### **Bidding a fond farewell**

persons who have sufficient experience or knowledge to undertake the measures necessary to comply with the provisions. Is this true at your course? If not, who is the necessary competent named individual? Is that individual's name written down in the record?

Q3: Regulation 7 (2) Ditto: Every employer shall, without prejudice – b) enable the persons concerned (if necessary by taking appropriate steps in the absence of guidance or instruction and in the light of their knowledge and the technical means at their disposal) to stop work and immediately proceed to a place of safety in the event of their being exposed to serious, imminent and avoidable danger. The key word is *immediately*. Are your procedures capable of immediate reaction?

Q4: Noise at Work. Noise guide No 1. The first level is set at 85 decibels. Determination of a machine's output can be made by carrying out the following: do not continue the test for longer than two minutes, as hearing damage may occur if personnel are exposed without adequate proytection! a) Ensure that the machine is parked safely. b) Only use trained and correctly attired personnel in the test. c) Check the area is clear of any debris or other contagion. d) Start the machine. e) Run at full throttle and with due caution attempt to carry out a conversation with the operator. f) Can you hear what is said using normal voice projection? Yes - the machine is operating on or below the noise level. No - the machine is operating above the minimum level and ear protection must be provided, training given in its use and operators instructed to wear it.

Raymond Wigley, Costessey Park GC, Norwich

# Lost opportunity

It was with increasing dismay that I read the thinly veiled advertisement (article) "Lock It Up". What a lost opportunity to address some important points to ensure yard buildings are constructed in accordance with modern thinking, not to mention the new EC/HSE legislative framework!

Employers reading the article will be tempted to construct 'sheds' in the same old way – as I find so depressingly often on my rounds. May I appeal to all involved in the design and construction of yard buildings to bear in mind two vitally important matters:

1) Where employees are gathered within a building for any length of time eg. workshops, rest areas etc., there must be a safe means of rapidly escaping in the event of an emergency such as a fire. Building such rooms within a 'shed' with security only in mind (no doors or windows) amounts to nothing less than a death trap. The collection of machinery and small tools in the main storage area frequently make it very difficult to get out in a hurry. Very often too the source of a fire will be a hot machine just parked right in front of the most obvious means of escape. Modern design and materials can ensure that the construction of doors and windows will give security as well as safety.

2) Little thought is given to the relationship between pesticides, oil or petrol stores, workshops and rest areas. It is not unusual to find new buildings with such stores right next to areas where employees are working or at rest. Add to this the fact that there are no external exits and you have an accident waiting to happen. There is plenty of guidance available to builders and designers to help them avoid disaster, but I wonder if they ever read them?

Too many mistakes are being made in yard

building design which employees have to live with. It is a pity that Inspectors do not pay more attention to this important aspect of health and safety at work. A few well placed Improvement Notices might go a long way towards getting the message across.

I would appeal to all involved in the provision of yard buildings: make health and safety one of the first things you think about, don't leave it to the end user, the employee, to worry about! Jon Allbutt, Cherry Tree House,

Sunningvale Rd., Biggin Hill, Kent

# Is this a first?

I have a brother, a brother-in-law, a cousin and an uncle, all greenkeepers at various courses, all of whom thoroughly enjoy their work. John Phillips, the uncle of this group, until recently worked at The Broom Hill G&CC in Vancouver Island, Canada. I say until recently, because during June 1993 he suffered a fatal accident, involving a tractor.

Our family were, of course, saddened by the tragedy and by our loss, but it has come to light that we were not alone, for the golf club where he worked thought so much of his work – and of John as a person – that they have re-named their club in memory of him. The new name is The John Phillips Memorial Golf Club. Each September a competition will be played in his honour.

We are all very proud of this and many of our golf-playing family hope to one day visit Vancouver Island to play in the competition with members of the club, an honour indeed.

I wonder, is this a first for greenkeepers? Andrew Phillips, Glynhir GC, Dyfed

# Tree grants available

May I draw to the attention of readers the large grants that are now available from the Forestry Authority for tree planting? These grants are available to all land owners, including golf courses, and are paid out under a Woodland Grant Scheme over a period of ten years. There is also a supplement for planting improved grassland, which is paid out at the time of planting.

We recently prepared a budget for tree planting in 15 different areas on a golf course and over a ten year period the grants will cover the total cost of the tree planting and subsequent maintenance. Eamonn Wall, Woodland Consultant, Dollar, Clackmannanshire

# Course is right on target

I would like to thank all the staff at BIGGA and all the lecturers for a most interesting and enjoyable week on your Year One Management Course. I found it of great benefit and will be looking forward to coming back for Year Two. If any greenkeeper is thinking of going on the course, I would thoroughly recommend it. Thanks again for a great week.

Perry Smith, Deputy Head Greenkeeper, Bramley Golf Club

# Wrong hills

Your top photo caption (page 19, October issue, featuring Kingsknowe GC), indicates that the Braid Hills are shown in the background. Not so, these are the Pentland Hills.

