass and rubbish (where practicable) from lawns, fairways,

formal grass areas and paths. Driven by a double vee belt from the pto driven gearbox, it is three-point linkage mounted and suitable for use with any tractor having pto.

The collection box can be emptied without the operator leaving the tractor seat. A canvas dust cover is standard.

Further information from Agar Equipment, Unit H 7/9, Blackpole Trading Estate, Worcester, Worcestershire WR3 8SG.

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