stay in the cultural triangle formed by Stratford-on-Avon, Bath and London. Somewhere about an hour from Heathrow.

Donnington Grove, a “Strawberry Hill Gothic” mansion built in about 1770, was bought in 1991 for this purpose. It is believed Mick Jagger was also interested in the property. The mansion and part of the 550-acre estate were turned into Donnington Grove Country Club, which boasts a Japanese-run hotel and a superb Dave Thomas-designed golf course. About £20 million was spent on the project, most going on the hotel with its 29 bedrooms, Japanese restaurant, Japanese baths, and saunas. About £2m went on the golf course, £1.5m went on a temple (with Japanese craftsmen flown in to construct it) and gardens, and about £300,000 has been spent on machinery.

Course manager David Winterton, 35, has just taken on a seventh greenkeeper. In the summer he also employs two casual workers to keep the course.

There is also a full-time mechanic who runs his own show. “He has been set up to run the workshop as a separate unit,” says David. “Therefore he has his own budget with a system set up so he charges his time out to the jobs he does. Parts and stock are supplied by myself. This is a trial run but is working well. Basically it is to prove that a full-time mechanic can earn his existence in a cost-effective and hopefully economical way. Each month a budget update sheet is produced by the accounts department for the workshops plus the golf course, gardens and farm. The mechanic spends 90 per cent of his time on course machinery but also works on estate/farm/garden machinery. He is good at fabrication and has good facilities with oxyacetylene, mig welder, plasma
"Enforcer" liquid mosskiller is a special chelated formulation of dichlorophen to enhance its performance. This enables the product to stay in solution, particularly in hard water areas, so ensuring a high level of efficacy.

"Enforcer" controls moss on golf greens, bowling greens and other amenity turf areas without blackening the turf. It can be used at any time of the year, providing conditions are moist, and will kill moss and fungi on hard areas like pavements and car parks without damaging the surface.

READ THE LABEL BEFORE YOU BUY: USE PESTICIDES SAFELY.
"Enforcer" contains dichlorophen. "Enforcer" is a trade mark of ZENECA Limited.
‘All is not perfect in this distant heavenly place. As with any new course, there are teething troubles’

cutter, special benches for setting up cylinder heads etc.’

The estate and gardens are groomed by a head gardener and four assistant gardeners. There is also an estate manager and three estate personnel.

The estate manager, head gardener and course manager report directly to the general manager, Mr Eiichi Tanaka. All major financial decisions are made by the directors in Japan who include Mr Jumtoku Deguchi, ‘The Headmaster’. They have the final say: “If they agree with whatever you want to purchase or change, then you can. But there’s no bartering. If they say ‘No’, they mean no."

But David adds: “They have been very generous.”

His budget for ’94/95 is £315,000 of which £120,000 will be spent on labour, £45,000 on chemicals and fertilisers, £30,000 on water and irrigation, with the rest going on machinery, clothing, college tuition, machinery repairs and spares.

Jobs to do

It sounds wonderful so far, doesn’t it? But all is not perfect in this distant heavenly place. As with any new course, there are teething troubles and several things to do to improve the course still further.

A year after opening, they have decided to replace all the woodchip buggy paths with 5mm sponge gravel. This is because, in many areas, especially on the second nine, the rain washes the woodchip away.

About 6000m of paths were laid with hardwood walk chips because the local council wanted the course to remain as natural-looking as possible but, as David points out: “It was a complete disaster as the woodchip did not firm down.” The council is now considering the change. (The buggy path is a concession to the Japanese owners and Japanese visitors as the majority of local and day members prefer to walk the course – a mighty health-inducing 5.5 miles.)

Other work at the moment includes overseeding, hollow tining and topdressing.

Last month (August) the greenstaff began their autumn maintenance programme by overseeding greens with a similar seed mixture to the original. The greens and tees were sown originally with British Seed Houses seed. The greens were 40% Frida chewings fescue, 40% Rufilla slender creeping red fescue, 10% Egmont Agrostis and 10% Highland Agrostis. The tees were 80% fescue types, 10% smoothstalk and 10% Agrostis and are being overseeded with a similar mixture with less festuca but including a dwarf rye seed.

