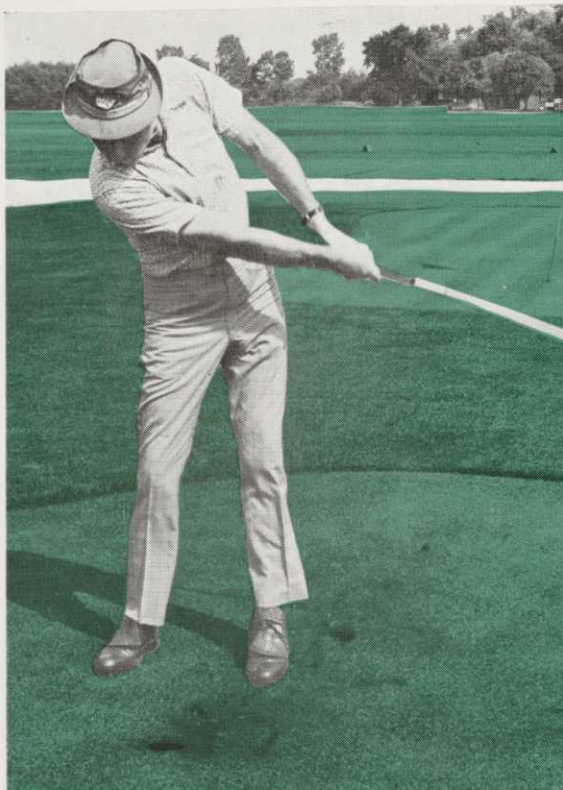


Warren's A-34 may be examined at the Harlow Car Botanical Gardens, Harrogate, Yorkshire. Planted May 1971.

Let
them
tear
it up...



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.

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



THE BRITISH GOLF

GREENKEEPER

HON. EDITOR: F. W. HAWTREE

FOUNDED 1912

PUBLISHED MONTHLY FOR THE BENEFIT OF GREENKEEPERS, GREENKEEPING AND THE GAME OF GOLF BY MEDIA PROMOTIONS LTD ON BEHALF OF THE BRITISH GOLF GREENKEEPERS' ASSOCIATION

No. 321 New Series

FEBRUARY 1972

President:

CARL BRETHERTON

Vice-Presidents:

SIR WILLIAM CARR
GORDON WRIGHT
F. W. HAWTREE
S. NORGATE
I. G. NICHOLLS
F. V. SOUTHGATE
P. HAZELL
W. KINSEY
P. MARSHALL
W. PAYNE

Chairman:

J. CARRICK
Golf Cottage
Church Brampton
Northampton

Vice-Chairman:

H. M. WALSH

Hon. Secretary & Treasurer:

C. H. DIX
Addington Court G.C.
Featherbed Lane
Addington, Croydon, Surrey
CR0 9AA

Executive Committee:

Carl Bretherton (President)
G. Herrington E. W. Folkes
V. Smith P. McCarron
W. Heeles J. Simpson
A. A. Cockfield H. M. Walsh
H. Fry (Jun.) P. Malia

Hon. Auditors:

Messrs SMALLFIELD RAWLINS AND
Co., Candlewick House, 116/126
Cannon Street, London, E.C.4.

Hon. Solicitors:

HENRY DOWDING, LL.B.
203-205 High Street
Orpington

The Association is affiliated to
the English and Welsh Golf
Unions.

CONTENTS

TEE SHOTS	PAGE 3
BE PREPARED	4
WINTER DORMANCY AND DESSICATION	6
WINTER CHECK LIST	8
MOWING IN 1972	12
NEWS FROM SECTIONS	16
SITUATIONS VACANT	20