Allen Wood, Braid Hills GC, Edinburgh



y time on Greenkeeper International is finished, to my regret if not to yours. Looking back over the small mountain of issues it has been my pleasure to compile, I grinned at one comment

which appeared in my first editorial, recalling again the pithy words of an unidentified but oh-so-observant wordsmith: "Writing a column is easy," he declared, "All you have to do is sit at your typewriter until small drops of blood appear on your forehead."

Thirty five issues have come and gone, some with more blood-letting than others, and though occasions were legion when "small drops of blood appeared on my forehead" it seemed, more often than not, that blood appeared on my fingertips as well, for the equivalent of something approaching two block-buster novels has been thumped out on the keyboard of my trusty old Apple Macintosh; far more than any trifling 'bloody' column and, in truth, much more fun.

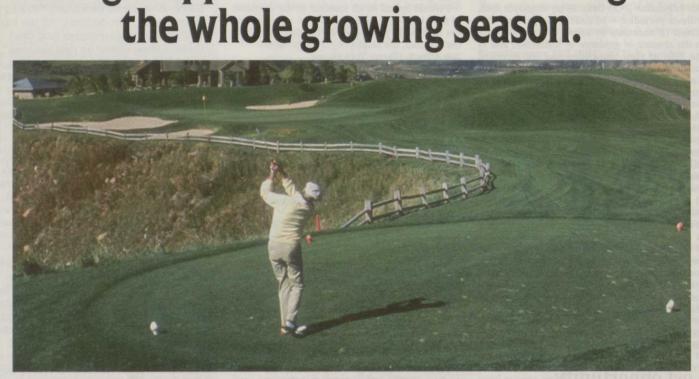
Editorial guess-work is at best an imperfect science. In trying to discover where readers' loyalties may lie, I've found no reliable way of discovering which elements in this magazine you've secretly pined to read – or those you'd be pleased to see the back of – while any 'research' I might have undertaken (in the main, listening to every greenkeeper I ever chanced to button-hole for more than a few moments) – served merely to offer guide-lines to those features you most enjoyed (without exception, the controversial ones), whilst failing to throw up any revolutionary or untried ideas.

Striving always to present all sides of the greenkeeping conundrum, often at no small cost to my firm (some would say impenitent) beliefs, in so doing I've held true to the doctrine of John Stuart Mill (1806-1873), whose words are writ large above my computer screen: "We can never be sure that the opinion we are endeavouring to stifle is a false opinion; and if we are sure, stifling it would be an evil still."

My departure should not alter your expectation of good things to come, for a tantalising array of delectables will I am sure continue to appear within these comfortable old pages, pages that I have come to regard as my own. There will be words that please and words that infuriate, words that inspire and words that are best read with a sharp instrument close at hand. If you think you are being addressed in a condescending manner, or you suspect pontification, grasp the matter firmly: your letters page was never dull, make sure it stays that way.

So farewell. Be of good cheer, trusted friends – and be kind to your new editor. This old editor cum columnist cum photographer cum copy boy isn't about to kick the bucket, he's simply taking a well earned blood transfusion. The drip is deep in the artery, the bottle flowing with a translucent amber fluid that contains reputedly miraculous healing powers! DAVID WHITE

# Sierablen Turfmix Controlled Release Fertilizer with fast start portion A single application assures feeding for



# High Quality. Proven in Practice.

- Controlled Release Nitrogen, Phosphate and Potash ensures constant feeding without scorching.
- Unique release pattern avoids unwanted flush of spring growth.
- · Even colour and growth throughout the season.
- Unique resin coating protects nutrients from run-off by irrigation or rainfall.
- · Ideal analysis for healthy turf: 28+5+7+Fe.
- · Minimizes leaching of nutrients.
- · Cost-effective and laboursaving.

Sierrablen is one of the high quality products of Grace-Sierra. Our know-how and experience help greenkeepers to maintain high quality turf all year round.

See us on Stand A48 at BTME	GRACE'S High technology in plan		
Call us for further information o		Gl. 12.93	Grace-Sierra United Kingdom Ltd
Please send me information on	urf 🗆 Landscaping		Freepost Nottingham, NG21BR
Name	Address		. Tel: (0602) 455100
Postal code/town			. Fax: (0602) 455311

# SPRING FERTILISERS

# It's time for a good feed, says MICHAEL BIRD - and he doesn't mean your Christmas dinner...

call for all fertilisers contain-ing nitrogen to state the source of the N present in the bag, box or bottle has come from Dave Lawson, soil chemist with the STRI, Bingley. Dr Lawson comments that those manufacturers who clearly display the source of their nitrogen are providing an important service to end-users. By identifying the type of N present, turf professionals will be able to optimise nitrogen applications in line with prevailing soil conditions, grass type, pH levels and disease risk.

A typical case cited by Lawson is that of ammonium sulphate, which has been shown to be the best source of fertiliser nitrogen for turf comprising fine fescues and bents, helping produce the highest quality finish. "This is a result of the acidifying properties of ammonium sulphate, which help reduce earthworm casting and fungal disease while discouraging annual meadow grass," he explains. There is, in fact, evidence that ammonium may be toxic to annual meadow grass, says Lawson.

