



NEWS LETTER

*"Little minds remain little through failure
to see and use big things."*

MAY

1934

This NEWSLETTER is published monthly by the Greenkeepers Club of New England, and sent free to its members and their Greens' Chairmen. Subscription price ten cents a copy, or a dollar a year.

GUY C. WEST Editor
312 Mt. Pleasant St., Fall River, Mass.

HOWARD D. FARRANT Business Mgr.
132 Russett Rd., West Roxbury, Mass.

May, 1934

Vol. 6, No. 5

SPEAKING OF SEED

by Mrs. E. E. Pattison, Pres.,
International Seed Service.

The biggest thing on the horizon is the invitation to bid put out by the Federal Surplus Relief Corporation in order to relieve the distress of the holders of Kentucky Bluegrass and Redtop to attempt to control surpluses so that future markets will be stabilized and last but not least to in some way exercise control so as to eliminate from the market the poor, off-grade, low and weak germinating material of previous years, more especially the Kentucky Bluegrass of the 1931 crop.

While I personally don't approve of the way in which the problem is being handled, yet I do see that there is bound to be some good result.

The amount of money the government is spending on this particular bid is \$2,000,000. Approximately \$900,000. of this amount goes into Redtop.

One of the results of this activity of course is going to be increased price for the ultimate consumer.

Another bit of news that certainly is interesting to greenkeepers is the shortage of the 1934 New Zealand fescue, Chewings fescue crop. The crop is not only short but a good deal of the yield is lighter weight than usual. I have always preached buying Chewings fescue not only on the purity and germination but on the bushel weight but so far as I can see, my preaching has done little or no good.

Short crop news also comes from Copenhagen where the acreage of *Poa trivialis* has been so seriously reduced on account of low prices.

While lawn grass is not directly in your line of work, yet it affects practically every member of your club and I think that you greenkeepers could extend your field of influence to the benefit of the club members. I have a little delicacy in discussing this with you because some of your advertisers would probably object to any activity along these lines but if you will take the last Massachusetts Bulletin, No. 72, Seed Inspection, and analyze the reports on the mixtures given therein, you are bound to feel that something ought to be done for those at least close to you.

Perhaps you would be interested in what I recently said on lawn grass to one of the members of the United States House of Representatives and for this reason I am appending a copy of this letter.

COPY

May 3, 1934

Honorable Claude Parsons
U. S. Representative from Illinois
House Office Building
Washington, D. C.

My dear Mr. Parsons:—

In talking to Mr. C. H. James of the Egyptian Seed Growers Exchange, Flora, Illinois, regarding Redtop and Kentucky Bluegrass seed, I had the privilege of giving him a synopsis of our work in the lawn grass field.

The lawn grass business, especially in the East, has been more or less of a "racket" which has prevented the use of more Kentucky Bluegrass and Redtop seed. I am daring enough to say that if the proper amount of Kentucky Bluegrass and Redtop had been used in the lawn grass mixtures over the last five years, there would now be no burdensome surpluses and the prices could be such as to show the growers a legitimate profit.

Almost single handed we have been fighting this racket for years. As an evidence of our battle, I am sending

you a reprint of an article by myself (somewhat deleted by the editor) which appeared in the Seed World. As another evidence I refer you to the case now in the hands of the Federal Trade Commission placed there by ourselves.

I am advised that no new legislation is necessary to stop this racket. All that is necessary is for the government (The Federal Trade Commission could do it) to define what is a lawn grass mixture and to prosecute those dealers who engage in interstate commerce and who mark the most horrible mixtures "Lawn Grass Seed."

With few exceptions most of this stuff is not only incorrectly labeled but the printing on the packages as well as the literature and sales effort is a deliberate attempt to deceive.

The State seed laws do not protect the ultimate consumer and it would be years before there could be state Legislation which would do so.

As an illustration as to the possible amount of Kentucky Bluegrass and Redtop seed which could have been used during the last five years, permit us to set down some very conservative figures.

The estimates for mixtures used for lawn and sport purposes run from fifty to one hundred million pounds per year. Taking an average of seventy-five million, our survey leads to the statement that at least fifty percent of these mixtures contain at least fifty percent of filler. Some of the fillers used are chaff, bluegrass glumes and pasture grasses such as timothy, meadow fescue and rye grass. (Note—Rye grass should not be termed a filler for lawn mixtures used south of the Potomac River or north of this line when the amount is not in excess of fifteen percent.)

