

THE JOINT COUNCIL
for
GOLF GREENKEEPER
APPRENTICESHIP

representing the English and Scottish Golf Unions, The Welsh Golfing Union, The British and Scottish Golf Greenkeepers Associations and The Sports Turf Research Institute.

Since 1963, when this Council was formed, 82 young men have completed their apprenticeship. 77 more are under training. The Joint Council wishes to thank all those golf clubs who have realised that the future upkeep of golf courses depends on proper training now, and the Head Greenkeepers who have handed on their experience to the next generation.

Hon. Secretary:
P. C. French, 3 Skeet Hill Cottages,
Daltons Road, Chelsfield, Orpington, Kent.

GREENKEEPER

HON. EDITOR: F. W. HAWTREE



FOUNDED 1912

PUBLISHED MONTHLY FOR THE BENEFIT OF GREENKEEPERS, GREENKEEPING AND THE GAME OF GOLF BY THE BRITISH GOLF GREENKEEPERS' ASSOCIATION

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

Chairman:
H. A. D. FRY
Heathercroft
6 Northway, Bishopston
Swansea, Glam.

Vice-Chairman:
A. ROBERTSHAW

Hon. Secretary & Treasurer:
C. H. DIX
Addington Court G.C.
Featherbed Lane
Addington, Croydon, Surrey
CRO 9AA

Executive Committee:
Carl Bretherton (President)
G. Herrington E. W. Folkes
R. Goodwin S. Fretter
J. Parker J. Simpson
A. A. Cockfield H. M. Walsh
H. Fry (Jun.)

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

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

No. 304 New Series

AUGUST 1970

AUGUST

CONTENTS

PAGE 3	TEE SHOTS
4	THE HEAT'S ON!
10	EIGHTEEN HOLES WITH HAWTREE
No. 12.	The High Veld
12	SPECIAL OCCASIONS
13	SITUATIONS VACANT
14	NEWS FROM SECTIONS

EDITORIAL AND ADVERTISEMENT OFFICES: Addington Court Golf Club, Featherbed Lane, Addington, Croydon, Surrey. Telephone: 01-657 0281. SUBSCRIPTION RATE: 15/6 for 12 issues post paid. Published during the first week of each month. LATEST COPY DATE: 8th of month prior to insertion. 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.

TO INSERT A CLASSIFIED ADVERTISEMENT, write to the Advertisement Manager at the above address. The rate is 6d. 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.

Under the guidance of users in the field and those responsible for professional fleet operation, we have re-examined in minute detail the requirements of mowers used specifically for the cutting of superfine turf. The result is . . .



By Appointment to
Her Majesty the Queen
Manufacturers of
Motor Mowers
Charles H. Pugh Ltd.
Birmingham.

the new **ATCO** 20" SPECIAL

the endurance-tested new features include:-

- LARGER CAPACITY "POWER-TO-SPARE" ENGINE, WITH EXTRA LONG-LIFE SPECIFICATION
- "LONG-RANGE" 6 PINT FUEL TANK
- PERFECT CONTROL THROUGH INSTANTLY ADJUSTABLE TUBULAR HANDLES, WITH THROTTLE AND CLUTCH CONTROLS BEAUTIFULLY TO HAND
- MAIN CLUTCH ACTUATED BY TWIN BALL RACES FOR DRAG-FREE PULL-BACK
- TRANSPORTING WHEELS WITH HEAVY DUTY TYRES AND RE-DESIGNED INTEGRAL FASTENERS
- FRONT AND BACK ROLLERS WITH COMPOUND RADIUSED ENDS FOR MINIMUM TURF MARKING
- BUILT-IN ATTACHMENT BRACKETS FOR OPTIONAL GRASS COMB
- EASIER MAINTENANCE BY BALL-BEARING MOUNTING OF FRONT ROLLER AND IMPROVED LUBRICATION OF BACK ROLLER

The ATCO 20" SPECIAL is the mower you designed; so ask your local Atco Branch for a field trial on your fine turf now

Free literature from
CHARLES H. PUGH LIMITED
P.O. Box 256, Atco Works, Birmingham 9



TEE SHOTS



by the Editor

The June drought has brought additional problems to Colin Baxter at the Whitburn Golf Course, South Shields. His course is built on rock and pipe laying cannot be contemplated. Until the club got the South Shields Fire Brigade to assist he was relying on borrowing milk churns from a local farm to carry water to his greens. He describes this spring and summer as a "nightmare".

* * * *

York Golf Club whose club-house was largely destroyed by fire in February 1969 has now re-opened an imposing new club-house which cost between £47,000 and £50,000. The official opening is on 1st August and will be performed by Mr A. R. Alvin, President of the English Golf Union and a leading figure in Yorkshire golf for many years.