Over-acidification of the turf needs to be avoided and this is achieved by blending organic nitrogen sources such as dried blood and poultry manure with ammonium sulphate - a mix favoured by many of the leading fertiliser manufacturers as it also produces a longer term N release period. Dr Lawson stresses that organic N sources should not be employed as the principal source of fertiliser nitrogen as over-use can lead to severe disease problems. Another problem is acidification of the rootzone, which can occur rapidly in newer, free-draining constructions. As a result, Lawson recommends less dependence on ammonium sulphate in favour of urea or ammonium nitrate, both of which are used commonly in liquid fertilisers and have a much reduced acidifying effect. The same maxim is applied where creeping bent grasses are commonplace as these prosper in non-acidic soil conditions.

A word of caution is sounded by Lawson over the application of slow-release fertilisers containing ureaformaldehyde-N (methylene urea). Regular use of such constituents is known to encourage the establishment of annual meadow grass in fine turf and he is concerned that other products which release nitrogen in a similar way to ureaformaldehyde may have a comparable effect.

The longer term consequences of the newer slow-release nitrogen materials have yet to be investigated.

While the scientists and researchers get to grips with new materials and new techniques, there is much to be considered on a practical basis by those looking ahead to spring fertiliser programmes. Probably the most important point to remember is that there is no standard programme which can be followed. Every course will have its own specific needs according to soil and grass type, anticipated turf wear rates and location. A fertiliser applied in March in Cornwall will respond quite differently to the same product applied on the same day on Tayside.

Advice given by manufacturers or fertiliser suppliers should always be based on a soil analysis report. ICI, for example, offers a free analysis service to customers which is used to prepare a planned fertiliser programme for the season. When the report is delivered, suggested levels of NPK are given based on background information regarding the course which has been supplied with the sample. ICI's reports and recommendations are based on soil nutrition levels advocated by the STRI. However, the company has found that many people regard these as being too high, cutting them back accordingly, with negative results in future years. As a guide, ICI says that traditional greens and tees will need 80 -200kg N, 20kg P and 60 - 150kg K. Sand constructed greens will require 250kg N, 20kg P and 150kg K, final levels in all cases depending on a soil analysis. The company recommends that 40 to 60 per cent of N is given in the spring, similar levels in summer and 10 to 20 per cent in autumn. P and K should be applied throughout the year as required, with the main K application in the autumn to help promote root development and winter hardi-

Slow-release nitrogen fertilisers can be applied early in the year to help maintain strong, healthy grass growth during periods of high wear, eliminating the need to make constant applications and reducing the risk of flushes, speckling or irregular growth. Such a product is ICI's Longlife Mini-Gold, a high nitrogen (31:0:0) mini-prill fertiliser suitable for use on fine turf where phosphorus and potassium levels are satisfactory. Release of the sulphurcoated urea is controlled over a period of up to 14 weeks, eliminating scorch and reducing leaching. Application rates are from 15 to 30g/sq metre with one 25kg bag capable of treating up to 1,660 sq metres. The ICI range is very comprehensive and where a balanced NPK fertiliser is preferred as an early spring application Longlife Spring and Summer 14:3:7 is a very popular alternative. Based on sulphate of ammonia combined with the slow release element 'Didin' greenkeepers can expect up to 12 weeks nitrogen release.

A mini granule offering controlled release of nitrogen, phosphorus and potassium for fine turf throughout the season from just one application is Grace-Sierra's Sierrablen Mini. Having an analysis of 22:3:7, the product is applied in February or March and has a longevity of up to six months at 21degC average soil temperature. Resin-coated, each granule's release rate is dictated solely by soil temperature, with higher temperatures reducing longevity. Recommended application rates are 35g/sq metre on standard greens and 50g/sq metre on sand constructions, said to provide between 50 and 60 per cent of the turf's spring/summer nutrient requirements. Any shortfall can be made up with a liquid NPK fertiliser during the growing season. The company also offers other formulations giving five month, and greater, release periods from a single application.

Rigby Taylor's Mascot = 14

kg

g



### AMENITY LAND SERVICES LIMITED

Long Lane, Wellington, Telford, Shropshire TF6 6HA Telephone Telford (0952) 641949 (24 Hour Ansaphone Service) Fax: (0952) 247360

### **Granular Shrub Fertiliser**

Granular Tree & Shrub (Slow rele	ease)
4-19-10+8% mg	25k

### **Premier Turf Conditioners**

Sea King Liquid Seaweed	10L
Premier Liquid Chelated Iron 7.2%	10L
Premier Soluble Iron 20%	4kg
Seaweed Soil Conditioner	25k

## **Liquid Fertilisers**

Premier	Liquidfeed 15.0.6	20L
Premier	Green 'R' 18.0.0	201

### See us on Stand B11 at BTME

AD REF 408

# SPRING FERTILISERS



13 - Microflow slow release liquid fertilisers have 'shortchained' methylene urea as their nitrogen source, giving a controlled release of nitrogen for up to 12 weeks, while promoting an early greening without growth flushes or fear of scorching, even at higher rates. Suitable for all turf areas, the product is available in three different formulations supplied as a solution which mixes instantly in water without agitation. Applied by conventional spray equipment, Mascot Microflow is available in 28:0:0, 18:3:6 and 15:0:10 formulations, the last two with added chelated micronutrients and iron respectively.

