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It took man millions of years to emerge from the trees, but just one golf stroke to put him back.

SIDNEY BRODY.

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CARTERS OUTFIELD AND FAIRWAYS FERTILISER (Spring/Summer)
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1 cwt. 45/-; 5 cwt. at 43/9 per cwt.; 10 cwt. at 42/6 per cwt.; Per ton £40 0s. 0d.
J. Drew Smith, who was with the Sports Turf Research Institute for eight years, called back again last month to help with the revision of “Fungal Diseases of Turf”, an S.T.R.I. publication which has now established itself as a standard reference book in this field. Since leaving Bingley, Mr. Drew Smith has been in Aberdeen and in New Zealand working on mycology and is now off to Canada to do research into diseases of forage crops. The new edition of “Fungal Diseases of Turf” is now with the printers, so those who have had to wait after the sell-out of the first edition can expect their copy soon.

* * *

Over 453,000 rounds were played on ten of London’s municipal courses last year compared with 380,000 in 1961. Bromley with 9 holes had 46,258.

* * *

From next month our magazine will be printed in Edinburgh by Messrs. Lindsay & Co. Ltd.

This is, therefore, an appropriate moment to thank the Herald Printing Press at York, who have produced it ever since Mr. George Philpot edited the first issue. The unfailing quality of their printing and their patience with Mr. Philpot’s unprofessional successors have earned the gratitude of the whole Association and of the Editor in particular.
A COURSE FOR THE LONG HANDICAP PLAYER

by

JOHN STOBBS

I hope the Editor will forgive me if I turn aside this month from American trends in greenkeeping to look at an unusually interesting topical point in course design over here. Unusually interesting, it seems, simply because that difficult-to-arouse lot, the golf writers, found it so, and because of the reaction their articles brought from golfers in general: on the subject of the new course opened for Harlow New Town at Canons Brook, and designed by Henry Cotton.

Thinking of Cotton’s career, and the calibre of golf and courses upon which he has made his reputation as our greatest modern player, over the last three decades of British golf, you might expect that he would have designed a very devil of a tough, tight, course, beset with troubles and challenges all the way along: the sort of course to suit his own game, in fact, with its long straight driving, impeccable iron play, and craftsmanlike pitching. But, No! Cotton has done just the opposite.

He has, of course, recognised the needs of the sort of golfer who’ll do much of the playing upon a New Town course. But he’s then carried that approach to design right to a logical conclusion.

The four major features which stick in the mind about Cotton’s design are:
1. There’s no rough at all, to speak of.
2. He’s placed bunkers hazarding tee shots, in general, out of range of the beginner or longer handicap golfer, so that they don’t affect him on his drive at all.
3. The greens are enormous.
4. The challenge to the low handicap player consists essentially in the full and testing length of the holes, and in the more aggressive bunkering around the greens.

Theory

The theory is that the beginner, rabbit, or middle handicap man can thus play easy, relaxed golf around Canons Brook, can open his shoulders to try to hit his longest ball without worrying overmuch about keeping it straight, and, however long the slog may seem to him up the longer holes, once he gets in range he finds a large green to aim at. He should thus be able to develop his game in as pleasant a way as can be offered to him—and he may also be expected to get round the course in considerably less time than he would take on a more traditional layout, quite an important point for a course likely to be much used, and often crowded.

The low handicap man, pro. or amateur alike, is still going to have a tightish job to get round in a good score. This is because the hazarding to the tee shots is aimed directly at the longer hitter; and because in order to get near enough to the pin with his second shots to make sure of his “par” on hole after hole, he’s going to have to strike them
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truly and accurately. For him, too, the openness of the course and the lack of rough is going to offer a chance to relax and open his shoulders in a way he can't often do—especially if he is a very long hitter—on most of our traditionally finest layouts.

At this point I rather wish the Editor himself was writing this article instead of me; because only a professional golf course designer can see the whole picture, from course to course and from country to country, and put things properly into perspective. (Perhaps he could take up the topic next month?)

It seems to the layman that although obviously the Canons Brook type of course (even as tightened up by the vast numbers of decorative trees Cotton intends shall be planted there over the years to come) won't for one moment become a blueprint for future courses, it does suggest how some of the huge unsatisfied demand for golf amongst ordinary people may be taken up in the future.

More Difficult?

It also raises once again the old question of to what extent many of our older courses have become, with the years and the lengthening of the distance a ball will go, more difficult for the bad golfer than for the top class player. Whether they should be is, of course, a matter of opinion. But many longer-handicap men find the game quite difficult enough in itself, without any need of hazards arrayed against them. Much of the time the problem of hitting the ball straight enough, far enough, is quite capable of exercising their best efforts, without any extra help from penal-type hazards. Yet on most older courses the main hazards from the tee, and often through the green as well, are arrayed far more to trap the sort of not-too-bad shot he's likely to play, than they are to affect the tiger, who has to hit a real stinker (for him) before he lands anyplace near any of them.

The best compromise between extremes, and one towards which many courses move hazard by hazard and hole by hole, is one in which our best courses remain very tight for the low-handicap man who hits the ball a good distance, but are made milder at about the length, and in the sort of areas, most used by the rabbit and beginner.