★ ★ ★ ★

Work has also started on new municipal golf courses for the Strood Rural District Council and the London Borough of Havering. A new 18-holes at Addington Court will also be open for the public within the next month or so. Problems experienced by greenkeepers in the quick transition from cold winter to dry spring have been accentuated on many recently constructed courses.



Grass Seeds

**FOR HIGHEST PURITY
AND GERMINATION**

SEND
NOW
FOR OUR FREE
'GREENKEEPING'
CATALOGUE

THE CANNOCK AGRICULTURAL CO. LTD., CANNOCK, STAFFS

THE HEAT'S ON!

by BILL SMART

Superintendent, The Powelton Club, Newburgh, New York

As mid-summer draws near, it would do well to remember that very little of our natural landscape is grassland as we know it and cultivate it on our golf courses. The north-west coastal range and the north-eastern seaboard are the only two large areas that come readily to mind. The early settlers saw little grass as we know it today. Perhaps the long bladed grasses in sections burned off by the Indians in an effort to obtain game; a common practice by this early American—or perhaps they saw finer swamp grass or native bent growing in abandoned beaver ponds that had silted to meadowland. Nature it would seem pollutes to good advantage at times.

Should any Golf Course Superintendent of today have Indian blood, he might call the season approaching The Time Of The Ulcer—for this period from June through early September truly tests the fortitude and knowledge of the turfman.

To solve a problem, one must first know what the problem is. To me the true enemy in midseason is just one factor—Heat! Most of our summer conflicts evolve from growing grass in an environment that seeks to reject this unwelcome intruder. Leave a golf course untouched for 10 years and it will revert to the native countryside; only the hand of man keeps it a sward of grass.

Once you accept this premise you can take steps to “cool” it. It is astounding to me how few do accept it. Ask any man in turfgrass management what his major summer problem is and he will likely reply: disease, wilt, labor, poor water system. *Poa annua*, heavy play, and so on. While all of these annual ills may be present, the root of the problem is plain old high temperature. If the reader dis-

agrees with this, it will be no more than I expected; but let me assure him that my conclusions have not been hastily drawn.

The answers to two nagging questions gave me some insight on grass failure in midseason. (1) Why did courses with minimum budgets often come through the season with less trouble than more affluent courses? (2) Why did some course superintendents, who watered “incorrectly”, have such an astonishing greens survival rate? The answers, and the acceptance of the heat factor theory during the 100 day period starting June first, led to a new concept in my summer maintenance.

First and foremost, I geared all my planning to the survival of the turf I had at the end of May. Care of what I had took priority over all else. This meant no projects—no construction—no extras, after June first. Maintenance and mow, water and watch. I am referring to greens in this article, especially older greens before the introduction of the newer, more tolerant bents; however, the basics would apply to other turf as well.

I have always held that any disturbance of the green surface during hot weather is a serious error. Only under the most unusual circumstances would I consider vertical mowing or aerating after the June first deadline. Even topdressing and fertilizer applications tend to injure turf in stress periods. The dark material tends to absorb heat and raise the surface temperature of the turf; and if the material is dry (as topdressing normally is, and most fertilizers are) it absorbs moisture from the surface of the green. Small factors, perhaps, but they are to be reckoned with.

There are times when well-intentioned greens chairmen will dispute

LEYLAND 154

the 'PERFORMANCE' lightweight

Versatile, and economical in operation, the Leyland 154 is ideal for turf maintenance work. Its light weight is a great advantage when working on grass where heavy tractor wheel pressures are to be avoided. With 25 h.p., compact dimensions and the ability to manoeuvre in confined spaces, the 154 is the 'PERFORMANCE' lightweight tractor for work on golf courses, parks and sports grounds. Leyland 154 features include 9-speed gearbox with 3 reverse gears, independent hydraulics and 2-speed P.T.O. There's a wide range of optional extras and specialised equipment. Arrange a demonstration with your Leyland tractor distributor or write for information to:—

TRUCK & BUS DIVISION, LEYLAND MOTORS (SCOTLAND) LTD., TRACTOR GROUP, BATHGATE, SCOTLAND.



the "100 day" rule and it takes the courage of conviction to stand your ground. I could fill these pages with case after case where the condition of the course suffered, in the prime playing months, due to projects or work best left till fall. In many cases, the superintendent is his own worst enemy in this respect. We all take on extra work we really have no time for and our men have no skills for. This is usually done "to save the club money"—or, in the case of the inexperienced green chairman, he feels you can handle it because you have a few schoolboys on as summer help.