To promote rapid early season turf recovery following winter play, Gem Professional recommends the use of its Turf Tone plus Iron, a 6:0:3 formulation designed to stimulate early growth and tillering to thicken the sward. Nitrogen is supplied in readily available form within a coarse quick-acting powder which requires very little moisture to wash it down to the rootzone while remaining in place, during grooming or verti-cutting.

Similarly designed to bring forward spring renovation programmes is Key Turf Tonic from Vitax, suitable for application in early March and at other times of the year when turf condition needs a boost. Supplied as a powder at a 2.1:0:2.5 + 3% iron formulation, the product also helps control moss and prevent fusarium patch disease.

Natural plant growth stimulants, such as seaweed extract, have been shown to improve both grass root and shoot development to provide a strong, healthy foundation for the growing season. Furthermore, trials on turf treated with Maxicrop's seaweed extract have produced increased plant chlorophyll levels, encouraging photosynthesis. Despite the proven results, Maxicrop admits that the influence of every single component contained within seaweed extract is yet unknown. Although this has produced scepticism in some quarters, one thing is certain: There is nothing harmful within the product, which is totally natural, containing growth compounds which are already present in grass. Maxicrop offers a range of seaweed-based formulations with added nutrients, iron and trace elements suitable for use during the year as a turf conditioner, general purpose feed, green-up agent or aid to establishment. The company is delighted to discuss trial results and recommend programmes for specific turf areas and needs.

A range of seaweed-based liquid feeds as well as liquid fertilisers is offered by Agriland. The company's latest fertiliser product, Tournament, is designed as a total feed for application by sprayer up to five days ahead of competitions and where stressed or badly worn turf needs reviving.

Analysis is 15:0:3 accompanied by organics, trace elements and other ingredients which, says Agriland, nourish the turf and create a durable visual effect, bringing out colour and promoting good, even growth and vigorous rooting. Tournament is available in 20 litre containers, with six cans sufficient for treating 18 greens. It can also be tank-mixed with herbicides.

# Project hunts for stories from the golf course

oes the heady coconut smell of gorse in the height of summer spark fond memories of days on the golf course? Do any trees at your club have a story to tell - the ball lodged in the fork of a branch or a particular species planted to commemorate a person or an event, a hole in one perhaps? Are there any wild plants special to your course and are they featured by the club in any way, for example in a badge or in an award for golfing achievement?

The connections between golf and the natural environment have always been strong. Flora Britannica is a project which aims to keep and record those connections. All people with an interest in golf are being invited to contribute their own stories to Flora Britannica – together they will feature in a book to be written by naturalist and broadcaster Richard Mabey.

The Flora Britannica project is keen to involve clubs in celebrating their links (sorry!) with wild plants. "English Nature's Hole by Hole Guide to the Wildlife of Royal St. George's for this year's Open proved extremely popular and could be easily repeated elsewhere", says John Newton the project's co-ordinator. "Compiling a map of a course

which tells both golfing and plant stories is another initiative which we are following up. However, there are many other possibilities and we would be delighted to talk to clubs who have their own ideas."

If readers of Greenkeeper International would like to contribute a story to Flora Britannica or to explore the idea of promoting their clubs connection with wild plants, please contact John Newton at Flora Britannica, 41 Shelton Street, London WC2H 9HJ. Tel. 071 379 3109. How to be blessed by your grandchildren

Books

by David White

B ack in 1981 I fell in love with a book. Honestly, I'd never before been smitten so by a single, individual tome, though I'm blessed with over three thousand highly individual little beauties in my golf library. I loved the book and its subject so much that I persuaded its authors, golf course architect Geoffrey Cornish, and architectural editor Ronald Whitten, that a niche existed for a leather-bound, limited edition, and that I should produce it. That special book, 'The Golf Course', came into being as an Ellesborough Press collectors' edition, with copies now changing hands at two or three times the original price. If I'd only known, I'd have done a touch of 'laying down'...

So, what was so special about it? It covered a subject that had not to any great degree been examined before: a history of the men who practiced the art of golf course design and the way their art evolved. More than that, it profiled several hundred men who made important contributions to the history of course design. Not content, it also contained the most comprehensive listings of architects' works ever compiled, plus, to cap it all, another section contained a master list of golf courses, cross-referenced to their designers. In short it was, or soon became, the 'Bible' for all journalists working within the golf industry; dog-eared, coffee-stained, a copy was found on every desk.

That first edition representing some 40 years of research for Cornish, and if it has been indispensable these past twelve years, the new edition will most certainly replace it as the 'darling' for all golf writers, by making us appear more knowledgeable than we really are, though we'll hardly discard the original, old friend that it is.

