Introducing the 7-Year Limited Warranty

For years we've had an open and shut case for quality in irrigation system valves. Now we're putting a promise behind our words.

The 8000BCR Series of contamination-resistant, 1" to 3" bronze valves is so tough and dependable that Weather-matic is backing them up with a new 7-year limited warranty!

But there's even more. Our direct burial, remote control valves are available in other models, too. The new 7000E Series offers competitively priced bronze valves in ³/₄" to 2" sizes. The 11000 Series features

1" to 2" sizes of high-strength, glass-filled plastic construction. Both carry 1-year limited warranties.

All Weather-matic valves are the normally-



closed type. Design features include a unique dual ported flexing diaphragm that minimizes clogging and malfunctions without traditional bleed tubes or channels. An easy-to-use manual bleed lever bleeds valves to downstream. And every valve is water pressure-tested before leaving the factory.

Weather-matic valves have been providing top performance around the country for years. Teamed up with our controllers, sprinkler heads and Rain-Stat[®], they work and work and work.

That's why more and more irrigation professionals say you can't beat the system when the one you choose is Weather-matic. For complete information, write or call today.

What an opener!

Sprinkler Division, Telsco Industries P.O. Box 18205 • Dallas, Texas 75218 214/278-6131



LAST WORD

BONUS ISSUE

Greenkeeper is pleased to be able to include with the issue a reprint of Nicholas Parks series of articles on the "Management of British golf courses" which appeared last year in Golf Monthly. The series received such wide acclaim and created such interest that the Royal & Ancient through the Greenkeeper Training Committee commissioned the reprint in booklet form. For those who have not read the articles they will be fascinating and for those who have seen them before the booklet will become an invaluable addition to their reference library.

CONFERENCE CALL

EIGGA's annual Conference still has places available for all greenkeepers, secretaries, chairman of Green Committee's, etc. During the three days there are over twenty-five speakers covering a wide range of topics, they include some fourteen greenkeepers as well as Peter Wilson of the English Golf Union, Jim Arthur on behalf of the R & A and Sir Rex Hunt guest speaker at the dinner. The cost for members is £112 including full board and accommodation and daily attendance is possible at a cost of £25 per day, so if you have not yet booked a place phone Danielle Jones on 0291 424235.

CHAIR CHANGE

Michael Chance has retired after five years as Chairman of the National Turf Grass Council. His successor is Howard Swan whose main aim is to see "that in the not too distant future the NTC will come up with a research programme for the benefit of the Turf Grass Industry as a whole".

TORO SCOTTISH CONNECTION

With a view to increasing their sales of irrigation equipment in Scotland, a second Scottish Dealer — Stewarts Sportsground Construction Limited, Dalkeith, Edinburgh, have been appointed by Toro Irrigation Limited.

From a commercial point of view, this development will increase the penetration of Toro Irrigation equipment in Scottish markets, where many systems, especially those using impact-drive sprinklers, installed in the seventies, are now in need of updating.

"We did lose our reputation for product reliability in Scotland for some time" admitted Peter Roberts. "But we know from experience gained over the past decade in other parts of the UK, that Toro gear-driven sprinklers and Toro designed Irrigation systems are now probably the best available."

GREENKEEPING PANEL

The Royal & Ancient Golf Club of St. Andrews has announced the formation of four advisory panels to monitor the use and distribution of its external funds. The panel on Greenkeeping comprises of D. H. Louden, K. Almond, R. T. Robinson, J. H. Arthur and P. Wilson, the R & A advise that the panel's role is an advisory one, although they will oversee how the funds donated for research, education and the new amalgamated Greenkeepers Association are spent, they will not act in these areas, but report back to the club.

IRISH ADVICE

The fifty or so golf clubs in Ireland that have received advice over the years from Jim Arthur are now to be visited by the STRI. Dr. Peter Hayes who was based in Ulster will cover the north, whilst Stuart Ormondroyd will visit clubs in the south, reports and advice will be given on a joint basis. Mr. Arthur will continue to act as the R & A's consultant agronomist to the Championship committee as well as advising many private clubs in England, Scotland and the Continent.