On the above figures one arrives at 18,750,000 pounds of filler per year. For the sake of giving all the benefit of doubt let us greatly discount this figure. Let us take the ultra-conservative figure of 10,000,000 pounds of filler per year. At this rate over a five year period if these fillers had not been

used, we would have consumed at least fifty million pounds of good Kentucky Bluegrass and Redtop seed.

Believing that the growers of these grass seeds want a "cure" instead of a remedy, I urge you and the other congressmen interested to do your utmost in curing a racket that affects not only the producers of these seeds but every conscientious dealer and every home owner in the United States. For this reason I think every congressman should be acquainted with this racket and urged to do his utmost to eliminate it. It is impossible for me to acquaint them but I hope you will see the necessity of doing so.

I have been in the seed industry for over twenty five years having started at the government's laboratory in Washington and I have seen this racket take millions of dollars annually from the American public. When Mr. Homeowner buys this junk he not only pays his good money for poor seed but he loses a great deal more from labor and other materials that are wasted because of it.

If I can be of any help in curing this evil, I am at your command.

Sincerely,

International Seed Service, Inc.

President,

E. E. PATTISON.

EEP:EM

This busy season finds your Editor busy as well, and we most earnestly ask for more and better cooperation in sending in articles and items of interest for the future issues. We also ask you to cooperate by sending us changes in green chairmen, new addresses, etc. If you have not already sent your questionnaire on "Winter kill" to the chairman of the entertainment committee, do so at once. We hope to have some helpful information from these questionnaires, and will present it in the NEWSLETTER later.

TABLE OF THE CHARACTERISTICS OF SEEDS
(from Rhode Island Short Course)

Grasses	Ideal sample Seeds per lb.	Good Purity	Average Germination	Days to Germinate
Pacey's Ryegrass	350,000	95	80	6
Fescue (Chewing's Red)	700,000	94	50	10
Fescue (Sheep's)	680,000	94	80	10
Kentucky blue grass	2,000,000	85	50	14
Rough-stalked meadow	2,500,000	85		
Redtop	5,000,000	96	85	7
Colonial bent	6,000,000	90-95	85	10
Type A (R.I., P.E.I., N.Z.)	6,000,000	90-95	85	10
Type B (Astoria)	6,000,000	95	85	10
Type C (Oregon)	6,000,000	95	85	10
Colonial velvet mixtures	7,000,000	70	85	10
Velvet bent	10,000,000	90	85	8
Seaside Creeping bent	6,000,000	95	85	10
Creeping bent (seed)	6,000,000			

MAY MEETING

The May meeting was held at the Weston Country Club, Weston, Mass. on May 7th. In the morning there was a demonstration of the new Tillavator, sold by the New England Toro Co., also demonstrations of the Buel Perforator hitched to a Worthington Tractor.

The results of the 18 hole medal handicap tournament held in the afternoon are as follows:

Class A:

- 1st net, M. O'Grady—89-73.
2nd net, C. Sowerby—87-74.
3rd net, T. Mattus—95-75.
4th net, W. Peckham—90-77.

Class B:

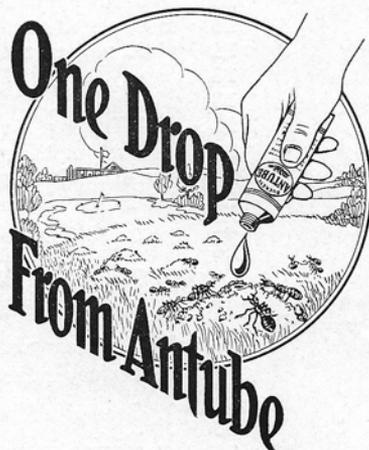
- 1st net, C. Treat—101-71.
2nd net, J. Latvis—100-72.

Dr. Howard Sprague of the N. J. Agri. Exp. Station has called our attention to a typographical error in the report in the April issue of his talk at the Braeburn meeting. The statement which read "Sulphate of ammonia is O. K. on soils excessively acid" should have read "Sulphate of ammonia is O. K. on soils, unless excessively acid." We are pleased to note this error, and correct it.