Make no mistake, this is no 're-hashing' exercise, for the new book, apart from quite properly gaining a new title, The Architects of Golf, is a completely revised and expanded edition, a survey of golf course design from its beginnings to the present, with an encyclopedic listing of golf architects and their courses (so bang up-to-date some of the courses listed are still at the grow-in stage). Described by its publishers, Harper Collins, as the ultimate reference source for anyone interested in golf, it contains a ton of new material. With umpteen million golfers world-wide, the market potential is enormous, but more than that, it's a hell of a good book. I urge you to buy a copy, your grandchildren will bless you for your foresight. The Architects of Golf, by Geoffrey Cornish and Ron Whitten, (648pp hardback) is available from Grant Books, Victoria Sq. Droitwich, WR9 8DE, price £42.75 including postage.

hirty five years of searching, but I never did find a copy of a rare book of golf architecture entitled Hazards; The essential elements in a golf course without which the game would be tame and uninteresting. We collectors should never despair, for nearly always there is someone to the rescue when the search is almost abandoned, and now a whole new generation of grateful readers can enjoy the collection of articles and discourses collected by Aleck Bauer in 1913, which helped him in his work on the Ravisloe course in Chicago. In particular he assembled a selection of famous golf holes which were noted for their terrifying hazards, with spice added by contributions from Alister Mackenzie, Ted Ray, Donald Ross, Dr Laidlaw Purves and Harry Colt. Good enough, you might think, but in this reprinted and enlarged edition there are further features also by Peter Thomson, Fred Hawtree and Peter Dobereiner, plus a fascinating argument propounded by Philip Truett, in which he questions whether bunkers should be raked or not, expressing a desire to see old traditions retained, making golf a test of skill supplemented by a large slice of fortune good or bad. I imagine many greenkeepers will have something to add on that subject!

### Hazards, by Aleck Bauer (88 pp hardback, limited edition of 750 copies) is available from Grant Books, price £28.50 including postage.

arry Colt's famous little work, Some Essays on Golf-Course Architecture first saw the light in 1920, when it was heralded as a minor classic. Colt, perhaps the first of the dedicated architects, left an indelible mark on golf course architecture and his influence in this century has been and remains enormous. He worked closely with Alister Mackenzie on a number of projects until about 1928, thereafter working with C H Alison and J F Morrison until 1961.

This little book brings to life Colt's desire to work with nature and natural configurations, at his best when propounding the merits or otherwise of bunkers, which he used to great subtlety. Starting points, sites for greens, length of holes and blind approaches are all skillfully discussed. The placing of bunkers, compulsory and optional carries, protective hazards and freak greens – all come under his scrutiny. Colt's philosophy is as appropriate today as it was in 1920, perhaps even more so.

Some Essays on Golf-Course Architecture by Harry Colt (78 pp paperback) is available from Grant Books, price £18 including postage.

### 'Costly' British courses

It used to be that British courses were considered something of a bargain when it came to green fees. No more, for in a recent survey, Britain featured (ashamedly) in the six most costly, world-wide, edging out Canada, Ireland, USA, Mexico, Jamaica and Australia. It will come as no surprise that Japan topped the league, with \$125 (US) as the average for a single (weekend) round, Spain at around \$90, Taiwan at \$82, France and Germany neck and neck at \$65, whilst Britain averaged \$45. The USA was as low as \$30. (£1 = \$1.48). I suppose this explains why more and more Brits are making for Myrtle Beach, South Carolina; for with over 80 courses on a 30 mile stretch of coastline, all in spanking condition, and all welcoming the British invasion, the tourist/golfer there is seen as something of a 'treasure', rather than an infidel out to be fleeced.

### Toro sales top £450m

Toro's worldwide sales for the fiscal year ended July 1993 were an impressive £456m.

"We are extremely proud of the tremendous strides by all within the company in helping achieve this solid platform," said chairman and chief executive Kenrick B Melrose. "We will aggressively pursue our strategies to maintain worldwide leadership in the turf machinery world."

Lely (UK) Ltd, distributors of Toro commercial products in the UK are naturally delighted with the news from the Toro company – particularly when considering the economic and competitive element in the industry. The release of new products to both golf and other commercial outlets has reflected in a healthy increase in sales for Toro products throughout the UK and it is anticipated that demand for the Toro range will continue in 1994.

### Poking fun at pretension

Remember 'Caddyshack', one of the ten most rented movies of all time and regarded as one of the great storehouses of one-liners? In it, actors such as Rodney Dangerfield and Chevy Chase poke fun at country club pretention, adolescence and golf course bravado. Now, some 13 years after its release, Atlanta based Ford Trading Co. are to market merchandise including tee-shirts, hats, bag tags and so on, with Bushwood Country Club and 'Be the Ball' logo - a small brown gopher who digs tunnels and generally wreaks havoc throughout the course. Purchase of any Bushwood item carries lifetime membership of Bushwood, the motto of which is, "If you don't cheat, you're only cheating yourself." Testament to that fact came at their annual tournament played this spring, when one member turned in a scorecard posting an 18 hole total of 18!