Take a single hole of some 450 yards (from the point of view of playing-value and ease of maintenance alike): suppose you have a clear area between the tee and the first artificial hazards at some 230 to 260 yards from the tee; then a tightly hazarded stretch for some twenty or thirty yards at the range where the long-hitter's tee shot will pitch; then a comfortable opening up again, both to reward the man who has hit an extra-long, accurate drive, and to offer plenty of room for the long-handicap man's second shot; and finally a fairly tight hazarding of the entrance to the green for both the tiger's long second shot and the rabbit's third shot.

Keep the Pattern

It is precisely because so few courses do space their hazards in this way, or have altered them with the years to keep the pattern despite changes in clubs and balls, that the point is worth noting and deducing. There are too many holes, perhaps nowadays, where the long hitter can clear all bunkers from the tee on the carry, so long as he hits the ball fair and square; but where the line is twice or three times as tight for the shorter hitter. There are too many, perhaps, too, where the worst rough lies in front of the tee or at the sides up to some 200 yards from the tee, precisely where it can torment the duffer all the time, but never affect the tiger at all.

Often, too, old-fashioned cross-bunkers and such like lie at exactly the range of two of the rabbit's best shots; but 50 to 100 yards short of where the long hitter is going to pitch.

Henry Cotton's extreme example may carry a lot of precept for thought even if it makes no common model for imitation.

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Continuing . . .

THE ECOLOGY OF NITROGEN ACTIVITY IN TURF SOILS

by

Dr. R. E. Blaser and R. E. Schmidt

This paper was presented at the American Golf Course Superintendents' International Turf-Grass Conference and Show at Philadelphia, last year. We reprint the second instalment here with grateful acknowledgments to the "Golf Course Reporter" because so much of it will be of interest to readers over here.

Wilting and Nitrogen

Wilting injury or death of bentgrass is often a problem during warm, sunny days. Wilt is caused by a combination of factors—soil, climatic, and morphological and physiological condition of plants. Nitrogen has direct and indirect effects on wilting. Thatch encourages wilting in three ways: (1) shallow roots; (2) poor moisture infiltration; and (3) the inhibited gaseous exchange (consequent carbon dioxide gas accumulation) causes protoplasm to resist water intake; hence, plants wilt more rapidly.

Liberal nitrogen fertilisation influences the physiology and morphology of plants to encourage wilting in four ways. (1) Root to top ratios and root depths are reduced. (2) Fast growing leaves with high nitrogen fertilisation are thin walled and high in water content. These combined effects encourage water loss and make grasses vulnerable to wilting. (3) Temperatures of liberally nitrogen fertilised grasses may be increased because the darker green leaves absorb more heat and also because of higher rates of respiration. Water loss in leaves is positively related to leaf temperatures. (4) Liberal nitrogen decreases the osmotic concentration of cell sap because of lesser mineral uptake, such as potassium, per unit of tissue and lower sugar content. Water is lost faster from leaf cells with sap low in sugars and minerals as compared with higher concentrations.

Now we will look inside the plant to understand the principles just discussed.

Food Reserves and Respiration

The green chlorophyll in grass leaves fixes carbon dioxide into simple sugary substances that are then used for maintaining and forming new roots and tops. Thus plants manufacture energy products (sugars) that are re-utilised for making all other substances and tissues in growth processes. Plants must stay alive at night, during periods of dormancy, under snow, and any time when leaves are not making food. Thus, sugary substances not used for growth are condensed and stored as reserve carbohydrate energy foods. Such reserve carbohydrates are important in many ways: (a) When leaves and shoots are lost due to cold weather, wilting, diseases, insects, or due to heavy verticutting and leaf removal; new ones are made from reserve carbohydrates. (b) When leaves do not make enough food for root and top growth, the stored reserves supply the shortage. (c) New
basal grass shoots form much faster with high as compared with low carbohydrate reserves. (d) With a shortage of reserve carbohydrates, the tops have first access to them; thus, a low root-top ratio and shallow roots. A simplified list of materials in plants is given below:

Organic Materials—19%
- Soluble carbohydrates
- Simple sugars
- Stored (fructosan or starch)

Structural Materials
- Protoplasm (N-substances)

Water—80%

Minerals—1%

Fructosan is the main starch-like storage reserve carbohydrate in northern turf-grasses like bluegrass, bentgrass, and others. Fructosan accumulates in grasses in the stubble, underground in roots and rhizomes and also in leaves. Alternately it breaks down into simple sugar for growth and is stored again. The amount of fructosan reserves in grass tissue is influenced drastically by closeness of clipping (leaf removal), available nitrogen in soils and by the temperature (season of application). The combined effects of very close clipping, and high soil nitrogen during the hot summer season would cause very low fructosan reserves.