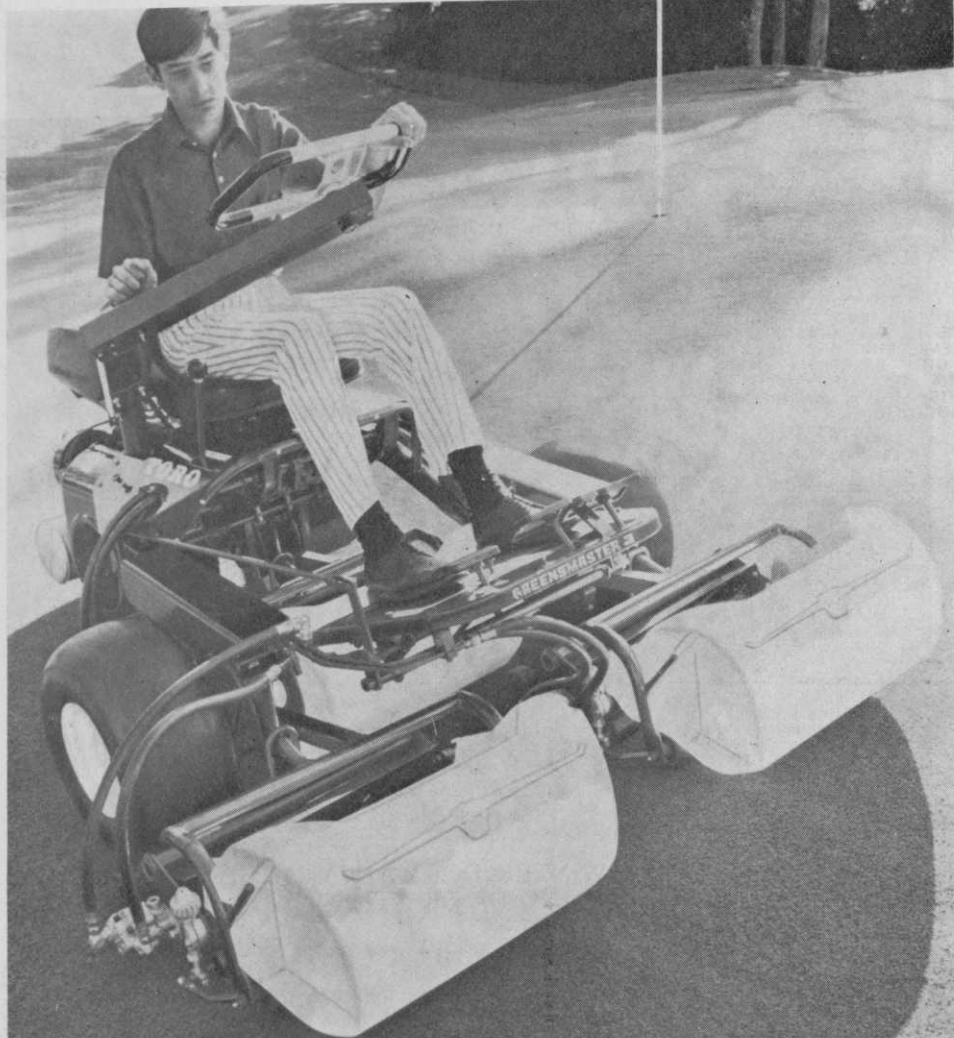
EDITORIAL AND SUBSCRIPTION OFFICES: Addington Court Golf Club, Featherbed Lane, Addington, Croydon, Surrey. Telephone: 01-657 0281. SUBSCRIPTION RATE: £1.25 for 12 issues post paid. Published during the first week of each month. All rights reserved. Reproduction of original articles and photographs in 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 Promotions 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 5p per word (minimum 15 words). 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 F. A. Clements (Chatham) Ltd.



THE GREENSMASTER[®]
GETS OFF THE GREENS FASTER.

A special golf course mower designed to give you the best in cutting, faster.

Faster from green to green because the operator rides at 7 mph.

Faster because it is more maneuverable (15" turning radius).

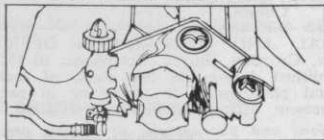
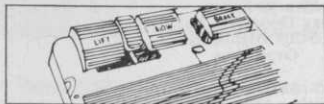
Faster because operator controls are well marked and conveniently placed. A single foot-control can raise and lower cutting units simultaneously.

Faster because it has 3 free-floating cutting units with 3 oversize grass baskets.

And to prevent turf marring, large terra tires distribute the weight evenly.

Ask your Toro Distributor about the Greensmaster 3. It won't hold up play.

Toro has servicing dealers and distributors worldwide. TORO... for 57 years, makers of quality lawn and garden care products, automatic underground sprinkler systems, snowthrower equipment.



For further information, please contact
 FLYMO Ltd. (distributors), Greycaine Road, Watford, Herts., England.

Tee Shots

TRANSATLANTIC NEWS

The Perfect Golf Course?

The United States Golf Association has plans for its own golf course to stage the US Open periodically, and other championships between times. The site proposed is in New Jersey and extends to 224 acres. A panel of four golf architects elected by the American Society of Golf Architects will prepare route plans for the course and later the detailed specifications and plans.

