Their game could depend on yours.

Your game is choosing the right fertilizer. 
We’d like to think Greenkeeper 2 is the right fertilizer, no matter what type of green you keep.
It’s made up of peat-impregnated granules and is a fast-acting fertilizer for fine turf.
It’s made by the unique Hi-Lite process and is easy to handle, with no dust problem.
Greenkeeper 2 acts faster and lasts longer than any ordinary fertilizer giving consistently good results, with no scorching.
That’s the benefit.
Greenkeeper 2, the reliable one. You can depend on it.

Greenkeeper 2

Fisons Agrochemical Division
Recreational & Industrial Dept. Harston Cambridge CB2 5HU
Tel: Cambridge (0223) 870312

April 1972
Seaweed 1

I refer to your appeal on page 3 of your January 1972 issue for comments from anyone who has used the soil conditioner and fertiliser, S.M.3.

Dear Sir,

This Company operates a number of separate divisions including one concerned with golf course construction, namely V.E.B. Golf Course Construction and one on the establishment of vegetation on sterile and poor soils, namely V.E.B. Landscape Reclamation Ltd. S.M.3 has been widely used primarily by the latter Company for the vegetating of soils with a poor structure but our experience leads us to believe that it could well be useful on the areas suggested by you, that is, sports grounds on clay soils. It is our experience that the material appears to be effective by promoting vigorous growth not only of the grass sward but primarily of soil micro organisms. Thus soils of poor structure and low organic content are encouraged to develop into suitable sward bearing media. The fertiliser is not only responsible for soil structure improvement primarily through the growth of micro organisms but also supplies a full range of trace element fertilisers for green plant growth.

As mentioned above, this group’s experience with this material has chiefly been through the land reclamation division. However, our golf course construction company is always interested in utilising new substances where they are of benefit and should a suitable occasion occur in the future, no doubt this material will be employed. Should such an occasion occur, I shall write to you again describing our experiences.

Yours faithfully,

T. F. Risely.

Seaweed II

George Wilson, from Paris, has also sent us a pamphlet describing the advantages of French seaweed. The ‘algues marines’ are however said to improve plant health to such an extent that fungicides and insecticides often become superfluous. It gets better and better. Otherwise the French stuff does everything you would expect of a British seaweed but will set you back about 12 francs for a 1 cwt or £10 for a cubic metre.

Seaweed III

If you want to know all about S.M.3, the English product, write to Mr. W. Finch.

Seaweed IV

We still do not seem to have any FACTS or EXPERIENCE about this stuff. Why not? But this is what Maxicrop Limited of Holdenby, Northampton, have to say about their product. They are clearly quite confident of the benefits. *Maxicrop Liquefied Seaweed is excellent for Golf Greens. The growth promoting hormones present encourage an extensive root system which will help the grass stay green during dry weather by reaching the moisture at a lower soil level.

*One of the main advantages is that Maxicrop does not scorch so can be used as a tonic when a quick pick-me-up is necessary. This is particularly useful for matches and competitions. As it is immediately absorbed, it can be applied at any time during the season with no interruption of play, and is compatible with the usual selective weed-killers. It also gives a degree of resistance to fungal diseases.

*Maxicrop plus 17% Nitrogen can be used to encourage a newly sown sward.

*Maxicrop is not extracted from seaweed—it is seaweed broken down by a special hydrolytic process. All the trace elements and other properties of seaweed are, therefore, retained. Alginic acid, which is extracted from seaweed for various medicinal uses and for human food, is also present and has been recognised for many years as a valuable soil conditioner. Not only does it help to break up clay soils, but also helps to bind together light soils so that they hold more moisture and more nutrients. Maxicrop is an organic substance. It provides a good medium in which soil bacteria...
can flourish. When these are prolific they also maintain a good soil structure and release nutrients already present so that they are available to the plant.

'Very limy soils can lock up trace elements such as Iron, Magnesium and Manganese, causing severe chlorosis. Maxicrop, complexed with 1% Iron, can usually clear up these troubles, but for very severe cases use Maxicrop complexed with Iron, Magnesium and Manganese. These elements are in chelated form and are immediately available to the plant. Any other element can be chelated with Maxicrop to order. The other elements present in Maxicrop ensure a correct mineral balance.'