After hollow-tining they topdress lightly with Isolite, a product which retains moisture and releases it when the grass roots require it. They are also lightly topdressing with Biogroundkeeper from Liquid Sod to get a true organic feed into the surface for microbial activity. This is followed by rootzone topdressing, overseeding and they keep it well watered for three weeks. "This should set the greens up well for the winter period," says David. The tees
NEW GREENS TURF

Inturf introduce Super Agrostis, the new high content bentgrass mature turf grown on sand soils.

Plus choice of cultivar mixtures from the 4 top seed houses - all grades.

Plus improved range of fescue/bent greens turf, hard wearing tees turf and low cost fairway turf.

Plus full installation service for conventional turf, 'Big Roll' turf (the original patented system) and new Lay 'n' Play turf tiles, all by qualified greenkeepers.

Plus good value prices and the best service available.

ANYTHING TO DO WITH TURF AND WE'RE INTURF

Inturf Limited, Regent Street, Pocklington, York YO4 2QN
Telephone (0759) 304101 Fax (0759) 305229
For Scotland Telephone 031 663 6617/8/9 Fax 031 663 0651
will receive similar management.

Over the next three years they also hope to topdress the back nine fairways twice a year "as the levels on these are not too good," explains David. "More soil was moved during construction to create interesting designs but with poor soil it has not settled well." The 588-yard 11th was so bad they had to plough it up and returf it six weeks before the opening of the course.

The fairways and approaches also need to be vertidrained as they are still too compact from construction work a year on. This was due to a lot of work being carried out in the adverse conditions of the winter of 92/93 causing serious loss of structure and drainage to the land in general.

About 2 ha of wild flower areas are to be created on the top course to give a variety of colour throughout the season. The mixture will contain meadow cranes bill, oxeye daisy, common knapwood, black medick, scabious, self heal, yellow rattle, wild angelica, red campion, willowherb, mixed with gorse, broom and possibly heathers. Heathers have already been planted but were devastated by rabbits, which are now being controlled.

The banks of the three small lakes on the lower course are to be planted with Juncus effusus ‘spiralis’, bulrushes, red poas, sedges, water dropworts and yellow flags.

More trees are to be planted, too. A lot of trees have already been planted by Civic Trees (which is also looking after them on a two-year contract which finishes this winter). The sheltered belts already planted to screen the long-awaited Newbury bypass have thickened up well, so they may be able to transplant from these onto the course.

Another big job this winter is tee building. Many of the tees,
especially on the par 3s, are proving too small which may mean resorting to mats. David would prefer larger tees that the members could stay on all year.

A putting green near the golf shop - all 700 sq m of it - is to be built from scratch and a 500 sq m turf nursery is to be constructed on the flatter lower parkland course. This will be maintained the same as the greens and tees and will help make the course truly heaven on earth, especially for the greenstaff who are enjoying the experience of working for Buddhist bosses.

18-handicapper David has worked on a lot of golf courses since he left school in '76, but this is the first Japanese company he has worked for. After leaving school he took a two-year apprenticeship in forestry and landscape with a development corporation in Peterborough. This included working on a municipal course, Thorpe Wood, under David Walden. "I realised this was for me", he said. But he went back to school - as a groundsman, then went to Myerscough College and took an OND in turf-culture. One of his work placements was at Alton Meadows, another course supervised by David Walden. Then he got into greenkeeping proper with a full-time job at Thorpe Wood where he stayed for three years before moving on to help build a course at Toft House Hotel, in Lincolnshire. Once that was built he went to Ramsey GC, Cambridge, to become head greenkeeper. Three and a half years later he quit to do some travelling. He got back into greenkeeping by growing in Greetham Valley GC, Leicestershire and in '92 he went to Castle Coombe for a short stint before joining Donnington Grove in February '93, taking over the final growing-in phase from Mike Bottomley. The first nine holes opened in June '93 with the back nine opening three months later.