**Fructosan reserves in grass tissue**

<table>
<thead>
<tr>
<th>Influencing factors in clipping</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness of clipping</td>
<td>Very close</td>
<td>Lax</td>
</tr>
<tr>
<td>Available nitrogen</td>
<td>High</td>
<td>Low</td>
</tr>
</tbody>
</table>

3. Temperature (season of application) Very warm Cool Data are now available to point out these inter-relationships. In our laboratories, Cohansey bentgrass was grown at temperatures of 50°, 70°, and 90° F. with low and high nitrogen, Figure 2. The stubble stems (stolons) were higher in carbohydrate reserves than the leaves. Note that stolons and leaves grown with low nitrogen were much higher in carbohydrate than those with high nitrogen. There was a drastic drop in carbohydrate in all tissue as temperatures were increased from 50 to 90° F. The lowest carbohydrate occurred with high nitrogen and high temperature; on the other hand the highest carbohydrates occurred with the lowest temperatures and low nitrogen. The carbohydrate content was much higher than would occur on a putting green because the grasses were not clipped for several weeks.

Liberal nitrogen fertilisation stimulates respiration (increased release of carbon dioxide and “burning up” food reserves apparently associated with fast growth),

![Figure 2. Reserve carbohydrates in leaves and stolons of Cohansey bentgrass as influenced by temperatures and nitrogen fertilisation.](image)

![Figure 3. The highest rate of respiration occurred with the highest temperature and high available nitrogen. Thus, during high temperatures, liberal nitrogen fertilisation reduces food reserves due to fast growth and high respiration. Here reserve foods are made into protein-like compounds and plant tissue, especially top growth. When temperatures are too low for grass to grow.](image)
rapidly, high nitrogen does not stimulate respiration and food reserves remain high.

Figure 3 also shows that carbon dioxide fixation (rate of making sugary substances) increased as temperatures were raised from 50° to 70° F.; there was a rapid drop in food fixation with temperatures. Because food is fixed at a low rate and respiration is high during high summer temperatures, nitrogen should be applied at low rates during the summer for cool season grasses.

A summary on some of the effects of nitrogen on grass growth is given in Figure 4.

**Timing Nitrogen Applications**

Cool season grasses (bent, blue, and others) should have liberal amounts of available soil nitrogen during the cool spring and late summer season. This is the season when such grasses are best adapted and make most of their growth. There is little danger of applying too much nitrogen in late summer as growth and respiration will be inhibited as temperatures keep getting cooler. Thus, carbohydrate reserves build up during autumn even with liberal nitrogen. Available soil nitrogen should be decreasing in late spring as temperatures get higher. It is necessary to keep cool season grasses slightly to heavily starved for nitrogen during periods of high summer temperature. With hot weather it is best to have a slow, hard growth. Grasses should never be over stimulated nor should they be allowed to stop growth.

**Warm Season Grass:** The principles discussed also apply to the warm season grasses. However, there is little danger in using nitrogen too liberally during high summer temperatures as warm season grasses have high optimum temperatures for growth. Warm season grasses do not usually have adverse respiration effects at high temperatures and photosynthesis is efficient at high temperatures. Thus, food reserves remain high at usual summer temperatures.

Nitrogen fertilisation should not be excessive during late summer when growth of warm season grasses is slowed up because of low temperatures. Over stimulated and actively growing non-hardy grasses are injured readily by rapid temperature declines. Likewise, excess nitrogen fertilisation and competition from overseeded winter grasses can seriously retard bermudagrass regrowth.

Nitrogen fertiliser is a most important mineral nutrient for growth control of turf.

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The secondary twin-armed sprinkler revolves an aluminium drum, winding in the staked cable.

Time taken to traverse the 100 yards depends on water pressure at the sprinkler head but the times quoted above can be achieved with a water pressure of between 50 and 60 lb. sq. in. Thus a football pitch will receive .33 in. of water in a day by setting the unit in the morning and re-setting once in the middle of the day.

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\[
\begin{align*}
1 \text{ cwt.} & \text{ at } 69/6 \\
10 \text{ cwt.} & \text{ at } 66/6 \text{ per cwt.}
\end{align*}
\]

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\begin{align*}
10 \text{ cwt.} & \text{ at } 37/9 \text{ per cwt.} \\
40 \text{ cwt.} & \text{ at } 36/- \text{ per cwt.}
\end{align*}
\]

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CORRESPONDENCE

FROST GREENS

In reply to the article written by Mr. Dearlove, of the Sheffield Section, I accept the opportunity of presenting my views on his two leading questions.

I heartily endorse Mr. Escritt's remark, that the decision as to when play should be restricted be left to the person who knows best—the greenkeeper.

Let us face facts and not personal issues. Golf courses in general depend on the skill of the head greenkeeper throughout the year, to supervise the staff and maintain the course or links in a first class condition. He has many important decisions to make to achieve high standards without obstructing play unduly. It is only years of practical experience and intelligent application that enables a greenkeeper to reap the fruits of his previous decisions, so why disregard his advice and the situation, after all, play restriction is normally short lived. The past two winters for instance have more than proved whether or not a green committee is justified in making such a decision. The reason being, any member of a golf club can be on the committee, and you can rest assured he will be feigning to be an expert covering most aspects of greenkeeping, within a very short space of time; agree with him and before you know it he's grown to be a golf course architect.

If unplayable conditions occur mainly through the week, when a club official is not present, and possibly out of the area for a few days, under these circumstances how are they able to formulate an opinion. After all it is only a small minority of the golfing community who want to play when adverse conditions prevail, and they are generally the first to complain if the greens are backward in spring.