Two cases will illustrate my point. (1) A superintendent was called before deplorable condition of the course in his Board of Directors to explain the midseason; his explanation that he and his crew had taken time to put in blacktop around the club and saved the club \$1,200 did not impress the Board. (2) A man on a nine hole course was forced to lay two men off in August. Reason?—"the grass isn't growing now and you don't need to mow it so often."

The plain and simple truth is that most courses have maintenance crews and they have little time for anything other than routine upkeep (if they are to do it well) and it takes all the skill and manpower a superintendent has to bring a course through this most critical period. A friend of mine in Westchester (Bob Hope called this metropolitan New York County a "populated golf course" because of the many courses) was fond of saying "Anyone can run a golf course . . . up to the Fourth of July." As I have stated, I prefer to roll that back to the first of June.

Wilt

Detecting wilt in early stages is not easy for the untrained eye. In my crew of eight men, only one can be depended on to see it and stop all work until it is under control. He is my fairway man and is in position daily to head off trouble. Although I have never tried them, Polaroid sun glasses will detect wilt much sooner than the naked eye.

The use of wetting agents on turf is still in its infancy. Although they have been used nation wide. In my use on two courses, plus my first-hand knowledge of their use on other courses, I find that they definitely aid in obtaining uniform moisture levels. And, when used with phenyl mercury, they help to control water loss through the stomates. Proper use, in connection with other factors I have mentioned, has almost eliminated syringing on my course. Localized dry spots due to heavy thatch or severe contours have also been eliminated as one of my summer worries.

"X Pounds of N"

Fertilization practices on golf courses are a nightmare to one who attempts to evaluate them by practices used on other courses. No two use the same material in the same way. The text book approach is not much better, with only a guideline of X number of pounds of N, and adequate levels of P and K suggested. With so many variables (soil type, type of turf, timing, area of the country—etc.), is it any wonder that each superintendent has his own individual program and that this often as not varies from year to year? To further confuse things, we have organics, inorganics, synthetics, and their different forms and prices. My early observations led me to believe that most, if not all, superintendents fertilized not for health and growth—but for color. It is understandable to want greens that are pleasing to the eye; but the massive doses recommended and applied (as high as 12 pounds N per 1000 sq. ft.) produced a forced, soft growth. In many cases, this is at a time when the turf is trying to cope with its artificial environment by going into a semi-dormant stage. This leads to excessive disease, scalping, salts build-up, slow putting qualities and that "old debil", wilt.

I do not claim to be the first to go on a low nitrogen program for greens; indeed, many low budget courses use one through no choice of their own. This is one reason why the smaller courses often have less trouble

than the plush layouts. After much trial and error (too much of the latter), my fertilizer program for all golf course turf has evolved in two pounds of Actual N (in organic form) on dormant turf in early winter, and another pound in mid-September. During the summer season, a very small amount of water soluble fertilizer (in the weekly fungicide spray) is used on greens and low cut tees. Color? Iron Sulfate in the same spray gives me all the color I need or want. This program is minimum in cost and labor but, more important, it produces a slightly hungry turf which is more disease resistant, less prone to wilt and yields just enough growth to replace natural wilt (golfers are natural to a golf course). My rates may be too low for some of the newer, more aggressive bents. My greens are fairly typical of older courses in this area—South German bent plus overseeding through the years with whatever was fashionable or least expensive. *Poa annua* is present, although not a problem percentage-wise, and is on the decline. As is typical with other older courses of this area, the collars are almost 100 per cent. *Poa annua* as are the low cut tees and fairways. I am on no program to eliminate *Poa annua*. There has been much discussion about living with *Poa*, but, to the best of my knowledge, no one in this area has actually gone all-out on a program with this goal in mind. It has been done successfully on greens and low cut tees—why not fairways? If I can hold collars of 100 per cent. *Poa annua*, why not 40 acres of fairways? Last season was easy; nature co-operated. Water was put in the fairways in the fall of 1964 and my *Poa annua* is now fat, healthy and aggressive. I believe O. J. Noer said, "*The little grass plant wants to grow; let it.*" That is exactly what I plan to do.

Summary

Turf, as we maintain it, is seldom a natural growth and its most critical period is the 100 days from June first on.

The only way to handle "extra "

work in this period is to have extra men and money—over and above your working crew and working budget. Better still, contract out all special jobs.

Another serious error is never leaving well enough alone when the course is in good condition. I have been as guilty of this as anyone else. Our pride in our work and our intense personal interest tend to make us try to make things just a little bit better—or try to please everyone. It is done every season—verticut to make the greens faster for the member guest—an extra shot of fertilizer when you host the local meeting—lowering the cut because the club champ had a bad round and went to the chairman (who came to you). I see, and have made, the same old mistakes every year. A good mid-season rule to follow is: If In Doubt, Don't Do It! Turf can be lost through too much attention, as well as the lack of it.