Golf's tribute to Ike

Two major golf associations have undertaken a scheme to honour the memory of General Dwight Eisenhower. The goal is to help finance two institutions in which Eisenhower was intensely interested: Eisenhower College in the East, and Eisenhower Medical Center in the West. The project has been named *GOLF'S TRIBUTE TO IKE*.

The United States Golf Association and the Professional Golfers' Association of America are seeking the help of every golfer in the United States. Contributions to the foundation are a means of expressing appreciation for the General's great influence on the popularity of the game.

Hot news

Heated golf balls will travel about 30 per cent farther than balls at air temperature. Par Electronics of Panorama City, Calif., is capitalising on the fact by manufacturing Hot Balls, a battery-powered, rechargeable ball warmer that will keep three balls heated to the necessary 105°F for a complete game (\$14.95). Note: Heating balls in the sun is no good, a Hot Balls spokesman claims. They have to be heated to the core.

The Editor



Grass Seeds

**FOR HIGHEST PURITY
AND GERMINATION**

SEND
NOW
FOR OUR FREE
'GREENKEEPING'
CATALOGUE

CANNOCK FERTILISERS LIMITED, CANNOCK, STAFFS WS11 3LW

Be Prepared

J. Perris, B.Sc., *Advisory Officer, Sports Turf Research Institute, Bingley*

At this less busy time in the calendar when the weather may have temporarily closed the course or may prevent outside work, some thought can be given to the coming months and growing season. Once spring growth is under way and the usual pressures return, time will be at a premium. Now is the moment for preparation and planning to make life easier and happier in the months ahead.

Present problems

Aim at completing the current jobs on hand as soon as possible and certainly before the spring rush begins. As well as outstanding drainage work, unfinished course alterations such as tee extensions, etc, should be the immediate concern when favourable weather allows. When really bad conditions stop outside work, however, do not neglect other essentials such as preparing compost. Lopping tree branches, hedging and fencing work may also be tasks to finish but in the meantime still keep an eye open for sudden problems such as an outbreak of *Fusarium* patch disease.

Machinery

A golf course that starts the growing season with machines out of commission is starting off on the wrong foot. Every machine on the course should be systematically inspected in the winter months to make sure that it is capable of working to maximum efficiency. Worn parts should be renewed, engines overhauled if necessary and if this means sending the machine away, insist that it is returned properly serviced in good time. Do not overlook the smallest detail and if experience has shown a component of a particular machine to be susceptible to breakdown it is worthwhile getting a spare in stock.

Course sundries such as hole cups, flagsticks, tee markers, etc, should all be examined and where necessary repaired and painted. Advantage should also be taken during any brief mild spells of weather to see that there are no faults with the watering system. Do not forget to check hoses and couplings which can sometimes perish after a few months storage.

Materials

Careful choosing of the right materials at the right price will please a lot of people in many ways. If there is any doubt about the suitability of a material for a particular purpose, e.g., selective weedkiller for use on the greens, etc, take expert advice.

Accurately calculate the exact needs before ordering so that you are not short at a crucial time in the summer. When the various materials are delivered make sure that they are stored under the conditions that the manufacturers specify. If, for example, it is advised that a tin of fungicide is best stored in a cool, dry cupboard, try and ensure that this is done. Careless storage is very frequently never discovered until the material is required, when it is then often found to have deteriorated to the point of

worthlessness or, at the least, great inconvenience. Poisonous chemicals should, of course, be kept under lock and key and when such materials are used the recommended safety codes should be rigorously followed—remember careless mistakes could be fatal.

When samples of substances such as sand and soil are available, ask for them. You may find that the sand or soil is not really up to the standard you require.

Keep a check on all the materials bought and applied; such information may come in use next year. As well as having current greenkeeper's magazines or the back pages of *The Sports Turf Research Institute's Journal* at hand it is also wise to make out a list of your suppliers with telephone numbers, etc, so that should any emergency arise, an accurate bank of information is quickly available. Such recording is, of course, not only valuable and applicable to ordering materials but all other aspects of golf course maintenance work.

Diary

Besides checking machines, ordering materials, etc, there are many other small points about which some advance knowledge and preparation would be useful. Incidentals such as checking with the Club Secretary on fixtures and important tournaments for the coming season often save tempers and embarrassment later. Another wise action at this stage is to make initial contact and tentative arrangements with any firms from whom you may hire machinery later in the year.

