Warren's A-34 Kentucky Bluegrass Comes Back Faster!

Warren's A-34 Kentucky Bluegrass (Poa pratensis), grows vigorously in shade and sun alike. It is proving to be the best all round grass for use on sports-grounds, parks and recreational areas. Its ability to recover quickly from injury makes it ideal for sowing down golf tees and all those areas receiving wear and tear.

Warren's A-34 Kentucky Bluegrass will tolerate up to 65% shade when maintained at a two inch cutting height. On open sites it can be mown down to 3/8ths of an inch, still grow vigorously and retain its power to recover quickly. It is the one pure strain of bluegrass seed that will thrive in shade and sun and tolerate a wide range of soil and climatic conditions. It is not necessary to blend A-34 with seed of other species or strains and the best results have been obtained from using it neat at a low seeding rate.

Warren's A-34 Kentucky Bluegrass has been under observation by turf grass research departments of leading Universities and other research organizations in the United States and they have all given it a high rating for disease resistance and shade tolerance.

For more particulars on Warren's A-34 Seed phone your inquiry to:

HURST GUNSON COOPER TABER, LTD.
WITHAM, ESSEX—PHONE WITHAM 3451

Exclusive Importer for the U.K.

PETER ADAMS (GARDEN LANDSCAPERS) LTD.,
Granley Gardens, Muswell Hill,
London N10 3AR. Telephone No.: 01-883 5880 and 0821.

A product of Warren's Turf Nursery, Palos Park, Ill. U.S.A.
JULY 1972

CONTENTS

TEE SHOTS PAGE 3
AERATION 5
CLASSIFIED ADVERTISEMENTS 8
GROWTH RETARDANTS 11
HON. SECRETARY'S NOTES 13
LETTER TO THE EDITOR 15
SITUATIONS VACANT 16
NEWS FROM THE SECTIONS 17
BUYERS' GUIDE 20

Front Cover Picture:
Murrayfield Golf Club, Edinburgh

EDITORIAL AND SUBSCRIPTION OFFICES: Addington Court Golf Club, Featherbed Lane, Addington, Croydon, Surrey. Telephone: 01-657 0281. SUBSCRIPTION RATE: £1.25 for 12 issues post paid. Published during the first week of each month. All rights reserved. Reproduction of original articles and photographs in whole or in part is prohibited. This Magazine shall not, without the written consent of the publishers first given, be re-sold, lent, hired out, or otherwise disposed of.

Contributions and photographs of interest are invited.

ADVERTISEMENT OFFICE: Media Promotion Ltd, 1 Chester Close, Chester Street, London, S.W.1. Telephone: 01-235 1146. LATEST COPY DATE: 8th of month prior to insertion.

TO INSERT A CLASSIFIED ADVERTISEMENT, write to the Advertisement Manager at the above address. The rate is £2.50 per single column inch. Remittance must be sent with order. Please state number of insertions required and write advertisement in block letters. Advertisements will be inserted in the first available issue.

Printed by Dolphin Press® Brighton Williams Lea Group
Huxleys Garden Machinery

SPECIALISTS IN MACHINERY
and equipment for Parks, Public Authorities, Golf Clubs, Sports Clubs and Garden Use

★ CHAIN SAWS ★ MOWERS ★ ROLLERS
★ CULTIVATORS ★ SWEEPERS ★ HEDGE TRIMMERS
★ TRACTORS ★ TRUCKS, BARROWS ETC

A complete stock of SPARE PARTS and FULL SERVICING FACILITIES!

THE WORLD’S FIRST GREENS MANAGEMENT SYSTEM
RANSOMES-HAHN TOURNAMENT
TRIPLEX FLEXIBLE LEASING TERMS FROM 2-5 YEARS

Precision Greens Mowing!
Triplex Tee Mowing!
Triplex Verti-cutting!
Triplex Spiking!

GET THE FACTS AND FIGURES FROM HUXLEYS
Have a DEMONSTRATION ON YOUR OWN GREENS

Huxleys Garden Machinery
27 years of Good Reputation and experience

22/26 CHURCH STREET, STAINES, MIDDLESEX
Telephone: Staines 51123 (3 lines)
Also at THE DEAN, NEW ALRESFORD, HANTS.
Telephone Alresford 3222

Huxleys Hire
WITHOUT OPERATOR
for the Professional User
34 different types of Machines available.
Ask for Illustrated Brochure and Price List

The British Golf Greenkeeper
Tee Shots

Many of the older courses laid out on common land have had a hard struggle over the past twenty years and longer.