Perhaps the most important tool you have is your watering system. If you have a fully automated system that is in perfect working order with all the water you need—God Bless You—not many can make that claim. The rest of us must accept the system we have (at any rate, for this season). The vital concern here is to get the turf in the best possible shape before its peak use. This is clearly the responsibility of the man on the job. Indeed, no other person will know or care about your pumps, pipes, valves, hoses and sprinklers. The system should deliver every possible gpm, with no flaws to sap its potential. All portable watering gear should be in plentiful supply. And if I did have an automatic system, I would check and recheck it well beforehand.

Most authorities refuse to be pinned down on watering practices. We are all aware of the stock phrases: "*Apply an inch a week*"—"*Go as long between watering as possible*"—"Overwatering is bad, and underwatering is just as bad." After trying every method I could think of, I have come to the conclusion that what I am after is a uniform, constant moisture level—and

this is best done by a short watering period *every morning*. On the silty loam greens of my experience, about 10 to 15 minutes would seem to be about right—but like all the “experts”, I would like to qualify this by common sense factors. These include expected weather, past weather, presence of *Poa* green construction, gpm of the sprinkler and on and on. This early AM watering will wash in any possible accumulation of salts, aid in fertilizer break-down, reduce disease development and help keep the day-time surface temperature down. Most important, however, it should give your greens protection from sun, wilt and wind for just *one more day*. Multiply this by 100 and you are through the season. But, don’t count on it alone. A greens check just before noon is good insurance. In some cases a light syringing can be made after lunch. This is one operation for which the rule is: “If In Doubt, Do It.” No turf was ever lost due to a light mid-day watering. In true stress periods, check again in time to repeat before your men are through for the day. Over 75 per cent. of my time during a normal (dry) summer is spent in some type of watering activity—this, of course, includes supervision of those who are doing the watering. I feel that some of the reaction to this will be, “But I don’t have the time or men to do this”. My reply to this is, “I can’t imagine anything more vital to the course or your own welfare”.

Another annual error is lack of

proper instruction on syringing greens. On many courses it amounts to, “Joe, you take the back nine—and Louie, get the front”. Many greensmen feel that this is a casual, rather foolish operation and can be done any old way and get on with more important work. Then there is always the man who is gone for hours and reports back, “I really gave them a good soaking”. I have made it a point to syringe once early in the season as sort of trial run, to remind the old-timers what it is all about and to instruct the new men. One minute to a thousand square feet, at my course, is enough during stress periods. The aim is to replenish the moisture through the surface of the leaf and to lower the soil level temperature. This is *not* the time to build up moisture in the root zone; this is the job of normal irrigating. Hand syringing leaves the most margin for error and this system needs careful and constant supervision and instruction. In quick coupling systems, the use of sprinklers will eliminate coverage problems but is somewhat bothersome to players. With pop up, semi or full automatic, the only concern need be with timing; many superintendents give instructions in terms of “let the head revolve six times”.

For hand syringing, a 75 foot light-weight, high quality hose makes a durable outfit to transport from green to green. Fogg-It nozzles, drilled out to $\frac{1}{4}$ inch, are inexpensive, unbreakable and pocket size. I keep three 75 footers, coupled and nozzled, ready to go at all

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

times. They are not used for any other purpose.

You are the only person who knows what your watering system should be. If it is not right, fix it—remodel it—update it . . . this fall. For the present, care for it as if your job depended on it . . . and it does. Instruct others that their job also depends on it.

A little watering every morning may be wrong culturally, but so is our close-chopped golf course turf. Does it make sense to wait till mid-day and perhaps be forced to syringe to save wilting turf, with probable root loss that takes weeks to recover . . . or would you rather plan an hour's work in the morning that will give you peace of mind and insurance all day?

Four Discoveries

H. W. Meusel's work at Yale proved that stomates in the grass leaf can be closed by chemicals, and thus retard wilt. It is neither mysterious, expensive, difficult or dangerous. Nor is it a cure-all.

I consider that there have been four

major turf developments in the past 25 years: (1) selective weed control by the 2, 4, D materials, (2) chlorinated hydrocarbon insecticides, (3) broad spectrum fungicide concept plus iron sulfate, and (4) use of wetting agents on turf.

It is too early to judge, but I suspect that I will be adding low nitrogen dormant feeding to this list.