If frost holes are cut in readiness to meet such emergencies, this would automatically keep the course in play without any difference of opinion arising. All skill disappears from the game when frost conditions exist so its only a matter of exercise and keeping the swing going. There is no doubt, golf is unique in the world of outdoor sports simply because it's about the only game which is not seasonal.

Now this brings me to the second question quoted by Mr. Andrews, to stop griping and get on with the job. For years the greenkeeper has been doing an excellent job and, in many cases, without sufficient machinery, or up to date equipment. At the same time he has adapted himself to meet this advancing scientific era. Frustrated with the shortage of the right type of staff, trying to be in several places at once he has not had a “please yourself” job with regular hours like others better paid. Greenkeeping is a relentless challenge to the conscientious man seeking higher and higher standards. Each one of us approaches our day to day problems in different ways, but our eventual aim is always the same—to give the best playing conditions possible as far as the weather elements allow. I sadly recall many occasions when our greens have been in peak condition, small divots have been made on the greens by some irresponsible player missing a putt. There have always been too many taciturn greenkeepers, Mr. Andrews. I hope I leave you in no doubt which category I belong to.

Yours sincerely,

J. MAWSON,
Scarcroft Golf Club,
Leeds.

ANOTHER 'FIRST'

What is claimed to be Europe's first complete golf centre is to be erected on the sea front at Seaburn, Sunderland, by the newly formed subsidiary of Lynwood Ltd.

In a letter to shareholders, the Chairman of Lynwood, Mr. W. D. W. Knight, says that the subsidiary, County Golf Ranges Ltd., has been granted permission for the project by Sunderland County Borough Council. The golf centre will have 36 tees on two floors and will incorporate "unigolf", described as an entirely new development.
The question of bunker maintenance, as opposed to the positioning or size of some new bunker, is rarely heard discussed in most golf clubs. It seems that bunker maintenance is often regarded as unimportant and this should not be so. A bunker provides a bad enough hazard to the "unlucky" golfer who has to play out of it, but it becomes an unfair menace if it is not properly maintained.

**Smooth Surface**

Routine maintenance of bunkers consists mainly of keeping the sand surfaces smooth and the grass fringes and banks around them neatly cut. Raking out of the sand to correct unevenness should be a daily job, if possible, and the sand should be kept loose and well drawn up to the bunker faces. The work ensures that weed establishment in the sand is reduced and that the player called upon to execute a bunker shot is provided with a fair lie. The work done by the greens staff is not sufficient to ensure satisfactory conditions for play at all times and the golfers must be regularly reminded of their responsibility to correct damage they do, after playing a bunker shot. This is particularly important where the greens staff has not time to complete the daily raking.

Cutting the fringes of the "run-up", the lip and banks of bunkers, is important if they are to serve their intended purpose and provide fair conditions for play. This trimming is needed at no more than fortnightly intervals, though, no doubt, many a club cannot afford to do this so regularly. An effort should, however, be made to keep the bunker surrounds reasonably well trimmed, otherwise conditions result which give rise to complaints.

Other items of maintenance work are less frequently required than raking and mowing, but nevertheless they are important. The sand is regularly being blasted out of the bunker and, on seaside courses particularly, a lot is often blown out by wind. Replacement of the sand is needed on occasions to keep the bunker "full" and this generally presents no problem on the seaside course, where new sand is often readily available. On the inland courses, new sand has to be brought in and, therefore, the wise club ensures that the right type of sand is obtained. It is not satisfactory to accept the cheapest sand from the most handy supplier, as the bunker sand needs to be fairly sharp, hard, not too fine and certainly free of silt. Dirty, fine sands tend to pack down and provide poor surfaces for playing a bunkered shot. The same applies to a soft sand, which quickly breaks down and turns to "slurry" during wet weather.

A further point, which is often overlooked, is that sand for inland golf courses should be free of shell or lime, particularly in those bunkers around the greens. This is important, as the regular blasting up of a "limey" sand on to the green slowly creates alkalinity in the turf, which favours lush grass growth, the establishment of weeds, and the activities of worms. It is desirable to maintain the turf on greens in a slightly acid state and on courses where "limey" sand has been unknowingly used in bunker filling, deterioration of the turf near the bunkers is often seen. This, apart from being undesirable, raises other problems, as further money has to be spent on killing the weed and worms.

**Lime Free Sand**

It does not follow that all sands obtained from inland sources are free of lime. Clubs who are in doubt as to whether the sand they propose to obtain is satisfactory, should have a sample tested. Frequently it is impossible to pick out a sand which contains lime by visual inspection only.

Drainage of bunkers is often a problem, if they are made "self draining". Many bunkers are made by excavating to form a basin shape in such a manner that sub-soil is exposed. Where this is clay, drainage problems arise as the bunker forms a collecting point for water
which percolates away only slowly through the clay base. If possible, a tile drain should be laid through the clay base of bunkers and connected to an existing land drain. The drain should fall towards its outlet end and it need not be deep. If set 4 in. below the sub-soil surface at its high end, it would be satisfactory, but it should be covered to the level of the sub-soil surface with porous material, e.g. gravel or hard clinker ash. It is desirable to cover this backfilling with turf placed upside down before the sand is introduced. The turf prevents the sand from being washed into the backfilling material and then down the drain.