Even before the war the Royal North Devon Golf Club, England’s first links, had lost some of its prestige because the condition in which its fairways could be presented fell short of advancing standards.

Golf Clubs on Tooting Bec Common and Clapham Common in London fell out of favour through encroachments by public use and the disturbance compared with private courses. Blackheath, the very first English golf course, quietly exchanged its five holes on the Heath for eighteen in nearby parkland at Eltham. Wimbledon and Mitcham Common golf courses still survive as does Bitwell Common near Nottingham, or Sutton Coldfield, Birmingham. It seems that if there is plenty of space, golfers and public can co-exist. Ashdown Forest is probably the safest example.

But Minchinhampton on a large common is about to make its own private 18 holes elsewhere. The course is laid out round the most popular gathering point for cars at weekends where five roads meet and cattle have precedence.

The Southcliffe golf club at Lincoln is another club actively seeking a place of their own. The local council is beginning to think other sports should have preference over the golfer.

Fortunately they organise things better in Scotland. Apart from the occasional feudal servitude like the provision of sea-shells the Old Course at St. Andrews still looks like carrying on.

The Editor.
SHORTER, MORE STRATEGIC COURSES ON HORIZON

In all current golf course design – for remodelling as well as for new courses – easy maintenance is a prime consideration. The golf course architect, while planning the most challenging course possible on the available land, also must think ahead and give the golf course superintendent a layout that can be maintained at peak condition with the modern equipment and supplies now available. ‘Monster’ holes that require a great deal of hand mowing, raking and watering, put too great a dent in the superintendent’s schedule and budget.

The American Society of Golf Course Architects is most interested in preserving the ‘green belts’ in our urban areas, many of which are golf courses, and many of the design techniques used on the shorter executive courses can be utilised in the remodelling of some of our older courses, giving them new dimensions for years to come. With the many executive-length courses now on the boards, it appears that golf soon will have a course for everyone – championship, standard, executive, and par-3. And if you don’t have every type in your area, remodelling tees and greens can give a standard course the versatility to stretch itself into championship length or shorten itself for ladies competition. With this planning, it seems certain that golf will continue to be the most popular sport with our leisure-conscious population.

With acknowledgements to the GOLF SUPERINTENDENT, January, 1972.

LONDON’S FIRST INDOOR GOLF RANGE

A new idea for leisure, especially when our summer weather is washed away, is the Golf Dome at Scrubbs Lane, London, W.12.

The largest ‘tent’ ever erected in this country is in position near the White City. Called the Golf Dome, it houses a double decker driving range with facilities for 31 players at any one time. It is 156 ft. wide by 252 ft. long by 63 ft. high, and is big enough for real golf indoors. In addition to the driving range, golfers can practise on putting courses, and try out their skills on the Vistagolf. The Golf Dome is open seven days a week from 12 noon to 11 p.m. Golf professionals are on hand for coaching and advice.

With acknowledgements to SPORT & RECREATION, January, 1972.

FOR FAST GREENS

FIT A GRASS COMB TO YOUR MOWER

STEWART & CO.,
FINE TURF SPECIALISTS
EDINBURGH, EH2 2AY

Have Greensaires – will Travel

So book early for your Hollow or Solid tining for the coming autumn. A two machine experienced team is available to carry out your requirements speedily and efficiently with the world famous RYAN GREENSAIRES. Scarifiers, Sweepers and Top Dressing spreaders available with or without operators.

TURF-AIR Contracts

YEW TREE COTTAGE
IDEN GREEN, BENENDEN, KENT
Telephone: Benenden 768

The British Golf Greenkeeper
Aeration

Paper read at the Conference of the International Greenkeepers Association, Caslano

by

Mr. E. Staniforth, Mr. J. W. Hargreaves, Sisis Equipment (Macclesfield)Ltd.

Our subject this morning is 'Aeration' or as the Americans will have it 'Aerification'.

There is still much to be learned about the subject. A lot of what is known is hard to prove. It is often difficult to judge precisely where the fact begins and theory ends. What we can say, is that most experts agree that opening up the turf surface with machinery of one type or another is beneficial and there are two main reasons for such action.

Firstly, it is necessary to maintain good drainage conditions and secondly, to ensure an adequate amount of air in the top soil, so that the grass roots can breathe and grow.