GREENKEEPERS' HANDICAP LIST

(Revised June 1, 1934)
Class A (1 - 24)

Cassidy, Philip	24
Cappello, E.	23
Clark, A.	24
Clinton, John	15
Counsell, John	14
Darling, H. C.	22
Farrant, H.	23
Fahey, T.	24
Fitzpatrick, John	13
Flood, V.	18
Granger, R. T.	0
Howe, W.	8
Hayden, P.	22
Hannon, S. F.	24
McBride, W.	21
McCormick, J.	14
McDonough, M.	21
Maschiochi, E.	4
Moshier, H.	24
Macbey, P.	16
Mattus, T.	16
O'Grady, M.	15
Ohlson, Alec.	8
Ohlson, Ed.	24
Oldfield, J.	14
Peckham, W.	12



*Wipes Out Ant Hill in 24 Hours! No Cans, No Bottles,
No Trouble! It's a Knockout!*

Introductory Special Offer

TWELVE \$ **9²⁵**
Double Size **ANTUBES** *6000*
500 Hill **ANTUBES** *Knockout*
Drops

If not Satisfied with results in 30 days, send back 11 ANTUBES and owe us nothing

Get in on this now - because you know nothing has come forward yet to really solve that pesky ANT problem. This looks like it has arrived.

For Sale By

NEW ENGLAND TORO CO.

1121 WASHINGTON STREET

WEST NEWTON, MASS.



Pettizoni, G.	23
Phinney, E.	15
Sowerby, C.	12
Stephenson, E.	18
Swanson, T.	13
Sullivan, J.	22
Treat, Carl	24
Volmer, G.	23
West, G.	20
Wendall, A.	21
Wendell, O.	24

Class B

Anderson, A. E.	25
Braio, D.	28
Burnett, M.	38
Cottelle, H.	38
Darling, J. W.	28
Durkin, H. C.	32
Elder, R.	28
Fuller, E.	38
Fontaine, A.	30
Greene, M.	26
Galvin, T.	26
Hall, H.	38
Hansen, Ed.	28
Holden, J.	26
Johnson, J.	38
Latvis, J.	26
McDonough, J.	26
Murray, T.	28
O'Keefe, C.	38
O'Leary, T.	30
O'Malley, J.	30
Parker, C.	38
Polhamus, E.	38
Pyle, E.	33
Partridge, W.	30
Robinson, R.	28
Stott, L.	33
Tamio, P.	26
Wanberg, P.	30
Wilson, F.	28

Paul Hayden, Chairman
Golf Com.

WINTER KILL QUESTIONNAIRE

The following is a partial report upon the answers received to date from the questionnaires sent all members. All

who have not sent in reports are urged to send them at once, so that a complete report may be made.

What About Winter Kill?

Following is a questionnaire being sent to members of the Greenskeepers Club for the purpose of assembling useful information to the members.

QUESTIONNAIRE

- Q. Name and address of golf club.
A. Nine courses reported.
- Q. Kind of grass in greens.
A. Mainly mixed bents plus poa annua.
- Q. Seeded or stolons?
A. Both.
- Q. How many greens had winter kill?—
Heavy or light damage?
A. Ranged from 10% to 100% and many reported heavy damage.
- Q. What date did it occur?
A. Last week in March and first of April.
- Q. What strains of grass, if any, were not affected by winter kill?
A. In every case where velvet bent was reported it was not winter killed.
- Q. What parts of the greens were damaged? (High, low, or shaded)
A. Usually in low and shaded parts.
- Q. What do you consider the actual cause of winter kill on your greens?
A. Poor drainage, too much snow melting and couldn't get away fast enough. Icy water being held under surface by frost underneath practically freezing out roots. Ice under snow earlier may have started more trouble than realized.
- Q. What are you doing to rectify the damage now and what plans are you making to prevent it during another cold winter?
A. Raking, spiking, seeding and top dressing.

CHAMPIONS

against

BROWN PATCH**Semesan****Nu-Green**

Most practical and effective fungicides yet developed.

Semesan and Nu-Green will prevent the development of brown patch as long as any known fungicide. Also, they quickly control the brown patch fungi even under the most severe conditions and aid in restoring the diseased turf to normal health.