Finally

Despite the most thorough preparation and organising it is still possible that some unexpected problems will occur. In a way, it could be said that you must prepare yourself to accept this. Many greenkeepers have the confidence and ability to overcome such difficulties but if there are any gaps in your knowledge which could lead to a situation in which you would be a little uncertain what to do, now is the time to ask or read and find out.

R. C. CRAIG

AND CO. LTD.

SPECIALISTS IN THE REPAIR AND
MAINTENANCE OF ALL TYPES OF MOWERS

* Agents for: RANSOMES SIMS &
JEFFERIES LTD.

* LLOYDS & CO. LTD.
WEBBS LAWN MOWERS

* Distributors: DENNIS BROS. LTD.

GANG MOWERS FOR HIRE

We will gladly call on you to advise
on your grass cutting equipment or
arrange demonstrations. Ring us now

*

**153 Arch Stamford Brook
Station, LONDON, W.6.**

RIVERSIDE 5415

Winter Dormancy and Desiccation

Dr. Thomas Watschke

Knowing how grasses grow is essential for all turfgrass managers. Equally important, however, is to know something about how turfgrasses 'rest' (dormancy). As the winter months approach, day length, light intensity and temperatures (both day and night) decrease, causing many physiological changes in turfgrasses.

The first effect of these changes is a reduction in growth. Higher temperatures than those occurring in late autumn are required for the optimum functioning of metabolic processes responsible for rapid growth. Nitrogen metabolism slows, resulting in decreased protein synthesis. Carbohydrates accumulate in storage tissue (rhizomes, stolons, crowns) because the metabolic demand for carbon is reduced (less growth and lower respiration). As long as chlorophyll remains in the leaf, photosynthesis will continue even after temperatures become quite cool. The majority of the carbon dioxide fixed in late autumn is translocated as carbohydrate to storage tissues.

Once temperatures are cold enough to cause leaf chlorophyll degradation, photosynthesis is drastically curtailed and new foliar growth is almost non-existent. The leaf canopy of turf areas becomes a mottled green to light brown colour and dormancy prevails.

Late autumn is also the time when root sloughage begins. As much as 80 per cent of the root system of turf grasses is lost over the winter. The crown area, however, is very much alive and at the mercy of the elements.

We are indebted to *The Keynote*, published by the Pennsylvania Turfgrass Council Inc., for allowing us to print these two timely articles from their November issue.

Mr. Frank Sirianni, superintendent of the Penn State University, has produced a useful check list of winter work, and Dr. Thomas Watschke, Assistant Professor of turfgrass science at Pennsylvania State University, writes on winter dormancy and that dangerous phenomenon—desiccation.

Because the grass is alive it transpires, respire, and at times fixes small amounts of CO₂ and consequently requires water. The inability of grasses to satisfy their water requirement results in a wilting phenomenon known to a turfgrass manager as 'desiccation'.

Desiccation is probably the foremost cause of winter injury from the Great Plains to the Atlantic seaboard and is not restricted to cool season grasses. Desiccation occurs when the water supply is diminished to the point where the plant is unable to absorb water to replenish that transpired. Several winter days of snow cover, low humidity and wind will enhance the possibility of desiccation. Evaporation losses from the soil coupled with

The earlier you let us service your Atco this winter the happier you'll be.

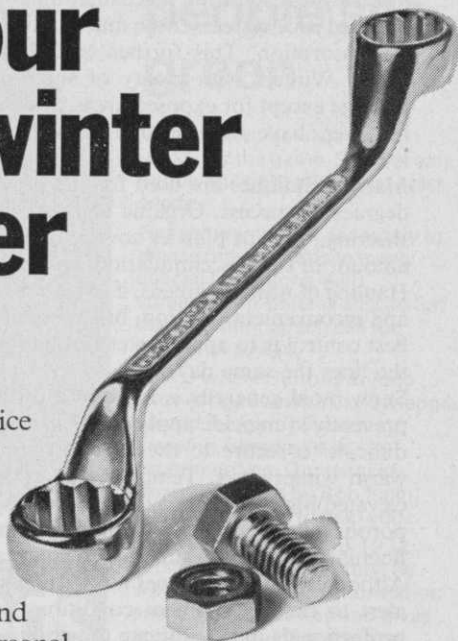
Every winter the Atco Service Organisation is snowed under with mowers waiting for their annual service.