Image: Constraint of the second state of the second sta

of irrigation controllers, valves and sprinklers. Interested parties should contact

Mr. E. Gregory Deegan, European Sales Manager, 34 Avenue Victor Hugo, L-1750, Luxembourg. Phone 27455 or Telex address 60123 MACOM.



Five simple ways to take control.

Whether you need a 6, 8, 12, 16 or 24 station irrigation controller, you can't beat the microcomputer Mark Series from Weather-matic. All models are available in three types of housings — U.L.-listed rainproof aluminum; economical plastic for indoors or heavy-gauge, industrial-grade steel — so they can fit every application.

The Mark Series is easy to program, too. A function selector switch and large pushbuttons reduce operator confusion and help cut training time, all but eliminating installer callbacks.

Among the advantages are two watering schedules, four daily start times on each program and 0-99 minute timing at one-minute increments. Plus the new Day-Bright[™] LED display —



filtered and recessed for daylight visibility.

Special features include a self-charging battery back-up system. This retains the program and clock time in the event of a power failure. And it eliminates periodic battery replacement. The controllers will also detect and skip a shorted valve.

Teamed up with Weathermatic's proven valves, sprinklers, Rain-Stat[®] and other products, Mark Series controllers work and work and work.

They're five reasons why so many irrigation professionals

say you can't beat the system — when the one you choose is Weather-matic. To learn more, write or call tollfree:

1/800/835-2246. (In Kansas: 1/800/362-2421)





Sprinkler Division, Telsco Industries P.O. Box 18205 • Dallas, Texas 75218 214/278-6131



WOODS IN JAPAN

Walter Woods – links supervisor at St Andrews – recently completed a mission to recreate his beloved linksland on a Tokyo hillside. *Greenkeeper* carries his report and photos exclusively.

IT'S a long way from St Andrews Scotland to the New St Andrews Golf Club Japan. A flight that takes you over seemingly endless ice-covered land involves a refuelling stop in Anchorage and breathtaking views of Mount McKinlay and Mount Fuji.

On arrival at Tokyo, you are greeted by an intense heat and high humidity that makes your lungs draw deep in search of oxygen.

Tokyo is vast with a population of about 12 million. It sprawls for miles and huge skyscrapers give an appearance more typical of New York.

Motorways go off in all directions, but even these cannot compete against the density of traffic and all vehicle movement draws virtually to a crawl during morning and evening peak periods. The modern subways and trains are more convenient and wellorganised taxis offer an alternative to the inconvenience of driving yourself.

One thing that immediately captures your notice is how clean everything is – the shops are beautiful and the people well-mannered and courteous. You can also walk in any part of the city during the night or day without fear of being accosted.

As you travel out, the countryside looks similar to parts of Scotland, Wales or the Lake District and it is not until you see the different architecture and vast rice fields, that you realise you're on the other side of the world.

It was some 12 years ago that a number of golfing enthusiasts embarked on a scheme to build a golf course similar to the Old Course at St Andrews. They ran into difficulty with government land restrictions and legislation. An alternative was sought and Jack Nicklaus invited to design another 18-hole golf course on a hillside. The result resembles a typical American course with lakes and tightly bunkered greens.

The course is now wellestablished and receives many visitors, who provide a valuable source of income. Unfortunately, it is well out of the reach of many. To play a round, with the caddie fee and use of clubhouse facilities, can cost £100, excluding any meals. It is also possible to play at night with nine of the holes completely floodlit!

Directors and officials of the New St AndrewsGolf Club visit St Andrews periodically to cement a bond of friendship between the two golfing



communities and because of an upsurge in the popularity of golf in Japan, they recently decided to build another nine holes. They hired a young Japanese golf course designer, who has studied British golf course architecture and, in particular, many of the famous golf courses in Scotland. It was mainly for this reason that my services were required.

At the golf club, I was informed of my duties and what was expected of me. I was then introduced to the designer and, between us, using an interpreter, we discussed and implemented the undulations of greens and fairways and the siting of tees and bunkers.

All the golfing holes have different intended character – two holes resemble Carnoustie, some are like Gleneagles or even Sunningdale and one looks like a particular hole at St Andrews. All were individually built to resemble British golf course architecture.