Finally a list of 'contents' which varies from batch to batch but does not seem to have much missing.

<table>
<thead>
<tr>
<th>Material</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic matter</td>
<td>51.2%</td>
</tr>
<tr>
<td>Inorganic matter</td>
<td>43.6%</td>
</tr>
<tr>
<td>Nitrogen (N)</td>
<td>0.72%</td>
</tr>
<tr>
<td>Phosphate (P₂O₅)</td>
<td>2.0%</td>
</tr>
<tr>
<td>Potash (K₂O)</td>
<td>3.0%</td>
</tr>
<tr>
<td>Sulphate (SO₃)</td>
<td>6.1%</td>
</tr>
<tr>
<td>Chloride (Cl)</td>
<td>6.7%</td>
</tr>
<tr>
<td>Silica (SiO₂)</td>
<td>0.2%</td>
</tr>
<tr>
<td>Iodine (I)</td>
<td>0.9%</td>
</tr>
<tr>
<td>Bromine (Br)</td>
<td>0.8%</td>
</tr>
<tr>
<td>Soda (Na₂O)</td>
<td>18.9%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnesia (MgO)</td>
<td>0.58%</td>
</tr>
<tr>
<td>Lime (CaO)</td>
<td>0.44%</td>
</tr>
<tr>
<td>Iron (Fe₂O₃)</td>
<td>0.34%</td>
</tr>
<tr>
<td>Alumina (Al₂O₃)</td>
<td>0.23%</td>
</tr>
<tr>
<td>Copper</td>
<td>40 p.p.m.</td>
</tr>
<tr>
<td>Cobalt</td>
<td>4 p.p.m.</td>
</tr>
<tr>
<td>Nickel</td>
<td>24 p.p.m.</td>
</tr>
<tr>
<td>Zinc</td>
<td>100 p.p.m.</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>10 p.p.m.</td>
</tr>
<tr>
<td>Manganese</td>
<td>40 p.p.m.</td>
</tr>
<tr>
<td>Boron</td>
<td>1 p.p.m.</td>
</tr>
</tbody>
</table>

Also traces of: vanadium, titanium, gold, silver, chromium, caesium, rubidium, ruthenium, rhenium, selenium, beryllium, lithium, tungsten, etc.

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RELF & KENDALL
OF CROYDON AND BARNET

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ENORMOUS STOCKS OF RANSOMES SPARE PARTS

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OUR FLEET OF VANS IS OCCUPIED DAILY IN MAINTAINING OUR EXPRESS SPARES DELIVERY SERVICE

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We stock a comprehensive range of domestic and professional machinery. Ask for a demonstration on YOUR ground

April 1972

13
Golf greenkeeping

A need for training and research in 1972

By The Editor

The state of greenkeeping in Britain is out of step with the development of golf. Millions of pounds are being spent on new courses, on machines to maintain them, on prize money, on clubs and balls—a few thousand are spent on research and a few hundred on training greenkeepers. Golf course maintenance risks a decline.

Firstly, from 1946 to 1959, newcomers to greenkeeping were rare. Men who should now be passing on experience are too few and their time is over-burdened because staffs are small. But there is still no other way in which the traditions of good greenkeeper practice can be learnt.

Secondly, this gap coincides with a sharp increase of players and of golf courses. New courses inevitably lag four or five years behind demand. Existing courses, built to older standards, are overplayed and new ones cannot find fully trained men to look after them. The rate of new course construction would represent a need for 25% more head greenkeepers in 10 years time.

Thirdly, many clubs tend to economise on staff hoping that new machinery will redress the balance. There is consequently no time for finesse and many machines actually produce problems which only more machines can help to cure.

Lastly, the job is not always rewarding financially and working conditions are often poor. There is no reason to hope that the attractions of an outdoor life will alone encourage recruitment.

The British and Scottish Golf Greenkeepers Associations have done what they can to improve wages, status and training but their funds come entirely from members’ subscriptions and only just cope with their present level of activities. The B.G.G.A. publishes a monthly magazine, arranges lectures in the winter and collaborates in an apprenticeship scheme which has produced 109 trained men since it started five years ago. 35 more are now apprenticed.