Be Prepared for Brown Patch

Greenkeepers, knowing how quickly disease can damage turf, should keep an ample supply of Semesan or Nu-Green on hand for prevention and control.

Both Semesan and Nu-Green can be shipped immediately from Boston warehouse. Distributed by:

BRECK'S

85 STATE STREET, BOSTON

*Grass Seed Division***F. H. Woodruff & Sons**

Main Office

Milford, Connecticut

*The Home of***WOODCO Brand SEEDS**

Highest Purity

Maximum Viability

Minimum Weed Content

Write for information on our
FREE Consultation Service
and visit our PROVING GROUNDS
for Turf Grasses at Milford.



The Sign of Good Seeds

NEW ENGLAND GROWN

Winter-hardy, Acclimated

BENT SEED

for

New England Golf Courses

Direct from the farms of

A. N. PECKHAM

KINGSTON, R. I.

Telephone PARKway 3467

N. HOWDEN

1131 Washington Street

West Newton, Mass.

HOWDEN'S SEEDS

Recommend themselves and depend not on costly and extravagant advertising, but on public appreciation of their unvarying excellence of quality and on the recommendation by one friend to another.

Such recommendations are greatly
esteemed by

N. HOWDEN

Plans to prevent—Improve drainage, shovel off snow earlier, putting up snow fences, putting in more resistant grass.

Q. Any severe damage from snow mold?

A. Yes and in many cases heavier than seen before.

Q. What are you doing about it?

A. Raking and seeding where bad.

Q. How does the play at your course thus far this season compare to 1933 and 1932? Make general remarks.

A. One course 40% over 1933.
Four course 50% over 1933.
One course 75% over 1933.
One too early to tell and two not reported.

Homer C. Darling.

DESCRIPTION OF FERTILIZER MATERIALS

(R. I. Short Course)

Nitrate of soda is a quick-acting water soluble nitrogen carrier. It is easily leached from the soil. Continuous use tends to make the soil less acid.

Nitrate of potash is very similar to nitrate of soda and in addition furnishes potash. Nitrate of lime furnishes calcium in addition to nitrogen. Calurea is made by combining urea and calcium nitrate.

Sulfate of ammonia is the most widely used of the nitrogenous fertilizers on lawns and golf courses. It contains about 20 per cent of nitrogen in the ammonia form. The continued use of sulfate of ammonio will make a soil more acid. If not carried too far this is just what is wanted on bent grass lawns or other turf. Such acidity tends to discourage certain weeds and clover.

Cal-nitro is made by combining ammonium nitrate and carbonate of lime. About half of N is in nitrate form and half in ammonia form.

Ammono-phos is a synthetic material containing both nitrogen and phosphoric acid. It is similar to sulfate of ammonia in its effect upon grass although it produces soil acidity more slowly.

Urea is a highly concentrated nitrogen fertilizer material containing about 45 per cent nitrogen. It should be used with extreme care as its high concentration is likely to cause fertilizer burn if not applied very sparingly.

Cottonseed meal is an organic nitrogen carrier. The content of nitrogen is usually about 6 per cent and it carries approximately 2 per cent each of phosphoric acid and potash. It is a slowly acting fertilizer and can be used without danger of "burning" the grass. Linseed meal and castor pomace are similar materials.

Milorganite is another organic nitrogen carrier. It is a little lower in nitrogen content than cottonseed meal and contains only a very small amount of potash. It has the same advantages of an organic fertilizer that were mentioned for cottonseed meal.

Other organic fertilizer materials include dried blood, tankage, hoof meal, and guano. These are all more slowly available than the inorganic materials but have the advantage of lasting longer. They are more expensive, usually costing about three times as much for a given amount of nitrogen in the material. They are used in making up part of the nitrogen in the better fertilizer mixtures.

We find only a few materials to choose from in selecting our carriers of phosphoric acid. The more commonly used are superphosphate and bone meal. Superphosphate may be obtained in a number of different grades ranging from 16 to 45 per cent P₂O₅. Superphosphate tends to reduce the acidity of a soil when used continuously. Colloidal phosphate and floats consist of finely ground raw rock phosphate and are too slowly available for general use. Precipitated bone furnishes phosphoric acid in a highly available form.