# Success from an old man's genius and a young man's dedication

# Heart and

O ld Tom Morris, it is recorded, was the archetypal public relations expert, practiced at telling folk what folk most wanted to hear. Called upon to inspect a tract of land – any tract of land – on which he may be asked to design a course, he would ponder awhile, sucking on his old clay pipe, before uttering words that would be recorded for posterity: "God and nature", he would growl in his unmistakable Scottish brogue, "must surely have conspired together and decreed that this place was intended only for a golf course." He is known to have said this of 40 different locations, and whilst it was sometimes uttered with tongue firmly in cheek, on the occasion of his visit to Tain, Rossshire, he must clearly have felt the spirit move, for Tain's mixture of linksland and inland terrain was then, and remains today, a truly outstanding expanse of God's Own Country.

Earth-moving equipment in 1890 was little more than a horse and drag-scoop, and architects relied heavily upon nature's own flowing contours to achieve their creations. Old Tom's Tain is a masterpiece, albeit a wee one when he began, and at first he designing just 15 holes, though with ample room for expansion. Times must have been hard, for the committee resolved to confine 'improvements' (for 'improvements', read grass cutting), initially to those nine holes nearest to home, then twelve, and it was four years before a gorgeous and fulsome eighteen came to maturity.

What was it like in those days? The 'Golfing Annual' of 1898-89 described the course as 'simply bristling with hazards in the shape of the River Tain, whins, broom, rushes, bents, ditches and bunkers. Although the strict par is 75, 83 or thereabouts represents first-class play. For variety, we know of no better course and, as the putting greens are for the most part natural and of excellent quality, visitors to Tain will be loath to leave. St Duthus Club (the old club name) members are proud of their 'home' hole, Thrice does the sinuous stream come into calculations, and there is no dodging it. The hole is indeed a beau ideal one, a terror for the topper or slicer.'

Iain MacLeod, head greenkeeper at Tain some eighteen years, will tell you that nothing much has changed, the

course (now par 70) still holds terror for the topper and it's a grand player indeed who can match Tain at anything approaching his handicap. Meeting Iain was a humbling experience for this self-confessed hacker. He's a splendid golfer with a smooth, leisurely swing, a category one player who has honed his game on these links for many a year. Granted he's a golfer of considerable merit, but more than that, he's blessed with the consummate spirit of an artist when it comes to caring for Tain's blessed acres - his golf course. Marked with his particular brand of artistry, it is best shown on Tain's quite exquisite putting surfaces; fast, firm and abundantly blessed with fescue, finished with numerous bunkers, each one properly and expertly revetted in the time honoured manner. I swear it, I've seldom seen a course with so many delicious examples of the revetter's craft; it would almost be a pleasure to have one's Titleist settle into the sand, if only to admire Iain's canny skill.

I like the Scots, especially those many Scottish greenkeepers who I'm proud to call my friends. For a start, I've never come across a greenkeeper in Scotland who didn't, honestly, love his golf course and adore the game, exhibiting true pride in achieving often miraculous results, invariably with budgets that would make the average head man in Surrey foam at the mouth with disgust. It's probably true to say that Iain's budget falls into the minuscule category and though you'll find a gorgeous golf course, there's no luxury clubhouse, (membership fees, can you believe it, are only £130 a year), certainly no high-tech maintenance facility. Tain is not a wealthy club, though wealth is relative and they are blessed with those acres of golfing magnificence, believed to resemble St Andrews in many ways, even in the views of spires and the town's public buildings.

Fate played a hand in Iain's pedigree: Scottish father, English mother, born in Southampton, schooled in Coventry, nurtured in the Highlands. Holidays were usually spent at nearby Nairn, and as a youth Iain fell in love with golf. He praised the Nairn links, was offered an apprenticeship under Murd Livingstone, the rest is history. In the event, his apprenticeship didn't materialise and he went south to take up the job of assistant professional cum assistant green-

keeper at the GEC owned Grange GC in Coventry. He went to college, married Barbara, (a Nairn native), found the lure of Scotland altogether too great and returned again, this time as an assistant greenkeeper at Tain. I'd call him a dual-national: Scottish when he's in England, English when he's in Scotland – though a Scot in every respect save his quirk of fate birthplace.

Setting aside Iain the golfer for a moment, it's easy to understand why Iain the greenkeeper came to be selected as a candidate for the ICI Premier Greenkeeper award last year. He demonstrates such solid authority, without so much as an ounce of negativity when it comes to executing his programme. He's been through the highs and lows of club finances, has known what it is to struggle, sans watering system, sans adequate staff (as low as one other on occasions, though now blessed with four absolute stalwarts in Gordon McKie,

Tain: a masterpiece from the days when architects relied heavily on nature's own flowing contours to achieve their creations John Urquhart, Gordon Fraser and Stuart Griffiths), but the love he has for Tain comes shining through. It's his course, he extracts the best from it, anticipates difficulties before they become crises, he's thoroughly 'on the ball' and knows exactly how to deliver.