This scheme is hampered by lack of educational facilities. Some technical colleges run day release courses but the only specialist training centre is The Sports Turf Research Institute at Bingley founded by the four national golf unions in 1929. The S.T.R.I. is primarily a research and advisory body but manages to run five 5-day courses each year, always over subscribed. A Government grant supplements subscriptions, donations and income from advisory services, but the surplus for research is small.

Much present work, for example, concerns new grass strains because this attracts grants. Urgent problems of soil structure and drainage have to wait. A rough calculation suggests that the golf industry’s investment in research and training is 0.00065%.

well-seasoned.

We may be a new name to you, but we have been in the business of supplying and servicing professional machinery for nearly 70 years. When you next need new equipment, spares or servicing why not get in touch with us and get the benefit of our expert knowledge.

We are distributors of:
LEYLAND 154 TRACTORS • RANSOMES
SISIS • HAYTER • ALLEN • DENNIS • FLYMO
MAY & BAKER PRODUCTS • FERTILIZERS ETC.

THE K-H GROUP AT:
HARPENDEN KINGSTON HOUSE MOWERS LIMITED
VAUGHAN ROAD • HARPENDEN • HERTS/Telephone: 4643

CAMBRIDGE C. TOLLIDAY & SON LIMITED
KINGS ROAD • CAMBRIDGE/Telephone: 64642
The new Atco Groundsman.
A cut above other mowers.

Atco introduce two new models to their range of professional mowers. The 28" and 34" Groundsman. Apart from the difference in their cutting widths, they share the same features.

To start with, they’re both fitted with six heavy duty blades which give 81 cuts per yard—an unusually fine cut for their size.

Both have a 12 volt electric self-starter, battery and automatic charging system as a standard fitment. They can be power driven with the cutters stationary by operating a cutter release clutch.

What’s more, either machine may be used with or without the optional standard Atco trailer seat.

Another feature is the continuous chrome tubular handle specially designed for added manoeuvrability when turning.

It can be adjusted quickly to suit individual operator heights by means of an instant clamping lever.

There’s a new ‘swing over’ type glass fibre grass box. It is mounted on tubular steel support arms and its lower section is recessed so it can be used with swivel front rollers.

Then there’s a large capacity fuel tank which holds one gallon of petrol.

It takes one professional to recognise another. Is it any wonder then that Atco mowers are used on some of the most famous stretches of turf in this country.

As famous as the lawns we cut.

For full details of Atco mowers write to Charles H. Pugh Ltd., P.O. Box 256, ATCO Works, Birmingham, B9 4PR.
There are three urgent needs:—

1. The encouragement of recruits to greenkeeping.
2. More and better education of apprentices.
3. More research into the problems of golf course construction and maintenance.

The rational way to satisfy these needs is to build on the framework which exists.

Recruitment
The National Joint Council for Golf Greenkeeper Apprenticeship now lives on its £3 Registration Fees and a number of voluntary workers. The scheme needs a full time paid secretary to promote development, supervise apprenticeships and encourage golf clubs to engage apprentices and improve wages and working conditions.

Training
Apprentices are scattered all over the country often remote from urban centres where technical colleges may not in any case give suitable instruction. Background education is, therefore, absent or elementary. A correspondence course would overcome the difficulties of geography and dearth of suitable instructors. At the same time, the 5-day courses at Bingley should be extended to a month or more and the greenkeepers' magazine should be expanded and enabled to commission technical articles and provide instruction for all grades.

Research
The staff at the S.T.R.I. must be expanded to provide at least two more Research Officers free of advisory duties and concentrating on areas of research now neglected.

The appointments and investments necessary to implement these proposals would cost about £2,000 immediately and £9,000 annually thereafter. Unless those engaged in golf by way of trade are prepared to cover this outlay, we can only look to organisations representing golfers themselves to collect it as part of annual subscriptions. On a comfortable minimum of 500,000 golfers accountable, it represents 2p per head to be earmarked for investment in the future of the game.

Postscript
The following is fairly typical of a number of letters I receive:

'Dear Sir,
I am at the moment employed at the . . . . . . Golf Club (in Lancashire) as Assistant Head Greenkeeper. I have been a greenkeeper for 7 years during which time I have been to Bingley for a week and attended a course at Wigan in connection with the National Institute of Groundsmanship. Later this year I passed the 3rd grade exam, which I had prepared for at Wigan. However, this covers a large amount of sports and does not specialise in any single game such as golf.