David says he has a great team at Donnington Grove and that he is enjoying the experience of working for a Japanese outfit. "They allow you to use your professional judgement to the full and you are treated as a true professional with knowledge to be listened to and acted upon," he said.

One thing he has noticed is that "they don't like to say 'No'. That sounds great, doesn't it? But it doesn't mean that I get what I ask for because they don't say yes either. "But they expect perfection, especially in the way the course is presented. At times I've been struggling with the appearance of the course. We've got the machinery but the men don't stretch to it. It's not the greens and tees, but the general look - we can only manicure to a point, we just can't quite get that wonderful finish that the Japanese want. They want the best, and I like that, but they're not always willing to pay for it. And they won't pay for it until they can see it's obvious that, yes, he needs more manpower." (Since I visited the course they've increased the manpower and machinery "to get the presentation they require").

The main areas that appeared to be suffering when I was there were the bunkers which required hand-cutting. The grass on the mounds was longer that desired and prevented the ball from rolling into the sand. David would also have liked to verti-cut more frequently. But there is only so much seven men can do in a day. With the 18 holes set in 170 acres, there is a lot of grass to manage, which is why they have been planting more trees, shrubs and wild flowers.

A couple of other differences David has noted with working for a Japanese company is that "they require a great deal of flexibility in view of working hours and they often expect the team to do other tasks when the occasion arises. But they are always fair."
Autumn Maintenance Programme

Greens
1. Scarify to 5mm depth. Remove debris.
3. Topdress over holes with 2x25kg Biogroundkeeper (dried poultry manure) to increase bacteria activity in surface + 2x25kg Isolite, a Japanese product which helps to retain moisture.
4. Dragmat these products into holes - get these to bottom of holes.
5. Topdress with 90% sand, 10% peat mixture (RBL double-washed sand/Thameside peat) - 3kg/m².
6. Overseed onto topdressing with fescue/bent mix (60/40) - 30gms/m².
7. Dragmat seed/topdressing into surface.
8. Irrigate.
9. Leave uncut for two days, cut at 5.5mm after this.
10. Apply Rigby Taylor special organic N 8.0.5 0.5 + 2% Fe at 35gms/m² - a half rate dose. Irrigate in.
11. In late September will apply Rigby Taylor organic feed - A/W2 4.8 + 2% Fe.
12. Apply light topdressing - 1.5-2kg/m² some time in September.
13. Raise height of cut to 6.5mm for winter.

Tees
1. Hollow-tine and remove cores.
2. Topdress - 2kg/m²
3. Overseed at 30gms/m² - mix dwarf ryegrass, creeping fescue, bent and smoothstalk.
4. Topdress again lightly - 1.5-2kg/m²
5. Apply Sierrablen autumn feed - 15.0.22 + 1% Fe
6. Raise height of cut to 12mm. Will rest par 3 tees by using mats.

Due to drought, many areas of fairway, semi and rough require following work:
1. Scarify thin or dead patches. Some of these patches exist due to extensive kill of clover patches. Use Sisis Veemo behind tractor.
2. Larimiser used to sweep up debris.
3. Overseed using mechanical seeder, possibly a pedestrian overseeder.
4. Topdress.
5. Should not require fertiliser due to Sierrablen feed applied in early spring - 22.5.7 which has an 8-9 month release. If fertiliser is required, will apply Mascot Microfine 4.0.8 + 2%Fe +2%mg.
6. Divot all fairways in late September/early October.
7. Fairway height of cut raised to 200mm.

Tee/green banks and apron
1. Scarify/overseed any bare areas due to weed kill/drought in places.
2. Topdress these areas with complete topdressing of tee banks.
3. Apply Mascot Microfine 4.0.8 + 2%Fe +2%mg. 35gms/m²

Other autumn works
1. Prepare areas of grassland for autumn sowing of wild flower seed by a) spraying off grass with total herbicide (roundup); b) cultivate area after removing majority of grass; c) Sow wild flower seed.
2. Mark trees which have died due to drought so they can be replaced in the winter - possibly remove completely.
3. Sow seeds for wild flowers/water plants around the margins of the three lakes on the course.