Bunkers are regarded as a necessary feature on a golf course, but every effort should be made to keep their number to the minimum due to difficulties of maintenance. Often natural features exist which can form a hazard comparable in effect to a bunker and these should be utilised wherever possible. At the same time, the careful placing of a bunker in association with a natural feature can do much to help make the game of golf more interesting.

New List available from Suttens:

Messrs. Suttens have prepared their 1965 list of grass seed and fertiliser mixtures, together with all the other products which they keep available for golf course maintenance. The book is attractively produced in two colours and with all its illustrations and prices will be a useful addition to the greenkeeper’s reference shelf. An article by Mr. R. W. Pain, Manager of the Grass Department, describes the care with which Messrs. Suttens have studied the problems of grass selection over more than one hundred years and a picture showing part of a consignment of 283 cwt. of grass seed for a new golf course near Paris illustrates their world-wide fame and the important contribution which a firm with this experience can make to the export drive. Any greenkeeper requiring a copy of this booklet should write to Suttens Grass Advisory Service, Reading, Berkshire, mentioning this magazine.

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W. HARGREAVES & Co. Ltd., MACCLESFIELD - 6363 - CHESHIRE
News

SOUTH-WEST

By A. Cockfield

Chairman: G. Gilbert
(Warminster G.C.)

SOUTH-WEST

from the Sections

Christmas Dinner

OUR CHRISTMAS DINNER, THE first of what we hope will be an annual event, took place at Clevedon Golf Club, on 12th December. For a first attempt I'm sure everyone will agree that the evening was a great success and we are once again very grateful to the Clevedon Golf Club for allowing us the use of the clubhouse.

Our President, Mr. Southgate, presided and introduced our Association Chairman, Harry Sheppard, who thanked everyone for supporting our Dinner. Mr. Southgate then proposed a toast to the guests. Mr. Nicholas (Clevedon Golf Club) responded, at the same time adding a few words of welcome.

On behalf of our committee I should like to say how pleased we were with the success of the evening. It is the greatest reward of all for time spent in organisation and we all look forward to another next year.

Our Dinner was preceded by an 18 hole medal round. This is always a light-hearted affair and to add to the festive occasion a few seasonal prizes were to be won. Harry Sheppard (Weston-Super-Mare Golf Club) with a nett 67 won a bottle of whisky. F. Tucker (Knowle Golf Club) and G. Morgan (Lansdown Golf Club) a bottle of sherry each. C. Burge (Long Ashton Golf Club) a golf umbrella and W. Light, a bottle of wine.

As this competition like the Christmas Dinner is to be an annual event, Mr. Veals (Ransomes agent for Bristol) is providing us with a trophy to play for. A very generous gesture for which we are extremely grateful.

Regrettably, the light-heartedness of our Christmas festivities was soon to be dashed, for we learned that our Chairman, Harry Sheppard, had tragically lost his wife on the day following the Dinner. Although Mrs. Sheppard had not for some time enjoyed the best of health, her death came as a great surprise and shock to us all. I feel sure all our members will be sorry to hear this and will join me in expressing our deepest sympathy.

NORTHERN

By J. Parker

Chairman: S. Bailes
Hon. Secretary: 8 Golf Stock Terr., Harden, Bingley, Yorks.

Spring Tournament

THE ANNUAL SPRING TOURNAMENT of the section will be played over the course of the Shipley Golf Club, Beckfoot, Bingley, on Thursday, 6th May, 1965 (by kind permission of the Committee).

Handicap

The following adjustment of handicap has been made:—P. Williams (6).

February Lecture

This will be held on Tuesday, 16th February, at White Swan, Call Lane, Leeds, at 7-15 p.m. The speaker will be a representative of Messrs. Synchemical Ltd., who will take for his subject "Turf Chemicals,

KEEP'S

CHLORDANE
CONCENTRATED WORMKILLERS
also kill LEATHER-JACKETS

SELECTIVE
WEED KILLERS

GRANULAR FERTILISERS

RECORD GRASS FERTILISER

FRANK KEEP (1958) LTD.
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CROYDON, SURREY

Telephone : CROYdon 0734
New Techniques”. As the speaker will be making a long journey to give the talk your committee look for a good attendance.

Grand National Sweep
In an effort to make this more attractive your committee have this year decided to increase the value of the 1st and 2nd prizes. This means that more tickets will have to be sold to increase any profits and they hope you will not let them down with your efforts. Just drop me a line and I will send you more tickets.

Grand National Sweep
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SOUTHERN
By W. Mason
Chairman: W. E. Moore
Hon. Secretary: 18 Albert Road, Hendon, N.W.4.
Tel.: SUNnyhill 0245

Lecture
AS ALREADY MENTIONED IN MY January notes, our next lecture will be given by Mr. William Finch, Messrs. Maxicrop Ltd., on Wednesday, 10th February.

Section Dinner
I would like to remind members that our Section Dinner will be held on Friday, 26th March.

Past Lecture
Our last lecture I am very pleased to say was well attended and most interesting, with a wonderful film showing all the latest piercing machines.

I would like a very hearty vote of thanks to be accorded to Messrs. Hargreaves’ representative, coupled with Messrs. Parkers’ representative who attended to the slides.