My position is this. I am conscious of wasting time and learning little or nothing in more practical experience. Please could you, therefore, advise me for I would be very grateful for any encouragement you could give me in regard to my future in greenkeeping.

Yours sincerely,
(signed).

P.S. My age is 23.'

It is hardly possible to give this young man much encouragement at present. The proposals outlined above would at least enable him to gain the specialised knowledge he is seeking. Some golf course would be glad of it one day.
Andrews go professional . . . .

With a range of equipment that makes rival products look like playthings. Here they are — designed for hard work; to give portable power to small labour forces; to offer unbeatable value at unmatchable prices . . .

‘CYCLONE’
MAJOR SPREADER

Easily covers 2 acres per hour — and that’s fast! Push it by hand or pull it with a tractor or mower . . . 10ft spread-width . . . just see if you can find equal value anywhere for £55.00.

BLUEBIRD

The most powerful scarifier on turf. 5 h.p. 4-stroke engine. For Golf and Bowling Greens, Cricket Tables and all fine awards. Please compare with alternative machines! Price £175.00

POW-R-GEN

An ultra-lightweight, fully portable generator — producing 30 amps at 12 volts. More power for your money than any generator on the market... Price just £65.00

JENNY

A heavy duty, fully mobile generator producing a massive 800 or 1250 watts—110 or 220 volts. Ample power for two hedge trimmers, hand tools, lights, etc. Again nothing to rival it at £89.00

To:
Andrews Lawn Edgers Ltd.
(GG1)
The Garden Machine Centre,
Sunningdale, Berks.
Tel: Ascot 21960.

Yes I am interested—now convince me . . . send me leaflets and price lists FAST!

Name
Address
Occupation

April 1972

DIAMOND JUBILEE DINNER

The Association will celebrate its sixtieth anniversary at the Annual Tournament in August. The Executive Committee has decided to mark the occasion by a dinner to be held in the Baronial Hall of the Blackpool Tower on Wednesday, 16th August, at 7.30 p.m., for guests, members and their ladies. Early application is advised to ensure reservations.

The cost for the dinner will be £1.75 per head. Please apply early for tickets and enclose your remittance.

This is a unique occasion in the history of the Association, and indeed of golf. Don’t miss it.

Hon. Secretary,
C. H. DIX.
HE HAD TO GO... (ADVERTISING MANAGER)...
BUT THEN PATTISONS HAVE BEEN AT IT
SINCE 1896 ANYWAY...

TURF MAINTENANCE AND GOLF COURSE EQUIPMENT
H. PATTISON & CO. LTD. STANMORE HILL WORKS
STANMORE MIDDX. HA7 3HD. 01-954 4171
News

from the Sections

Special occasions

APRIL
12th Southern Section Trip to Ransomes.
18th South Coast Section Spring Tournament.
18th Welsh Section Spring Tournament.
20th North East Section Spring Tournament.

MAY
3rd Southern Section Spring Tournament.
18th North West Section Spring Tournament & A.G.M.
23rd Midland Section Spring Tournament.

JUNE
7th East Midland Section Spring Tournament.
21st Southern Section A.G.M.—Hendon Golf Club.

NORTH-WEST

Chairman:
J. GILLET
(St. Anne's Old Links)

Hon. Secretary:
Horrobin Cottage,
Old Links Golf Club,
Montserrat, Bolton, Lancs.

Lectures
Our sincere thanks to Mr. G. K. Smyth of May & Baker Ltd., for the very interesting talk he gave to our members on the various fungicides used in the maintenance of fine turf, and on selective weedkillers and when and how to use same. Our thanks also to Mr. P. Wyatt of H. Pattisson & Co., for showing us some of the latest equipment used on the modern golf course, with some very useful equipment which is still in the trial period, but which bodes very well for the future. Thank you once again, gentlemen.

Spring tournament
As stated in the last issue of the journal our Spring Tournament will be held over the Hillside Golf Club course, Hastings Road, Southport, on Thursday, 18th May, and will as usual be a 27 hole competition, but due to a Club Rule the competition this year will be 18 in the morning and 9 in the afternoon. An 18 hole competition for Honorary Members and visitors will be held in the afternoon. The A.G.M. will be held in the evening following the prize giving. So once again, gentlemen, will you please arrive as soon as possible for a 9 a.m. tee off, and, also again please let me have your entries as soon as you can so that arrangements for the catering can be put in hand.