Sou

Delivering quality has never been an easy task, but Iain's low fertiliser, minimal water regime delivers in grand style. He dresses his greens in May and July with a basic organic granular fertiliser (8% N, 2% Iron, no phosphates or potash) and likes to apply Agrimaster liquid feed three times a year, finding the resultant colour, healthy plant structure and strong roots pleasing. Slit tining every month keep surfaces open, whilst a tractor-mounted fairway spiker thumping down to 12 inches every four months or so prevents any pan formation. He last Vertidrained in 1986, and sees no need to repeat in the foreseeable future. Drainage is not a great problem (bless Tain's sandy loam for that) and now that he has a Watermation TW1 his tees also are both handsome and vigorous. He's become quite an irrigation expert, gradually replacing old and inadequate PK41s with modern heads, a few each month, whilst becoming a dab hand at all but really major irrigation problems, talking through his faults over the 'phone with John Peace, Watermation's expert in Stirling.

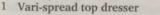
It's hard not to admire Tain and it comes as no surprise to learn that visitor green fees, the club's financial mainstay, were up some 42% in 1992, rising still higher in 1993. Word gets around that Iain keeps a mean course and it's hugely popular. Once smitten, those visitors keep coming back!

So, a century or more after its founding, Tain maintains itself as a monument to Old Tom, its committee fending off temptation to call in some johnny-cum-lately to bring the old girl 'up to date.' Granted, Iain will start soon to relocate the ninth green, the only bottle-neck in an otherwise smooth round, the approach crossing another fairway, but ever conscious of the magnitude of altering Tom's legacy, even slightly, Iain has made meticulous plans to re-create the green and famous 'U' shaped bunker.

Tain's the better for maintaining old world integrity, and in another hundred or so years I don't doubt there'll still be something mystical about the old place - What is it, then, this mysticism? Dare I suggest; it's a reflection of one old man's architectural genius and one young man's dedication? DAVID WHITE

# Major machinery in the Tain stable

- Toro GM 3s
- **Cushman Turf Truckster**
- Allman 300 litre sprayer
- Ford 1910 Compact tractor
- Massey-ferguson 550 Tractor
- Sisis Hydrocore with 3" hollow core and solid tines
- Sisis TDS Fairway spiker 2
- Ransomes Marquis 20" tee mowers
- Ransomes 214 gang set Charterhouse backlapping machine
- Lewis front loader
- 1
- Evenspread fertliser distributor





Above: 'A monument to Old Tom Morris' Below: Current custodians - the greenkeeping crew



**GREENKEEPER INTERNATIONAL** December 1993

# DAVID STANSFIELD compares traditional with modern methods of greenkeeping

t has often been said there is nothing new in greenkeeping, just variations on a theme and the same mistakes being repeated in cycles of popularity. This being the case, is there any such thing as 'modern' greenkeeping? After all, there is only a limited range of operations which can be applied to a golf course, which have been applied for years and years (mowing, aeration, topdressing, fertiliser, scarification, irrigation), and a restricted number of materials which can be used, even though there are many companies selling basically the same thing.

Nevertheless, there is a modernity in greenkeeping in terms of the standards which are now being achieved in all round course presentation, from putting surface to rough, which are far in advance of what was the norm 5-10 years ago. Also, the search for excellence in finish, and, equally as important, year-round usability, has extended way down from the high-flying clubs and made a big impact on the suburban parks.

These standards have been brought about in the face of ever-increasing player pressure, in part by improving the sophistication and ranges of available machinery and irrigation. But more important still has been enthusiastic and knowledgeable greenkeeping, which on average has moved away from the idea that the best treatment programme for golf course is the one carried out the previous year and the decade before that, the results from which were 'all right'. Success in greenkeeping only comes from dealing with specifics, rather than applying blanket treatments and hoping something will work, or using the odd special machine because the club down the road has hired it.

However, having got to this point, the big question for the future has to be 'how long these heights can be maintained – as opposed to being made even better'?

One downfall could be the increasingly common committee viewpoint; that having got the best there is no need to work at it any more, with key treatments such as summer aeration being banned (again!). Often as bad is the edict that top dressing is 'a good thing' and must be applied more and more frequently, regardless of any potential adverse consequences. Treatment programmes have to be balanced across the board and suited to turf make up, construction type, age and player pressure.

While the amateur manager is a perennial problem, potentially of greater impact is a lack of available chemicals to treat pests and diseases. The question of how best to control dense wormcasting is one which comes up week-in, week-out, as the effects of past applications of now banned chlordane wear off. The want is for a chemical agent equally as good as a clean, one-off treatment, which is affordable. The trouble is that it is highly unlikely there will ever be one, because it

# And the next step is...

would imply a chemical which is persistent in the soil, and persistence is a factor that would prohibit approval.

Environmental management to discourage worm activity (e.g. soil acidification using sulphate of iron or a modern flowable form of sulphur, maximising drainage rates, and maybe boxing off clippings from limited areas) is unfortunately slow to take effect, but may be the only option. This could though be backed up with an irritant expellent in really badly affected but limited areas, to take out the worms and allow them to be moved elsewhere. A return to ancient methods in the modern world.