New Members
We welcome to the section the following new members:—G. Taylor, J. E. Cox, M. Nelson, and M. Gay.

Quiz
A reminder that on Wednesday, 10th March, a Quiz will be held at the Talbot Restaurant.

NORTH-WEST
By V. Crabtree
Chairman: D. Pate
Hon. Secretary: 223 Market Street
(Royal Birkdale G.C.)
Whitworth, Nr. Rochdale

Lecture
AFTER THE GREAT SUCCESS OF our December lecture we were disappointed that the January one had to be cancelled. Arrangements were made with Mr. Finch of I.T.P. Ltd., who unfortunately is not now with the company.

I.T.P. Ltd., wrote to apologise for being unable to provide an alternative lecturer and as it was too late to approach anyone else, cards had to be sent, cancelling the meeting. I am sorry but circumstances were beyond my control.

H. PATTISSON & CO. LTD.
STANMORE - MIDDLESEX
Telephone GRImsdyke 400

GOLF COURSE EQUIPMENT

- Hole Tins
- Tee Boxes
- Cutters
- Tee Plates
- Staffs
- Ball Cleaners
- Mats
- Tablets
- Mowers
- Rollers
- Hose
- Sprinklers
- Mole Ploughs
- Rotary Sifters
- Aerating Machines

and all Greenkeeping Tools

February Meeting
Our February meeting will be held on the 15th at the Garrick Hotel, Fountain Street, Manchester, as usual at 7-30 p.m., when we have a representative of Messrs. H. Pattisson & Co. Ltd., with us.

SITUATIONS VACANT

ASSISTANT HEAD GREENKEEPER required for City of Newcastle Golf Club. Age 20 to 25. Apply, stating experience, etc., to the Secretary, City of Newcastle Golf Club, Three Mile Bridge Road, Gosforth, Newcastle-upon-Tyne, 3.

BETCHWORTH PARK GOLF CLUB (Dorking) require experienced 2nd greenkeeper. Accommodation not provided. Apply in writing with full particulars to Secretary, Punchbowl Lane, Dorking.

East Section
December Lecture
THE FIRST LECTURE OF THE winter session was held on Thursday, 10th December, in the Free Gardeners Institute. It was given in the form of a talk, by Mr. J. K. Campbell, Links Supervisor, St. Andrews, on the subject of St. Andrews and the Open.
Thirty members attended, which was most encouraging to Mr. Campbell, who gave an interesting talk. A vote of thanks was given by our Chairman, Mr. D. Flynn.

North and Midland Section
Lectures
Our first lecture of 1965 proved a great success. Mr. Palin of Messrs. Suttons gave a very interesting and informative lecture on golf course construction. It was pleasing to have such a good attendance, with many young faces among the thirty present.
The lecture the following week was also well attended again including many young members. The weather was not too good on either night. Mr. Beveridge and Mr. Cargill of Messrs. Ransomes, Sims & Jeffries gave us a very good lecture and film show, with plenty of good information about engines and maintenance of same.
Our next lecture will be on Tuesday, 16th February, when Messrs. Masons Ltd., of Neverthill will give the lecture. A light snack will also be served. Venue, Nicoll and Smiberts, at 7-0 p.m.

Tournament
The North and Midland Section Golf Tournament will be held at Craigie Hill Golf Club, Perth, on Thursday, 27th May, so please keep this date free.

New Members
We extend a very warm welcome to all the new members who have joined the section.
It is with deep regret that we heard of the death of Arthur Harold Pattisson Cole on Monday, 11th January, 1965, after a prolonged illness. Managing Director of Messrs. H. Pattisson & Co. Ltd., a man of great kindness and talent and inventor of many modern techniques for mechanical operation in the maintenance of fine turf, he will be sadly missed by greenkeepers everywhere.

A wreath was sent on behalf of members of the Association.

HON. SECRETARY’S NOTES

A MEETING OF THE EXECUTIVE

Committee will be held on Saturday, 6th March, 1965, at the Imperial Hotel, Birmingham, at 12 noon. Luncheon interval will be at approximately 1 p.m.

ANNUAL TOURNAMENT—WHITLEY BAY

The Whitley Bay and District Hotel and Boarding House Association have sent me a list of recommended addresses, about 50 of which are listed below. I hope this information will be of assistance to members who will be attending the Tournament.