Perhaps we should look at the second point first and it is necessary to understand immediately that, by permitting the entry of air into the soil, a gaseous exchange takes place and by this process the grass roots take in oxygen and expel carbon-dioxide. Accumulations of carbon-dioxide in the soil can considerably restrict root growth and can completely prohibit, or at best limit, the intake of water and nutrients.

Regularly aerated turf will readily allow the entry of water and the importance of this is apparent in summer months, when, during a period of hot dry weather, it is essential that the up take of water by the roots is greater than the loss of water from the grass leaves by transpiration or evaporation. If this does not occur, browning off can take place and eventually grass may even die. By thoroughly aerating the area at the browning off stage, thus permitting the entry of oxygen, the normal intake of moisture by the roots then becomes possible once again and, often without artificial watering, the results can frequently be seen in less than a week by the grass's return to normal colour.

At other times of the year, failure to carry out a programme of aeration in wet Autumn and Winter months can lead to an entirely different problem. In such conditions, surface sealing can often occur, due to the compacting effect of players' feet and heavy maintenance machinery on greens and fairways. Under these conditions water can be prevented from percolating, will remain on the surface, preventing the exchange of gases and could lead to the incidence of moss or the build up of fibrous growth. A programme of aeration is then necessary. If steps are not taken to relieve the compaction, the development of a fibrous matt could take place, restricting the amount of air, moisture and nutrients available to the grasses and creating conditions in which certain diseases can thrive.

So there we are, aeration firstly to allow the intake of air and secondly to permit the percolation of water away from the surface.

In both cases there is a choice of machines and a choice of tines to fit into them.

The days when the ordinary garden fork was the greenkeeper's only means of working any type of area are happily left behind us.

Once it became evident that turf benefited from this type of treatment, machines were invented and developed to assist the greenkeeper in his work. These machines progressed from manually propelled and horse drawn implements to the independently powered and tractor mounted machines of the present day.

Most modern machines are offered with interchangeable alternative types of tines and such tines fall generally into three main categories, even though variations may occur in the depth, thickness, diameter or shape offered by different manufacturers. The three categories are the Round Pointed Solid tine, the Flat Bladed Slitting tine, usually chisel shaped, and the Hollow Tine, for extracting a core of soil.

I would like briefly to discuss these in a little detail.

The Round Solid Tine, though extensively used and useful at certain times, can under certain conditions present compaction in the actual wall of the hole which it produces. Our Company, for one, have found in recent times a general move away from this tine, which has been used for several years for general maintenance aeration. The Round Solid tine will always be invaluable
Are your greens up to par?

Or is your handicap weeds, worm casts, moss and grass fungi.

Synchemicals have the products to help you maintain your course effectively, safely and economically.

SPECIALIST SELECTIVE WEED KILLERS FOR TURF.
ESTERMONE, SYPROP, CLOVERCIDE, SYFORD, FORESTER, SYNNOX, SYDEX, SYNCHEMICALS WEED AND BRUSHWOOD KILLER.

For the control of worms, leatherjackets, ants—SYDANE
For the control of moss and grass fungi—M.C. MOSS KILLER
For instant feeding through the leaves and roots—
50/50 LIQUID GRASS FEED
To hold the growth of grass in abeyance—MAZIDE, MAZIDE 36
To inhibit grass growth and kill grass weeds—MAZIDE SELECTIVE

Let the MAZIDE range take over where the mower stops

Why not ask Synchemicals to come and talk about your problems.

SYNCHEMICALS LIMITED.
Tel: (01)-237 1958/9

SYNCHEMICALS LIMITED.
LONDON, S.E.1

The British Golf Greenkeeper
in dry, hard and severely compacted conditions when penetration with any other shape of tine, to any appreciable depth, is found impossible. It is often found however, that after using a Solid tine several times under such conditions, and penetration and conditions thus improved, an alternative tine may then be selected as more beneficial and, if this alternative tine is used regularly, should avoid the recurrence of the original compacted state.

There has been a general swing, therefore, away from the Solid tine in favour of the Slitting tine, for general maintenance aeration, particularly on what we will call outfield areas such as golf fairways, football pitches and similar surfaces.