Bone meal, being an organic fertilizer, has some of the advantages of the organic nitrogen carriers already men-

THE SUPER-DETROIT

(Wheel Type)



A twist of the wrist guides it.

If It's a Power Lawn Mower Why Not a Moto - Mower?

The machines that have taken the
hardship out of labor and
made it a joy.

Super-Detroit 27 and 63 in. cut
Standard Model 24 in. cut
City Model 21 in. cut
Junior Model 19 in. cut

Also Lawn Master 25 in. cut

Catalog and Full Information
on Request.

MOTO - MOWER COMPANY**FACTORY SALES & SERVICE**

165 Brighton Ave., Allston, Mass.—Telephone Stadium 0199

PFIZER MERCURIAL MIXTURE

$\frac{2}{3}$ Calomel— $\frac{1}{3}$ Corrosive Sublimate
for

BROWN PATCH

CORROSIVE SUBLIMATE

for
ANGLE WORMS

CALOMEL — Fine Powder

Made and Marketed by

CHAS. PFIZER & CO., Inc.
MANUFACTURING CHEMISTS

81 Maiden Lane, New York, N. Y.

tioned. It is a slow acting fertilizer but a safe one to use.

The two commonly used potash carriers are sulfate and muriate of potash. There is little to choose between these two forms for grass fertilization purposes. Each carries about 48 per cent of K₂O.

Fertilizer mixtures for lawns.

In general a grass fertilizer mixture should be one rather high in nitrogen since this is the element that gives the greatest response when applied to grass. Many very excellent mixtures for lawns are found on our markets today. Some of the analyses found include 10-6-4, 8-6-6, 12-4-4 and a number of others. The ready mixed lawn fertilizers have the advantage that they are ready to use and come in small convenient packages suitable for the average small home lawn.

For the home owner who has a larger lawn and wishes to do his own mixing so that he will know just what he is obtaining in his fertilizing materials a few suggestive mixtures will be mentioned.

Sulfate of ammonia	5 lbs.
Cottonseed meal or milorganite	10 lbs.
Superphosphate	5 lbs.
Muriate of potash	2 lbs.
	<hr/>
	22 lbs.

This will make enough fertilizer for 1000 sq. ft. of lawn. The analysis will be approximately 8-6-6 Half of the nitrogen is obtained from a quick-acting inorganic form and a half from the more slowly available organic material.

Ammo-phos B	5 lbs.
Cottonseed meal	20 lbs.
Muriate of potash	1 lb.
	<hr/>
	26 lbs.

This will make a mixture of approximately 10-6-4 and very similar to the first one. Other similar mixtures might be made up in this way.

A complete fertilizer of this kind is the one suggested for the spring application. For the later summer topdress-

ings about 2 pounds per 1000 sq. ft. of lawn of sulfate of ammonia only is suggested. This should be thoroughly watered in to prevent injury to the grass.

GREENKEEPERS FIELD DAY AT R. I. STATE COLLEGE

The fifth annual Greenkeepers' Field Day was held at the Rhode Island State College on May 21st. An inspection trip to the turf experiment plats was held in the morning, conducted by Dr. T. E. Odland and Prof. H. F. A. North.

The experiments being conducted are many and varied. The old acid vs. alkaline plots are still in existence, and still a source of much interest. Various other experiments on grasses at lawn length are weed eradication, lead arsenate, iron sulphate, aluminum sulphate. The plats in the test of varieties and strains of grasses for greens have been revised, and now contain some new strains. These plats are also used to determine whether a grass comes true from seed, and each plot is used as a brwn-patch experiment, half being treated, half untreated. Sections B and C, seed production tests, are also of interest.

A test of fertilizer ratios on three popular bent grasses is a newer experiment. Here comparisons between the effects of nitrogen, phosphorus, and potash may be made, as the ratios of fertilizers used vary as 20-6-4, 10-6-4, 10-6-8, 10-6-0, 5-6-4, 10-12-4, 10-0-4, 10-0-0. These are tried in triplicate on plats of Washington creeping bent, R. I. Colonial bent, and No. 14276 Velvet bent.

Another new experiment seeks to determine the effect of ammonia, nitrate, and organic nitrogen on popular kinds of bent grass.