C. H. Dix.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Tel. No.</th>
<th>Beds</th>
<th>Rooms</th>
<th>Terms from</th>
<th>Facilities</th>
</tr>
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<td>Adcock, Mrs. J.</td>
<td>Wansbeck House, 12 Linden Terr....</td>
<td>26056</td>
<td>5</td>
<td>10</td>
<td>21/-</td>
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</tr>
<tr>
<td>Aitchison, Mrs. E.</td>
<td>Yasume House, 53 North Parade</td>
<td>27460</td>
<td>3</td>
<td>12</td>
<td>18/-</td>
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</tr>
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<td>Armstrong, Mrs. S.</td>
<td>Belnor, 41 Ocean View</td>
<td>27288</td>
<td>4</td>
<td>20</td>
<td>18/-</td>
<td>CDEFKL</td>
</tr>
<tr>
<td>Bell, Mrs. T. W.</td>
<td>Lintzford, 33 Brook Street</td>
<td>26183</td>
<td>4</td>
<td>18</td>
<td>18/-</td>
<td>DFL</td>
</tr>
<tr>
<td>Bell, Mrs. A.</td>
<td>Dunellan Hotel, 50 Marine Avenue</td>
<td>21686</td>
<td>6</td>
<td>18/6</td>
<td>21/-</td>
<td>DFJKL</td>
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<td>Best, Mrs. A.</td>
<td>38 Edwards Road</td>
<td>21046</td>
<td>6</td>
<td>21/-</td>
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<td>Bissy, Mrs. A.</td>
<td>Collingwood House, 139 Whitley Rd</td>
<td>23998</td>
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<td>18/6</td>
<td>18/-</td>
<td>DEFLO</td>
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<td>Bramble, Mrs. L. E.</td>
<td>Everitt House, 46 Beverley Terrace,</td>
<td>21568</td>
<td>7</td>
<td>18/6</td>
<td>18/-</td>
<td>DEFGKL</td>
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<td></td>
<td>Cullercoats</td>
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<td>Brown, Mrs. E.</td>
<td>Dawdon House, 51 Victoria Avenue</td>
<td>21682</td>
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<td>25 Victoria Avenue</td>
<td>26970</td>
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<td>Campbell, Mrs. T.</td>
<td>St. Mary’s View, Brook Street</td>
<td>26484</td>
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<td>Clark, Mrs. M.</td>
<td>St. George’s Hotel, 97-99 Marine</td>
<td>24100</td>
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<td>Cochrane, Mrs. T.</td>
<td>Alisa, 31 Ocean View</td>
<td>27416</td>
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<td>Cook, Mrs. E.</td>
<td>Shotley House, 15 Victoria Avenue</td>
<td>22961</td>
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<td>18/6</td>
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<td>Coumley, Mrs. E. V.</td>
<td>Cawder House, 13 Ocean View</td>
<td>24542</td>
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<td>Davies, Mrs. C.</td>
<td>Beach View, 42 North Parade</td>
<td>27165</td>
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<td>Dundas, Mrs. J.</td>
<td>Edenville, 14 Collingwood Terrace</td>
<td>25273</td>
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<td>18/6</td>
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<td>Eddie, Mrs. O.</td>
<td>Oswald House, 59 Percy Road</td>
<td>25973</td>
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<td>Fullarton, Mrs. L.</td>
<td>Shelbourne, 35 South Parade</td>
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<td>Gray, Mrs. I. E.</td>
<td>Linden Lea, 15 Linden Terrace</td>
<td>27808</td>
<td>4</td>
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<td>20/-</td>
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<td>Gregan, Mrs. M.</td>
<td>Dorset House, 52 Victoria Avenue</td>
<td>22596</td>
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<td>Haldon, Mrs. E.</td>
<td>Links Guest House, 11 The Links</td>
<td>23497</td>
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<td>18/-</td>
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<td>Hall, Mrs. N. W.</td>
<td>Sydenham House, 2 The Links</td>
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<td>Hall, Mrs. G.</td>
<td>Clifford Guest House, 10 Beverley</td>
<td>26043</td>
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<td>Hannah, Mrs. M.</td>
<td>Holmlands, 15 Edwards Road</td>
<td>22246</td>
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<td>12/6</td>
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<td>KL</td>
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<td>Harrup, Mrs. G.</td>
<td>El Nida, 43 Victoria Avenue</td>
<td>26761</td>
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<td>18/-</td>
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<td>Hasting, Mrs. E.</td>
<td>Croglin Hotel, 37 South Parade</td>
<td>26191</td>
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<td>Henderson, Mrs. R.</td>
<td>New Quay, 52 South Parade</td>
<td>23525</td>
<td>6</td>
<td>27/6</td>
<td>18/-</td>
<td>ABCDFGJKL</td>
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<td>Hoyland, Mrs. E.</td>
<td>Sea View, 67 Percy Road</td>
<td>20062</td>
<td>5</td>
<td>15/-</td>
<td>18/-</td>
<td>EFO</td>
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<tr>
<td>Hudson, Mrs. M. F.</td>
<td>Malden, 31 St. Oswins Avenue, Cullercoats</td>
<td>25797</td>
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<td>16/6</td>
<td>18/-</td>
<td>FILO</td>
</tr>
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<td>Hutchinson, Mrs. D.</td>
<td>Bide-A-Wee, 19 Victoria Avenue</td>
<td>20650</td>
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<td>Hunter, Mrs. F.</td>
<td>Crathie, 4 Balmoral Gardens</td>
<td>21663</td>
<td>4</td>
<td>18/-</td>
<td>18/-</td>
<td>EFKL</td>
</tr>
</tbody>
</table>

Continued on page 19.
Messrs. Lloyds and Co. of Letchworth have asked us to point out, with reference to an article which appeared last month that both “Leda Gang Mowers” and an “Ariel” mower have been in use on the Links at St. Andrews for some time. The quintuple “Leda” was supplied with the special golf course frame. The “Ariel” is used primarily for bunker banks.