The Slitting tine now tends to be first choice for general use therefore, since less compaction is evident in the walls of the hole which it produces. This hole has a much larger wall area than that produced by the Solid tine and will therefore permit the intake of a greater volume of air and moisture. A further side benefit of this tine is that during its use, a certain amount of root pruning takes place, encouraging new growth along the sides and into the depth of the hole. The value of the flat bladed slitting tine on fairway areas is in the deep uncompacted slit which it produces, capable of assisting percolation of a large volume of surface water, which can be extremely valuable during periods of excessive rainfall and during winter months. The use of the slitting tine before artificial watering on greens, or before a fertiliser dressing is applied, can ensure the maximum effect by providing access to the root system. This will increase the efficiency of fertilisers and dressings rather than leaving them to the elements on the surface, where evaporation and decomposition can respectively occur.

The third type of tine is the Hollow tine which removes a core of soil and is principally for the relief of severe compaction, and for the introduction of a sand to a heavy soil or a loam to a light soil when a soil exchange is necessary to improve general conditions. The cores which are extracted, can be removed and sand or loam brushed or luted into the holes for maximum benefit.

The aeration value of the Hollow tine is less than that of the Slitting tine, and if Hollow tines are used at the wrong time and in the wrong conditions then a hole can be produced with heavily compacted walls which take quite a time to break down.

Additionally, too much hollow tining can cause the playing surface to become too soft, it may cause irregularities in levels and can encourage invasion of the turf by useless grasses and weeds. In England, I think it is safe to say that hollow tining is generally reserved for cases where the soil has become particularly compacted and is slow draining, or where it is necessary to work large quantities of top dressing into the surface for one reason or another. It is fairly common practice in England that on an 18 hole Golf Course, 6 greens are hollow tined each year. In other words each green is hollow tined only once every three years.

Once again use Solid tines when conditions are hard and difficult. Hollow tines for very severe compaction or for introducing large quantities of top dressing, Slitting tines for maintenance aeration, and regular use of these can reduce the frequency of use of the Hollow tine. Choosing the right conditions for use of tines is very important. Particularly so in the case of the Hollow tine. If it is too dry and hard, full depth penetration may well be impossible. If it is too wet, clean ejection of the core may not be possible and if the Hollow tines become completely filled and tightly packed with soil then it virtually becomes a solid tine of very considerably greater diameter. Most manufacturers will, I feel sure, confirm that a very large proportion of complaints received, in connection with the non-ejection of cores, can be put down not to the design of the tine but to its use in the wrong conditions.

### Fairways

Most of our talk up to this point has referred mainly to the aeration of greens, but we should stress here that of equal importance is the aeration of fairways, if we are to achieve benefits in increased absorption and consequently improved growth and wear resistance.

This must be achieved with a minimum of interference with play. Penetration by suitable implements down to 4 in. or so is common practice on good outfields, but for more troublesome soil conditions, deeper penetration of 6 in. to 9 in. is necessary. In order to break the compacted layer below, a shattering effect must be produced, with the minimum of surface disturbance, and the application of conventional round section solid or hollow tines, even if made of sufficient proportions, would not produce broken holes due to the sideways displacement of soil into their walls. Observation of the results produced by flat bladed tines in general purpose aerating machines has led to adoption of the larger flat tines. These are capable of producing either a deep cultivating and shattering effect with some surface disturbance, especially where the root growth
is poor, or by using a chisel shaped tine producing a rather less deep but uncompacted hole of large area, below the surface, and clean at the entry under almost any condition. This latter tine is therefore usable on a regular maintenance basis.

Now to the choice of machinery for carrying out a programme of aeration and many of the available machines were on display yesterday, where everyone had the chance to discuss the merits of each item presented with personnel from their manufacturers or distributors.

The choice of machinery however can depend upon many factors. Firstly whether the turf to be treated is fine, as on greens, or outfield type as on fairways. Secondly the depth of compaction to be relieved must be known. Thirdly the labour, or power units, which are available for operating the aerators should be considered. Next, the time allocated for the job and therefore the speed at which it must be carried out and, of course, there is the problem which we all have, how much money is available.

Now depth of penetration is very important indeed. It is not always sufficient simply to open up the surface since, if this is done on an area suffering from sub-surface compaction, it can very easily provide conditions which we see all too often these days. I mean the conditions where water, since it cannot percolate to a lower level, or to the drains, remains on the surface. The shallow roots have no holding properties and the sportsmen slide or slither about, or on the golf green the pitch of the ball takes out a piece of turf. So often, damage is caused to the turf which is not easily repaired during the playing season. But how often has one seen a course looking immaculate at the beginning of a season deteriorate very quickly. How often has one taken a plug of soil from such grounds and found two or three inches down, dusty dry soil, although water is lying on the surface.