The Japanese government will not allow any golf courses to be constructed on flat or agricultural land, so any new projects have to be built on wasteground or hillsides, but this is no problem to the enthusiastic Japanese. They will move any amount of earth to achieve their aims.

Money is no object and you learn quickly never to commit yourself to your first suggestion. If you did, they would have the task completed by the following day! I overcame this by determining and earmarking bunker locations, deciding what green undulations were necessary or suitable and only then did I mark them out by using chalk, wooden stakes and string. I then checked them myself, usually in the evening.

This eliminated any mistakes and, once completed, their surveyors would put the final decisions to paper. Everybody concerned in the project was asked to attend a meeting every second day and everything, down to the smallest detail, was discussed.

A large workforce, including women, worked from eight until five, six days a week. Each morning, the supervisors would have every detail written on a blackboard and the entire task of that day would be explained





Traffic on the move, almost, in Tokyo.

before work commenced.

Everybody tackled the manual labour conscientiously. Such work included building bunkers, planting trees or bushes, or turfing fairways – no seeding took place, except to the greens.

On the fairways, the turf used was korai, a native grass that provides a dense surface something similar to that you would find on any British inland course. The greens construction was to the specification adopted by the USGA.

Plastic drainage was confined into a gravel and grit carpet, then covered and contoured with a sand and peat mixture. This was then seeded with Penncross bent, which appeared to be well-suited to the climate.

While the green and tee construction was going on, installation of the irrigation system took place. Not only were pop-up watering heads installed, but also a demisting system. This was organised by the installation of pop-ups at 12 metre intervals on separate pipes right round the greens. These were then linked into valves and could be operated individually or through the irrigation controller.

The fine jets could fire water to create a mist for one-minute intervals and this, in turn, cooled the air for three to four hours, preventing the grass from wilting in the heat and high humidity.

During my stay, I visited many golf clubs and the pattern was similar at each. Clubhouses were as near perfect as they could be and service was exemplary. Courses were groomed to perfection in settings of azaleas, Japanese flowering cherries or many other beautiful flowering trees or bushes – a lesson learned from Augusta National.

The greens superintendent would have about 20 staff and

Continued overleaf ...



Greens drainage follows the USGA specification.



The same the world over!





Night and day, they play – thanks to floodlighting shown in the background.

'Communications' to lorry drivers bringing material.

ten or so ladies to hand weed fairways or rake bunkers. Greens, fairways and tees were cut daily, including Saturday and Sunday, which were the busiest days. Putting surfaces were fast and true and fairways firm. Bad lies were difficult to find.

Most courses had Penncross bent on the greens, but I did see some with a mixture of rye and Poa annua – even these were exceptionally good. Machinery was usually maintained by two mechanics and every modern device was available.

Staff rooms were spotless and contained a dining room, changing rooms, wash and shower rooms – shoes had to be removed before entering and slippers were provided. I saw these conditions at every golf club and the ultimate at one club was sleeping rooms for those who had worked extra overtime.

Japan has four main islands – Honshu, Hokkaido, Kyushu and Shikoku – split into perfectures similar to counties or regions. Tokyo, Yokohama and Osaka are the largest cities. Golf was first introduced to the country in 1903 by Arthur Hesketh Groom, an English merchant trader. With some fellow compatriots, he organised a nine-hole, parthree course. It no longer exists, but an 18-hole golf course has since been constructed nearby.

The sport's popularity has increased tremendously over the last ten years, due totally to the success of Isao Aoki and Tommy Nakajima and as soon as the latter's name is mentioned, people will immediately reflect on the poor fellow's disaster at the Road Hole bunker during the 1978 Open Championship – an area that is now referred to as the Nakajima Sands.

In Japan, there are 1,500 golf courses and over 5,000 driving ranges, used by those who only dream of playing a real golf course.

In the near future, more courses will be built for those of moderate and lesser incomes to enjoy. Playing tennis and watching baseball are the favourite pastimes at the moment, but golf is quickly overtaking them.

Young Japanese now watch the major tournaments on television and copy the superstar's swings and techniques. This encourages them to work hard and to practise during every hour available. Over the next few years, it would not surprise me if they begin to capture the world's major titles.