This rush starts in early December and lasts all the way through to late March. And as each mower receives the personal attention of skilled mechanics each job takes a considerable amount of time. Consequently the queue of mowers waiting for service grows longer and longer. Obviously it's best if you can get your machine to us before the rush.

That way you get your Atco serviced, oiled and greased for its winter hibernation and back to you quickly. So you're left with plenty of time to get on with the more important winter jobs without any worries.

The same goes if you want a new machine. Order it before December and you can be sure of a swift delivery.

So contact your local Atco branch early this winter. We'd be happier if you did. And so will you.



*By Appointment to Her Majesty The Queen
Motor Mower Manufacturers
Charles H. Pugh Limited*

ATCO

LONDON
61 Albert Road North
Reigate, Surrey
Tel: Reigate 45731-2-3-4-5

NEWMARKET (Suffolk)
176 Exning Road
Newmarket
Tel: Newmarket 2539, 2632

CHEPSTOW (Mon.)
Castleford, Tutshill
Chepstow, NP6 7YJ
Tel: Chepstow 2732, 2114

SCOTLAND
Industrial Estate
Larkhall, Lanarkshire
Tel: Larkhall 882370

READING (Berks.)
Boulton Road
Reading RG2 0ND
Tel: Reading 84258-9.

DARLINGTON (Co. Durham)
McMullen Road
Darlington
Tel: Darlington 2671, 66939

BIRMINGHAM (Warks.)
1210 Stratford Road
Hall Green, Birmingham, 28
Tel: 0 1-777 7111/3

PRESTON (Lancs.)
The Grove, School Lane
Longton, Nr. Preston
PR4 4SA
Tel: Longton 2451-2

SHEFFIELD (Yorks.)
Rotherham Road
Eckington, S31 9FH
Tel: Eckington
(Derbyshire) 2373-4

EXETER (Devon)
14 Marsh Green Road
Marsh Barton
Exeter EX2 8PG
Tel: Exeter 73882, 54017

losses by transpiration place unattainable demands for water on an already crippled root system. Often much of the soil water is frozen and unavailable for absorption. This further reduces the time for severe desiccation to occur. Winters with plenty of snow cover seldom result in desiccation damage except for exposed areas where snow is blown away. Most winters however, have bare ground periods when the potential for desiccation is high.

Many techniques are used for the prevention of desiccation with varying degrees of success. Organic and inorganic mulches, burlap, polyethylene sheeting, porous plastics covers, or erection of snow fence to increase the amount of snow accumulation, have all been used to alleviate desiccation. Hauling of water to greens, if irrigation cannot be turned on, is an expensive and inconvenient solution, but necessary to save desiccating turf. The very best control is to apply water through irrigation lines if possible and drain the lines the same day.

Snow mold generally is more of a problem when snow fence is used, and preventive fungicide applications are more essential. Covers are bulky and difficult to secure to the turf and condensation often occurs on sunny, warm winter days. Temperatures under various covers occasionally are elevated high enough to induce growth of *Poa annua*. Screen materials or porous plastic covers do allow air movement and reduce temperature fluctuations and are superior to solid tarpaulins.

Although desiccation does not occur every winter, turf managers should be alert to the environment conditions conducive for its appearance. Turf professionals must cultivate the ability to recognise conditions favourable for desiccation and take the proper precautions to minimise its effect. During snow-free winter periods the crown area of turfgrasses should be periodically checked for turgidity. Desiccating turf appears very dry, is brittle to the touch, and is easily pulled from the soil. Examination of the upper 1½-2" of soil should also be made periodically, particularly during windy weather, as soil moisture can decline very rapidly during low humidity days (10-20 per cent relative humidity) which occur during the winter months.

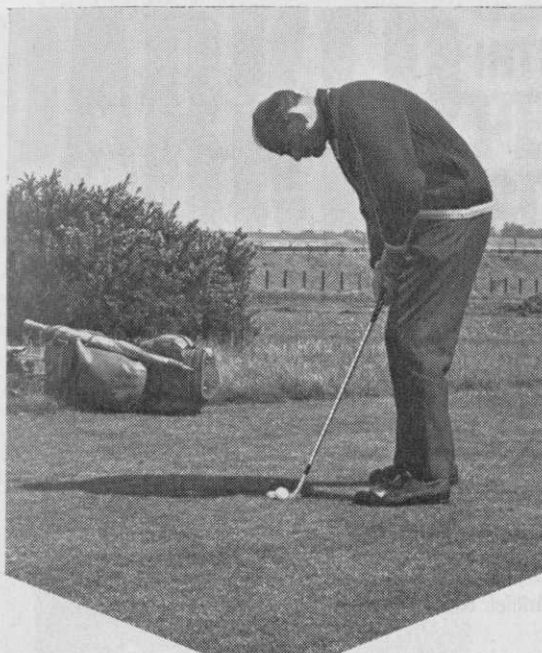
Much continuous effort is expended for excellent turf during the growing season, and there is no reason for those efforts to go down the drain by losing grass to winter desiccation. Providing for the needs of dormant turf is every bit as important as the attention it receives during the growing season. Grass needs your attention 12 months of the year. Are you there?