Feeding the soil
Soil tests showed the lower nine holes to be nutrient rich with fairway pH of approximately 7 and greens and tees at a healthy average of 5.7. "The pH of 5.7 I will try to keep to stop take-all developing in the greens. This will be aided by applying low doses of liquid sulphur and iron every six to eight weeks," says David.

More on Page 29
It's time for the programmed approach to disease control in turf.

'Greenshield' is the ideal product for use when the turf is growing strongly, as the combination of the contact chlorothalonil and the systemic carbendazim controls disease for up to six weeks. 'Greenshield' is recommended for all turf areas and should be applied any time during the year when there is active grass growth. Dependent upon the season this will be any time from late March through to late September.

'Daconil Turf' is one of the most popular contact fungicides on the market with a well proven track record for turf disease control during the cooler, slow growing months. Chlorothalonils' multi-site activity means fungal disease resistance has never been a threat, making 'Daconil' Turf the ideal cornerstone for any chemical programme. Empty containers of both products can be collected and disposed of FREE OF CHARGE using the Zeneca service on (0345) 125398.
The majority of local and day members walk the course—a health-inducing 5.5 miles.

Nutrition of the course is as follows:

**Greens** — approx 350kg/ha N, 50kg/ha P and 240kg/ha K using a mixture of Rigby Taylor feeds, namely Microfine 18.0.0 + 6%Fe, Microfine 14.4.7 + 2%mg and Microfine 4.0.8 + 4%Fe + 2%mg. They are also spraying a Japanese product called Minox, a liquid sulphur/iron plus micronutrients. In the spring they use Farmura Portcawl and in the autumn/winter Vitax iron and nitrogen and Rigby Taylor SRD, an organic supplement containing foodstuffs for bacteria/fungi in soil profile. They are experimenting with a new Scotsturf product on two greens—32.3.10

Drill fertiliser. A few other clubs are also trialling this product which will be marketed after analysis of data next year.

**Tees** — Sierrablen Mini 22.3.7 which gives “excellent results, good sward cover”. In the autumn they apply slow release Sierrablen. They also spray with a sulphur/iron mixture and Farmura Portcawl.

**Fairways/semi-rough** — Use a new Sierrablen product, 27.5.7—an 8-9 month release. This is spread in February to last the whole growth season. Four fairways have a different feed regime (all Rigby Taylor products) to compare the results. In the spring these receive Microfine 14.4.7 + 2%mg followed in the height of summer by a slow release liquid 18.3.6 + micronutrients, 28.0.0. In late summer they receive 15.0.10 + Fe.

**Topdressing**

The greens and tees topmix is 90% Roffey Brothers double washed sand and 10% peat from Thameside. Both these products were laboratory tested—the peat for pH and organic matter value, the sand for hydraulic conductivity, particle sizes, pH, lack of lime. “They worked very well indeed, having been built on a gravel raft system with a grit blinding layer.

The topdressing now used is exactly the same mixture and materials as used originally. They are sourced the same, bought in bulk loads and mixed on site with Donnington Grove’s own JCB. Tildenet netting is used to establish the more difficult areas, eg banks, rabbit damage areas on the greens and tees.

**Bunker sand**

There are 68 bunkers on the course which required 2,500 tons of sand. Some of the bunkers are very large. One is 300 sq m and took 200 tons of sand. The sand used is Kingsley fine washed. “An excellent sand, but it requires a year to settle down properly. However, it’s good after that,” says David.

**Irrigation**

Installed by TIS, the Toro system uses a SC 3000 control panel, two main pumps plus a booster pump for the upper course. The system is designed to apply 32mm in seven days to greens, 25mm in seven days to tees, and 19mm in seven days to approaches. The greens have four and the approaches have one Toro 658 Series electric valve in head, twin speed sprinklers. The tees use 700 series, there is also a manual hose point by each tee and green.