<table>
<thead>
<tr>
<th>Name</th>
<th>Address</th>
<th>Tel. No.</th>
<th>Bedrooms</th>
<th>Terms from</th>
<th>Facilities</th>
</tr>
</thead>
<tbody>
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<td>Honeybone, Mrs. F. E.</td>
<td>The Ashton, 9 North Parade</td>
<td>21113</td>
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<td>Johnson, Mrs. T. W.</td>
<td>Thorpe Guest House, 11 Esplanade</td>
<td>22853</td>
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<td>25462</td>
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<td>Lees, Mrs. A.</td>
<td>Lyndale, 23 Esplanade Place</td>
<td>26312</td>
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<td>Lowery, Mrs. M.</td>
<td>Oxford House, 1 Oxford Street</td>
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<td>BCDEFKLO</td>
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<td>Merrilees, Mrs. E. T.</td>
<td>Stanmore Hotel, 1-3 Esplanade Ave.</td>
<td>26888</td>
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<td>Coral House, 39 Ocean View</td>
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<td>Murray, Mrs. A. F.</td>
<td>37 Grosvenor Drive</td>
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<td>KL</td>
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<td>Picton, Mrs. E. G.</td>
<td>Chevin House, 1 Ocean View</td>
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<td>FKLO</td>
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<td>Reay, Mrs. M. L.</td>
<td>Hotel Myra, 22 East Parade</td>
<td>22907</td>
<td>7</td>
<td>19/-</td>
<td>CDFJKLO</td>
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<td>Rennison, Mrs. W.</td>
<td>Eastcliffe Guest House, 1 Eastcliffe</td>
<td>27553</td>
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<td>Normanton, 29 North Parade</td>
<td>27617</td>
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<td>EFJKLO</td>
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<td>Sabiston, Mrs. F.</td>
<td>Redesdale, 25 St. Oswins Avenue,</td>
<td>25197</td>
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<td>Seager, Mrs. H.</td>
<td>8 Oxford Street</td>
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<td>Shrine, Mrs. M.</td>
<td>Llandaff, 22 Esplanade</td>
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<td>Wytheburn, 37 Beach Avenue</td>
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<td>Turner, Mrs. R.</td>
<td>Farmouth Hotel, 17-19 North</td>
<td>21754</td>
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<td>Bourne House, 3 Ocean View</td>
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<td>Bracadale, 36 South Parade</td>
<td>20262</td>
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<td>Whitfield, Mrs. O.</td>
<td>Waverley, 44 South Parade</td>
<td>23371</td>
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<td>Willis, Mrs. J.</td>
<td>Farrington Guest House, 22 South</td>
<td>25021</td>
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<td>Wolfenden, Mrs. M. I.</td>
<td>Manor Court Guest House, 27 South</td>
<td>26386</td>
<td>7</td>
<td>21/-</td>
<td>DFJKL</td>
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<td>Wragg, Mrs.</td>
<td>Ravenswood, 61 Percy Road</td>
<td>22132</td>
<td>4</td>
<td>16/6</td>
<td>EFL</td>
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</tbody>
</table>

CODE OF FACILITIES

- A Licensed for Liquor
- B Central Heating
- C Garage
- D Hot and Cold Water in all bedrooms
- E Hot and Cold Water in some bedrooms
- F Reduced Terms for children
- G Cater for Parties (meals only)
- H Apartments
- I Bed and Breakfast only
- J Fires in Bedrooms
- K Lounge
- L Separate Tables in Dining Room
- M Old Age Pensioners
- N Parking
- O Willing to take Old Age Pensioners at special rates
- P Holiday Flatlets

If you have any difficulty in finding suitable accommodation I will be very pleased to give you all the assistance in my power.

B. B. HARDAKER,
Loxley Hotel, Promenade, Whitley Bay. Tel. 24286

Secretary: Whitley Bay and District Hotel and Boarding House Association.
Mrs. Greenkeeper’s Own Corner

with Ann Mawson

Fresh scones are always popular if anyone calls unexpectedly. Eaten hot or cold with plenty of butter or home made jam, they are delicious.

Yorkshire Scones

2 oz. butter, 1 lb. plain flour, 2 oz. sultanas or currants, 1 teaspoon baking powder, pinch salt and about half a pint of sour milk.

Rub the butter into the flour, add sultanas or currants, baking powder and salt. Mix to a soft dough with the sour milk. Roll out lightly and quickly cut into rounds with a tumbler and bake at once. Make sure you have a quick oven, Gas No. 7, Electricity 430° F; Time about 15 mins.

* * *

How about hamburgers for supper?

Hamburgers

1 lb. lean stewing beef, salt, pepper, 2 small onions, 1 egg, fat for frying.

Mince the stewing beef, add salt and pepper, then add minced onion. Beat the egg and bind the mixture with it, make into flat cakes and fry them in hot fat.

Serve four people—time 15 minutes. Good with potato crisps.

* * *

Did you know that if your bath is a little discoloured, half a fresh lemon rubbed around the stain will help to bring it white again.

* * *

Do you know that if the inside of your aluminium saucepan gets burnt, all you have to do is to fill the pan with cold water, allow to stand for one hour, then add some borax powder and boil up. The burnt food will come away quite easily without injuring the pan.

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Printed by Herald Printers, York and London, for "The British Golf Greenkeeper"—62151