All these experiments are of interest and it should be the goal of every greenkeeper within reach, to inspect and profit from them.

Following lunch, the principal speaker of the conference was Dr. John Monteith of the Green Section. Dr. Monteith said in part, speaking on the general subject "Economic Maintenance of Golf Courses":

Golf is picking up, and cuts maybe something of the past, but it would be best to investigate cuts and see what good there is for the future. Many golfers have in the past been turned from the game by the luxuries thought necessary. Play is increasing from coast to coast, there are more members and members are playing more. The encouraging thing about this depression has been that so many courses have survived.

There will be more leisure in the future; all types of recreation will be stimulated, golf included. Golf will be more economical; more people are interested and know that they can get golf at a reasonable figure. This throws the problem up to the greenkeeper.

Golf that demands economical dues will not demand millionaire course standards.

Not all extravagance has been due to the greenkeeper, probably least to him. Greenkeeper should know and suggest the changes to be made. Traps can often be raked less often, or the size of greens cut down, as economy measures. Many golf greens can not stand much cutting down in size, while others with no character near the outer edges may be.

Fairways with fertilization toward the outer edges as good as in the center gives a condition where the man who hits a ball straight down the center has no better a lie than the man who just stays on the fairway, and often the man six inches off the fairway has the worst lie on the course. This may be a mistaken greenkeeping practice.

Watering is also done along these lines. A course that watered only in landing areas frequently and other areas seldom, gave a definite target for all shots, shots off line a little had poorer turf, a great saving in watering costs and also a good result.

There are still too many courses buying on same old idea that the most expensive materials are the best; this is a fallacy that has been exploded for years.

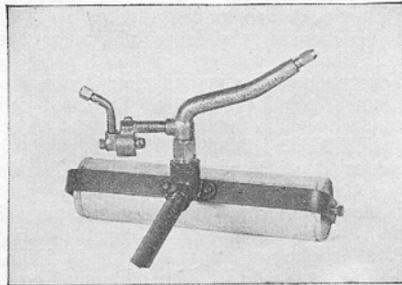
The greenkeeper is often not close enough to experiment station officials. The narrow viewpoint is still held by some greenkeepers that experiments on turf plots are valueless because conditions are different than on golf courses. The greenkeeper must be careful these days in turning down experimentation as worthless.

Experimentation on golf courses by greenkeepers has contributed little and cost plenty. Farmers have learned the value of experiment stations; golf courses are turning toward them. The day of secrets is over.

BUCKNER Watering Equipment

We are sure that Buckner Sprinklers will appeal to the Greenskeepers of New England because of their very obvious qualities. Indeed, they speak for themselves, with their sturdy construction, simple design and dependable performance. Their unusual efficiency has been proven in the arid climate of California and naturally in the milder conditions in the East, Buckner is incomparably finest.

One of the most popular models is illustrated below, namely, the California Rainer, No. 6A Sub Junior. It is priced very modestly at \$10.00 on roller stand. Excellent for small areas and for pressures of 25 to 35 pounds, and for $\frac{3}{4}$ or 1 inch hose.



We shall be pleased to mail you a full descriptive catalogue on the above sprinklers upon request. Surely, BUCKNER SPRINKLERS merit a try. We're sure you'll like them.

HAN. 1454

HOVEY & COMPANY
150 Milk Street Boston, Mass.

Golfers will demand better turf at less cost; result will be that the greenkeeper will be an expert in turf culture, not a mere foreman. The greenkeeper must keep abreast of new developments, must use every nickel to advantage.

The trend of the greenkeepers toward recognizing the necessity of continuing the green Section is a good sign. The N. A. G. A. at its inception was decidedly antagonistic toward the Green Section, now it expresses regrets that the work of the Green Section had to be curtailed, and is friendly.

The American temperament is such that golfers will never be satisfied. Routine greenkeeping is going on the scrapheap. Experimental work is something that the greenkeeper is not equipped to do. It is a disgrace to see some of our big courses at the mercy of some green chairmen, trying out something to satisfy their curiosity. A new chairman often has to "prove" his theories, even though they have been disproved many times before.

The Green Section does not use Federal funds for its main activities, altho it is tied up with the Bureau of Plant Industry. Membership in the U. S. G. A. has fallen off so that drastic cuts are necessary. Often people do not realize that dropping membership in the U. S. G. A. cuts out support of the Green Section. Many projects had to be cut out entirely, such as the work being done on weed control.