The reservoir holds 5 million cubic metres of water, filled by extraction from the River Lamberdon via a chamber pump underground. It is filled, according to the terms of their licence, between October and March.

One of the most time-consuming jobs has been lowering the sprinkers and most of the control boxes as the ground shrank after construction.

**Cutting heights**

Greens — 5mm in the summer, 8mm last winter, 7mm this winter; fairways — 20mm; semis — 1.5ins; rough — mostly 2.5in, the 5in areas are to become wildflower areas.

---

**WORTH DRAINING**

**VERTIDRAINING and HOLLOW CORING HIRE with the RYAN GA 30**

Contact Peter Bloodworth

WORTH DRAINING

Cornbecks Farm, Irnham, Grantham, Lincolnshire Tel/Fax: (0476) 550266
DEVON AND CORNWALL
With the summer drawing to an end we can now look forward to the beginning of our winter meeting programme which starts at Dinton Park GC on Wednesday October 26. I would like to remind you to send all your entries back to me with correct monies by the closing dates on the entry forms as meals have to be booked in advance. Also a reminder about our dress code at meetings – jackets and ties for lunch and no jeans or shorts to be worn at all. I look forward to meeting all my old friends and hopefully many new ones.

The section was saddened to learn through the magazine the passing of Ivor Scoones’ wife Ann. Members would like to pass on their deepest sympathy to Ivor and his family.

RICHARD WHYMAN

LONDON
I would like to thank Barenbrug UK and RPK Turfcare Supplies for the visit to the STRI. Our group was welcomed by Michel Mulder and John Bradley from Barenbrug at Bingley. The tour started with an introduction from Dr Andy Newell and this was followed by a session in the laboratory. We were given the chance to ask many questions on the analysis of soil and diseases and the associated problems. We also had the opportunity to see the trial ground and the tests that were in operation. The afternoon session was concluded with an excellent lunch and a chance to discuss turf problems amongst our group. The visit was very informative and beneficial.

Next month we host the regional seminar at Oaklands College on Wednesday 26th. You should have received the programme by now and I look forward to seeing you all at Oaklands. Attendance at the meeting will attract three Master Greenkeeper credits.

TONY DUNSTAN

NORTHERN REGION
The patrons scheme for companies wishing to support the region is going well. We have Highspeed (CourseCare) Ltd, Aitkens, Sportsturf and D&E Turf Maintenance as patrons. I hope members will support the companies who support us when ordering goods and services. Anyone who requires information about our scheme can call me on 0782 751851 or 0850 235554.

BOB LUPTON

MID ANGLIA
The Summer Tournament was held at Brampston Park GC, Huntingdon, and attracted an entry of 30 greenkeepers and trade members. A stableford format was played over 36 holes. This was a wise choice due to the difficulty of the course, which has many water hazards.

Although the hot weather had taken its toll on the fairways, it was good to see the greens in excellent shape and pleasing to play a course with so many interesting holes, particularly the 4th and 16th which provoked lively discussions in the clubhouse afterwards. Our thanks go to Brian Taylor, the course man-

EVENTS DIARY

September 22: Hayter Challenge Final, Pannal Golf Club, Harrogate
November 9–10: Scotsturf, Ingliston, Edinburgh
December 1: Scottish Region North Section one-day conference at Crailstone Estate, Buckburn, Aberdeen
January 26–27, 1995: STME ’95, Harrogate International Centre

Shanks Mowers

EXPERIENCE OUR SERVICE
The Turfcare Machinery you want
The Professional Support Service you need!

RANSOMES JACOBSEN GREEN'S

CONTACT US NOW AND USE OUR EXPERIENCE
GROVE WORKS, BENSHAM GROVE
THORNTON HEATH, SURREY CR4 8DA
081-771 4811 (Telephone & Fax)

How to improve your putting!

To get an idea of how many great golf clubs use RPK Turfcare Supplies, put this on your putting green and putt 320 times.

Some of the best golf clubs in the South East use RPK.
So why not get the ball rolling and find out why?

RPK: Getting closer to our client
For details call 0734 510251