Turf Manager's Winter Check List

Frank Sirianni

November is the month Superintendents and Turf-managers in Pennsylvania are making preparations for winterising their golf courses, sod farms and equipment. The following is a list of *musts* we use at the University Golf Course.

1. Protect turf from frost damage, either by water or by keeping golfers and traffic off until conditions are favourable.



We make people see green

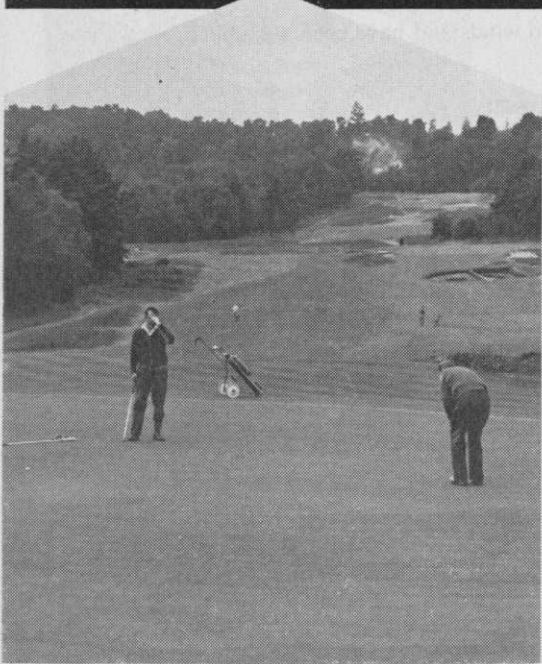
Golf, cricket, bowls, tennis, whatever the game, Suttons can supply the right mixture of grass seeds.

But sometimes it is necessary to devise prescriptions to meet special conditions. And sometimes problems arise in turf management which call for specialist advice.

This is where Suttons unique knowledge comes in, knowledge gained by years of planting, growing, blending and experimenting. Our team of experts, headed by Bob Palin, will be delighted to help you.

Send today for Suttons 1972 catalogue for the full story, as well as lots of useful information and ideas. This is free and gives you a ready guide to the best range of grass seeds and turf dressings on the market. It is also a sound basis for your own turf care ideas.

Suttons Seeds



To Suttons Seeds Ltd
(108) Reading RG6 1AB
*Please send me your 1972
grass seed catalogue*

Name.....

Club, Organisation, etc.....

Address.....

Suttons Seeds

2. Complete all outside work, save inside work for wet and cold days.
3. Drain all water lines, open drains where there is danger of freezing. Blow lines out with air if possible.
4. Store equipment that will no longer be used.
5. If course is left open for late play move cups to front of greens—take tee markers off and put in front of tee.
6. Add a few tablespoons of anti-freeze to water in ball washers if they are left out.
7. Use snow fence along entrance roads and near shops to protect areas that drift.
8. Keep leaves picked up.
9. Wrap and use guy wires on trees planted in fall.
10. Check radiators on vehicles that will be out and subject to freezing conditions.
11. Clean catch basins and drain boxes.
12. Spray greens for winter protection of winter kill, if budget permits spray tees and collars, etc.
13. If greens are exposed to winds and have been a problem, snowfence may help.
14. Spray evergreens if necessary.
15. Paint ball-washers—flagsticks—tee markers and waste baskets.
16. Overhaul and sharpen machinery, check each machine for worn parts.
17. If course is new and not fully covered keep seed on hand for dormant seedling.
18. Store all liquids in heated area to protect from freezing.
19. Mark and label all materials, use shelf rotation.
20. Attend Turf conferences, equipment shows and schools.
21. As soon as snow cover is gone check course several times during winter months.
22. Look over last season's records, make plans for next season's improvements.