If your course is in good shape at the end of May, (and it should be) make a resolution to keep it that way for the next 100 days. Don't try, at this late date, for any "improvements"—save them till after the 8th of September—the end of the 100 days. The nights are longer and cooler and you will have made it through another season.

If I have stimulated your thinking or struck a nerve, I would be happy to hear from you. Do not write and expect an answer between June first and September the eighth!!

With acknowledgements to "Golf Superintendent"



ESTABLISHED Tradition

See us on Stand No. 1, Avenue F, at the International Sportsground, Machinery and Equipment Exhibition, Mootspur Park, Sept. 15, 16, 17.

is important to our highly skilled team of maintenance and service engineers. Immediate delivery of spare parts — from the largest stock of spares in the trade. An immediate service exchange assembly (engines, cutting cylinders, magnetos, etc.). Reliable maintenance service to keep your equipment in top working order. Our Service Engineers and Demonstrators are available at any time. H.P. facilities available.

NEW EQUIPMENT ALWAYS IN STOCK

Distributors and Authorised Repair Agents to Ransomes, Sims and Jefferies. Official London Area Distributors for

Ransomes
specialist machines

HONDA

Tractors,
Cultivators,
Generators.

Main Agents and Distributors for
Clinton and Briggs & Stratton engines

Officially Appointed Service Depot for
VILLIERS & J.A.P.
Industrial and Agricultural Engines.

RELF AND KENDALL

406 BRIGHTON ROAD, SOUTH CROYDON, SURREY. CRO 0578
11 STATION ROAD, NEW BARNET, BARNET 8228



Member of the British
Golf Greenkeepers'
Association

Member of the National
Association of
Groundsmen

Contractors to : Municipal Authorities, Sports Clubs, Golf Clubs, Reconditioning and Maintenance of all grass cutting equipment.

18 HOLES WITH HAWTREE

No. 12—THE HIGH VELD

by FRED HAWTREE

It is rather more fashionable to write about South Africa than from South Africa just now but the Horton victory at Royal Durban gives a certain excuse—"The first foreigner to win the South African Open" as the *Eastern Province Herald* put it. It is also not uncommon for golfing journalists covering tournaments abroad in winter to slip in a few words about the sunshine which is roasting them with the hope that the snow back home is not too deep. If I fall into the trap it need cause no resentment because spring should be in the air by the time this 12th hole is played and I shall have been home a month or more.

Summer in Johannesburg is the green time; in winter, frosts turn the golf courses a light brown and the game reminds one of early prints of golf on the ice. Putts skid across the greens and the ball runs nearly as far as it carries from the tee.

Contouring of green surfaces is therefore very subtle—so subtle, in fact, that it is often hardly visible. The type of undulation which caused alarm on British seaside greens before watering became general, would cause mayhem here. The local *Cynodon dactylon* does not like water when it is dormant and in any event this would not keep it green when temperatures fall. By the same token cross slopes on fairways need to be restrained and calculable.

These limitations have in no way inhibited design generally. On the contrary, the standard of the layouts I have seen is uniformly high. C. H. Alison the English golf architect no doubt helped to set this standard with Glendower, Germiston, and Pretoria West End. He later collaborated with A. F. Tompsett who was responsible for Kyalami amongst many others. Bob Grimsdell, another South African golf architect recently completed the River Club, with some very fine holes in awkward country

and now collaborates with Brian Wilkes. Both Tompsett and Grimsdell were contemporaries of Sid Brews who came out here from Minchinhampton in Gloucestershire. All three did a great deal for South African golf in other ways besides designing courses.

The modelling of greens and bunkers on these courses is a delight and the uses of trees and water both in play and as decor often out-Trents the Jones's. Length naturally, gets considerable emphasis (where doesn't it?) because at 6,000 ft. the ball flies much farther in the thin air. All the 200 yard posts are at 225 yards and Mr Gary Player is even now advising a new Rand Mines development on a golf course which will top 8,000 yards. Serve him right if he has to play on it!

Short holes are proportionately longer short par 4's of, say, 340 yards are not liked because they are driveable. "Sky-line" greens where the base of the flagstick is not visible also gets low marks though it is hard to see how they can always be avoided.

The grasses used are mostly indigenous strains of *Cynodon* in Florida being popular for greens and Cape Royal on fairways. A local "kweek" is also generally in attendance and may be developed instead of commercial strains while the aggressive kikuyu will send its tentacles into everything unless kept at bay.

When the frosts come, the season's growth on the greens has left a brown fibrous mat which serves to support winter play until just before spring when all greens are scarified down to bare earth. The members seem to tolerate this for three or four weeks when all becomes green again.

Labour for upkeep is plentiful and possibly over employed. At one course during the scarification process I counted 24 native workers round one