Growth control. Just picture how it could help you.

Cutting grass, even when it is a joy ride, is time consuming and expensive. In some areas it is also inconvenient and difficult. Sometimes it is downright dangerous.

But now that ICI has introduced Holdfast, mowing can be reduced or even eliminated in medium or rough amenity grass*.

This unique soil-active growth retardant is fully



proven, effective and makes economic sense. It is easy to apply by spray application whatever the weather – rain isn't a problem. And once absorbed by grass roots will inhibit growth for about three months.

The photograph above proves the point. On the left is a grass sample allowed to grow normally and untreated. On the right is a sample which has been treated. Imagine how Holdfast can help you. Saving time, wear and tear and helping to release manpower for more important seasonal work.

Before deciding on your 1986 grass maintenance programme send for our Holdfast leaflet. It is the only way to get the complete picture.



Classified

BROCTON HALL GOLF CLUB

requires an

ASSISTANT GREENKEEPER

Applicants must have experience in greenkeeping and machinery maintenance. The appointment to commence as soon as possible. Salary negotiable. Accommodation may be available to

suitable applicant.

Apply in writing stating age and experience to: The Secretary, Brocton Hall Golf Club, Brocton, Stafford, ST17 0TH.

YORK GOLF CLUB (18 hole course)

applicants are invited for

ASSISTANT GREENKEEPER

Applicants must be experienced in greenkeeping techniques, the use of modern equipment. Experience in drainage would be an advantage. Written applications to:

> The Hon. Secretary, York Golf Club, Lords Moor Lane, Strensall, York, YO3 5XF

HEAD GREENKEEPER

required by

CREWS HILL GOLF CLUB

Applications are invited from suitably qualified persons. Salary negotiable. Accommodation available.

The Club is situated in country surroundings yet within easy reach of all facilities and Central London.

For application form, write or telephone: The Secretary/Manager, Crews Hill Golf Club, Cattlegate Road, Crews Hill, Enfield, Middlesex, EN2 8AZ. Telephone: 01-363 6674



WARREN GOLF CLUB

require

HEAD GREENKEEPER

Applications are invited for the above post. Salary negotiable. House provided.

Apply in writing with full details of age, experience, qualifications etc. to:

The Secretary, Warren Golf Club, Dawlish Warren, Dawlish, Devon, EX7 0NF

SECOND-HAND MOWERS

SPECIALISTS IN RANSOME MOTOR TRIPLES

SHAFTESBURY PLANT Shaftesbury, Briar Road, Great Bromley, Colchester, Essex. CO7 7XD

TEL.: (0206) 230442

HEAD GREENKEEPER

required

Applications are invited from persons experienced in all aspects of Golf Course husbandry for this old established Nine Hole Private Members' Club with full responsibility for Greenkeeping Staff and Maintenance.

No Accommodation available.

Salary Negotiable.

Applications in writing to:

The Secretary Hampstead Golf Club Winnington Road Hampstead Garden Suburb London N2 0TU Tel: 01-455 0203



WITH A

OF THE

WITH A DEMONSTRATION **OF THE** CLUB

WITH A DEMONSTRATION **OF THE** GROUNDSMAN

Whatever job it's designed for fine mowing or rough cutting – a professional machine has to be more than supremely efficient.

It must be easy and economical to operate. It must be tough and robust. Above all it must be able to carry on working day after day, season after season.

These qualities - and many more - are built into every machine in the Atco Professional range. But don't take our work for it.

Come along to one of our demonstrations. Watch the machines being put through their paces. Test them yourself and discover the many features of the:

Club 17" or 20" cut. For all types of golf and bowling greens and ornamental lawns.

Groundsman 28" or 34" cut. For playing fields and sports grounds, electric or recoil start options.

Gangmaster 83" or 138" cut. P.T.O. gangmower with 3 or 5 cutting heads in fixed or floating versions. For golf courses and other grass areas.

Also available in the rotary mower range, Airborne, Stoic and Clearway.

To find out more about demonstrations in your area ring Graham Vellacott on Stowmarket (0449) 612183 or return the coupon.