Looking beyond wormcasting, the escalation of problems which crop up when not just one or two chemical pesticides, but virtually the lot, disappear have been very much brought home to me while carrying out advisory work in (the rest of) Europe. In countries such as Holland, fungicides and selective herbicides are simply not available for use, and in the face of this it comes as a shock to realise how much greenkeeping in Britain depends upon pesticides, even though there is often a pride in keeping chemical application to the absolute minimum. The availability of even just a few pesticides in the UK is still a long stop which is propping up standards of excellence on the majority of courses.

Also, to someone used to hearing that even slight damage to the golf course caused by pests and diseases, or the presence of the odd weed or patch of moss, is regarded by the average club member as something approaching a hanging offence, it comes as a surprise that in countries where there are no chemicals, if there are a few brown patches on greens, or small sections of fairway being damaged by crows, this is not a crisis. Could this ever be the common view in Britain?

But how does one manage a golf course to work around these problems? Of course, the fundamentals have to be based on traditional links greenkeeping, which comes from a time when high-tech pesticides were not available, to develop turf which is resistant (but not immune) to serious disease. Ideally, this turf should be a mixture of species within the botanical composition, so that if one species suffers, there is still the basis of a ground cover to rebuild from. There is nothing so risky as a monoculture if there are no chemicals to maintain it, and this applies to pure bentgrass as much as it does to pure annual meadowgrass. It is doubtful there would be a place for courses requiring high-intensity management systems in such a world. Even more has to be thought about the general environment of the course too. The availability of sunlight to close mown areas, and the availability of a breeze to dry it, are such fundamentals in producing high quality turf, they can never be ignored. This may well mean a reversal in the tree-ing of courses despite all the political difficulties of effective tree management.

When it comes to pests other than worms, we are somewhat fortunate in Northern Europe in that infestations, on average, tend to be limited in extent and frequency. Prevention of leatherjackets, chafers or fever flies is not possible, but control using irritant expellents is practical and can be quite adequate for the vast majority of situations, albeit a messy job.

Good environmental management can be carried out so that high standards of course presentation are maintained on a wide variety of courses, as is proven, year-in, year-out. Even so, there are still a significant number beyond whose greens in particular have inherent disease problems due to the soft nature of the turf, due to constructional defects in terms of soil make-up and drainage qualities, or simply due to player pressure. Here, if the availability of chemicals to check disease disappears, even the fundamentals of links greenkeeping may not stave off a serious, long-term decline in playing quality and usability. What does one do in this situation?

Clubs in such straits have to get back to basics via the costly route, i.e. rebuilding greens to a better design standard. This means greens of a size which will take an adequate number of pin positions, without water- collecting hollows in the putting surface, and with a constructional profile which is freedraining without being droughty or totally infertile. Obviously, this is a much more dis-



Can high standards of greenkeeping be sustained for the future, or will disasters again become common?



COXWELL

FOR

ruptive and costly exercise than a tee rebuilding programme, but is still a nettle to be grasped. Good planning, and the use of experienced architects and contractors, can make this drastic step minimally painful (other than to the bank balance!).

A future without pesticides, or at least with fewer, less effective pesticides, has to be a possible scenario. To be able to keep up the current level of modernism in the results of greenkeeping in part means looking backward to the treatment applied before chemicals were generally available and adapting these to a world of changing demands. However, what is needed also is a better understanding of the basic biology of turf and rootzone systems so that information is available to use in environmental management programmes. This needs long-term fundamental research, which goes way beyond evaluations and the examination of individual problem features. Such research is costly, but is something which does need to be addressed.

■ The author, David Stansfield, is the senior agronomist with PSD Agronomy Limited, Preston, Lancashire.

# GRUNDON

Are pleased to introduce our full range of

Path Gravel Top Dressing Bunker Sand Drainage Gravel Rockery Stone Puddle Clay

For free advice and quotation call our action line:

0420 476407

REF

# THE LEADERS



See us on Stand A32 at BTME

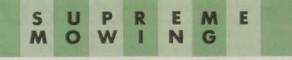
# **STREAKS AHEAD OF THE COMPETITION**

The efficiency of today's highly engineered lawn mowers and quality of cut can only be maintained with correct and accurate grinding of their cylinders and blades.

The 'Leader' range of grinders not only achieves this but offers many features unequalled on any other machine, making them the ultimate in lawn mower grinders. At the heart of a 'Leader' is a solid free standing frame with a cast iron bed and 2" precision ground guide rails that ensures an accuracy of less than 0.00.5" in 30 inch in straightness, whether grinding insitu or out of frame.

Coupled with this, great emphasis has been placed upon operator safety with a self contained coolant system, fully enclosed canopy that reduces noise and dust levels to a minimum and safety cut out devises that allow the operator to leave the machine whilst on automatic operation with absolute confidence.

For a demonstration and further details contact:— Linda Adams



Wet Moor Lane, Wath–Upon–Dearne, Rotherham, S63 7LR. Tel: (0709) 873436 Fax: (0709) 878005 A Ransomes PLC Company