New Members
We extend a very warm welcome to D. S. Duggan of the Woolton Golf Club, Liverpool, and hope his association with the Section will be a happy one.

NORTH-EAST

Chairman:
MR. J. SIMPSON

Hon. Secretary:
G. JEFFRIES
55 Brackenfield Road,
Framwell Gate Moor,
Durham.

Spring tournament
The starting time for the Spring Tournament which takes place on Thursday, 20th April 1972, at the Gosforth Golf Club, will now be 12.30 p.m., and not 1 p.m. as stated in the last issue of the journal.

April 1972

NORTHERN

President:
W. MOUNTAIN

Hon. Secretary:
Walter Heeles
7 Tentergate Close,
Knaresborough,
York, HG5 9BJ
Tel: Knaresborough 3851

Annual social
The Annual Social of the Section was held at the Horsforth Golf Club on 15th December, 1971. Our thanks are due to the Committee of the Golf Club for the use of the Club for the evening. Our principal guests were the Hon. Secretary and the Captain of the Club.
Many thanks to Ron and his wife for the excellent meal.

Lectures
In January we had a lecture on Pop Up Sprinklers by Farrods of Ripon. This was put to the members very ably by Jeff Wilkins. In February a lecture on Soil and Drainage was given by Mr. Fred Roberts of the Ministry of Agriculture.

Annual spring tournament
The Annual Spring Tournament will be held at the Halifax West End Golf Club in May. Date and times will be forwarded to the members nearer the time.

Mr. J. Parker
Mr. J. Parker, who has been presented with a cheque for £50, wishes to express his thanks to all members who contributed to this gift.

---

**WELSH**

*Chairman:*
M. Geddes

*By J. Rees*
*Hon. Secretary:*
Neath Golf Club,
Cadoxten, Neath, Glamorgan

**Spring meeting**

Our Spring Tournament will be held at Brynhill Golf Club on Tuesday, 18th April, 1972. Members are respectfully reminded that I must have their entries on or before 16th April, so that I can let the Steward know how many to cater for.

**Subscriptions**

There are still subs outstanding and it would be appreciated very much if members who have not paid their dues would do so at their earliest convenience to Mr. M. Geddes, 23 Fenton Place, Porthcawl.

**In Memoriam**

It is with deep regret that I have to announce the death of Mr. Bert Jones, Head Greenkeeper at Pyle & Kenfig Golf Club. Bert, who died suddenly on Sunday, 10th January 1972, was a well known and respected member of the Association for a great number of years.

He was a very good committee man who always had the welfare of his fellow members at heart. We will miss him greatly in our future meetings.

On behalf of all members of the Welsh Section I would like to extend our deepest sympathy to Dennis and his sister in their great loss.

---

**MIDLAND**

*Chairman:*
G. Hart
*(Gay Hill)*

*Hon. Secretary:*
4 Burton Old Road,
Streethay, Lichfield,
Staffs.

**Spring tournament**

Will members please note that the Spring Tournament will be held at the Droitwich Golf Club on Tuesday, 23rd May and not Wednesday, 24th May as originally published. All entries should be directed to me no later than 12th May.

**January Forum**

Despite appalling weather conditions, about 30 people turned up at Walmley Golf Club on the evening of 18th January and a very interesting exchange took place. A panel of greenkeepers answered a number of questions over a very wide range, on the Upkeep and Maintenance of the Golf Course.

The President of Walmley Golf Club, Mr. Jones, did a very fine job as Chairman and managed to keep the peace right up to the last question which was ‘What do Greenkeepers think of Green Chairmen?’

Our thanks to the Captain and Committee of the Walmley Golf Club for allowing us to hold the Forum in their very fine Clubhouse.

**New members**

We welcome to the Section the following new members and look forward to seeing them at our future events.

*L. C. Frost*—Assistant Greenkeeper at Sutton Coldfield G.C.

*J. A. Bonner, M. G. Hill, D. James, E. A. Pullen*—Assistant Greenkeepers at the Kings Norton G.C.

*J. B. Tomlinson*, who has recently returned to the Midlands after six years as Golf Course Manager at the Banff Springs Hotel, Alberta, Canada.

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The British Golf Greenkeeper