Depth of penetration then is a prime consideration. It is not sufficient to simply penetrate into the compacted layer. One must get beyond it. Often, an existing drainage system may be a limiting factor in this respect and in due course, one can visualise under-soil heating providing the same problem on a bigger scale.

Available machines
As you will have seen, the machines available today are many and varied. From the simple, to the sophisticated, from the hand tool to the tractor mounted machine, from British to American to E.E.C. Manufacture.

Machines producing a clean vertical hole without surface disturbance are obviously very desirable. This particularly applies on fine turf areas such as golf greens. On fairways, some slight disturbance can be acceptable and quickly restored by the use of drag mats, flat harrows, rakes or even gang mowers. It can be expected that there will be disturbance on an area being treated for the first few times. Until it has been aerated and a good root system developed, sufficient to give it hard wearing, holding properties, it may be necessary to explain to the uninitiated that the long term benefits from a programme of aeration are often achieved, only if one is prepared to accept that conditions which have deteriorated over a number of years, cannot be restored to perfection overnight. What we are trying to achieve therefore are deep holes, with uncompacted side walls, which permit the entry of air into the soil, increase the absorption of moisture by the roots, encourage quicker and deeper root growth, make the introduction of suitable dressings easier, to assist the formation of a natural percolation system down to the drainage layer, and, in all, establish and maintain a turf which is resistant to drought and wear.

Before closing, a brief mention of surface aeration which can be considered a subject in itself. We referred earlier to the build up of excessive fibre in certain conditions. This can develop to a degree when it comes to resemble and act as a thick mat or sponge, preventing water and dressings access to the soil below.

At that stage a mechanical rotary blade type scarifier is essential to remove the excess fibre, to ensure that there are good conditions and space for new growth to develop, rather than the dead spongy surface on which no golfer can give of his best.

Gentlemen, we are all concerned with growing that of all things greener grass, which is often so difficult to grow correctly, at the time and of the type which is required, yet, leave a piece of virgin soil and see how quickly grass will establish itself on it. As manufacturers we are always delighted to hear from you and to assist in any way we can, through our distributors when necessary to fully appreciate local conditions.

CLASSIFIED ADVERTISEMENTS
For Hire. Sisis Autoturfman Aerator, £25 per week – do it yourself. For contract prices telephone Burnsell, Eaglescliff 780647.

The new Vari-Gang.
A major advance in big-area mower design.

Anything from the roughest of the rough to the smoothest of fairways, with the same basic gang unit.

With its easily interchangeable cutters of 5 or 8 blades, the new Atco Vari-Gang offers a choice of twenty-five or forty cuts per yard.

It converts just as easily from three units to five... to seven... to nine... all in a matter of minutes. And converting the triple to hydraulic lifting by means of a simple optional kit is almost as quick.

The Vari-Gang's compact unit construction and flexibility of lay-out provide a contour-hugging cut over the most hummocky ground, with the minimum risk of scalping.

Full details of the Vari-Gang and demonstration facilities can be obtained from Atco at the address below, or from your local Atco stockist. Why not find out more about the Vari-Gang now?

ATCO As famous as the lawns we cut.

CHARLES H. PUGH LTD., P.O. BOX 256, ATCO WORKS, BIRMINGHAM, B9 4PR. Tel: 021-772 2524
FAST ACCURATE HOLE CUTTING with the new SUPER CUT HOLE CUTTER

Perfect cuts, perfect plugs. This hole cutter of a completely new design cuts vertically, thus eliminating wobble and making a clean cut so simply and quickly

Details from:
H. PATTISSON LTD. 01-954 4171
STANMORE, MIDDX.

Pattisson

RELFL & KENDALL OF CROYDON AND BARNET

With pleasure announce that they hold the greatest concentration of lawn mower spares and lawn mower engine spares in the country

ENORMOUS STOCKS OF RANSOMES SPARE PARTS

RANSOMES

Also BRIGGS & STRATTON VILLIERS, VICTA, J.A.P.
B.S.A., DENNIS

Service Exchange items such as CUTTING CYLINDERS—MAGNETOS

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

Telephone your immediate requirements to

RELFL & KENDALL
406 BRIGHTON ROAD, SOUTH CROYDON,
SURREY. CR2 6XX. Tel (01) 688 0578

11 STATION ROAD, NEW BARNET, HERTS.
Tel (01) 449 6225

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