In Great Britain, golf clubs contribute through Golf Unions. The Budget there last year was twice the budget of the Green Section, and their problems are about as varied as here in New England, while the Green Section must deal with problems all over the United States.

There is small support for State Institutions, not because of lack of interest at the stations.

FIELD DAY NOTES

Interest was revived in the Rhode Island Greenkeepers Association, and plans for the coming season discussed at the annual meeting. Officers elected for the coming year are Everett Pyle, Pres.; Howard Hall, Vice Pres.; Prof. North, Secretary; and Martin Greene, Treasurer.

The land occupied by the experimental plots, heretofore leased, has recently been acquired by the College. Incidentally, the Rhode Island State College has just received a Federal grant of over a million for changes and new buildings.

A new experiment in brown-patch control is planned for this season on Colonial and Astoria bents, and a sod web worm experiment on Kernwood.

A large stand of 14276 velvet, also one of Kernwood, have been planted with the aim of getting some Rhode Island growers interested in growing these strains.

Webworms put in an appearance this past week at turf plots.

A bulletin is in preparation covering the work that has been done on the turf plots.

Dr. Monteith told of remarking at a golf meeting that golf would do a great deal to help the farmers of the country, as after playing eighteen holes of golf, a man was in the right condition to help reduce the surplus of beef, grain, etc. Herb Graffis of GOLFDOM added, "Yes, especially the corn and rye".

Many greenkeepers and others have known during the past year of a new fungus which Dr. L. E. Erwin of Rhode Island State College has been trying to identify. Because this is of interest we are quoting a part of a rather technical article by Dr. Erwin from the Forty-sixth annual report of the R. I. State College Experiment Station:

A GRASS DESTROYING FUNGUS NEW TO AMERICA

During the spring and fall of 1932 and 1933 a disease was noted regularly on certain Massachusetts and Rhode Island golf courses and polo fields. It has been found to attack bluegrass and most species of bent grasses.

This disease proved to be a fungus (*Corticium fuciforme* (Berk.) Wakef.) It consists of an effused glutinous layer, composed of filaments with gelatinous walls, attached to the epidermis, and from this arise tufts which stand out from the stem and leaves of the grass. These tufts are a bright coral pink, are variously branched and sometimes attain a height of fully a quarter of an inch. They consist of a compact mass of filaments, collectively colored but individually almost hyaline, running lengthwise, septate and branched. The tufts are typically acute at the apex and they gradually taper away into a few threads. The effused mucous base may spread out and glue different parts of the grass together or the top of the tuft may expand when it comes in con-

Don't Starve the Grass
FERTILIZE and ECONOMIZE

with
LAN - FER

(8-6-2)

(6-8-2)

Special Golf Course
FERTILIZER

also

Super-Phosphate Bone Meal
 Castor Pomace Chemicals

and

ARSENATE OF LEAD

write for prices.

M. F. LANSILL

Fertilizer Specialist
86 CHARLES RIVER PKY.
NEWTON, MASS.
 Newton North 0992-M

CYLINDRICAL GRINDING

Have your reels cylindrical ground:
 They will

Wear Longer Last Longer

Have Fewer Nicks

Need Fewer Adjustments

Prices:

Fairway units completely overhauled
 and painted \$10.00
(cylindrical ground)

30" Reel and Bottom Knife
 together \$4.00

We have an almost new Roseman
 Tractor attachment for sale at
 a very low price.

*We specialize in mower service,
 and solicit your patronage.*

**POWER LAWN MOWER
 SERVICE COMPANY**

15 Tenney Court, Somerville, Mass.
 Somerset 0504-W

Ideal Power Greensmower

Two Sizes—18" Cut, 21" Cut

The Ideal Power Greensmower which is built in two sizes, 18 inch and 21 inch, has a number of exclusive features that account for its fast growing popularity. Lightest in weight and easiest to operate. Positively will not pack your greens. Does a perfect job of cutting. Due to unique application of power we eliminate all possibility of roller burning or tearing turf. Patented clutch control makes for easy operation.

Powered with 4-cycle engine that is exceptionally quiet and vibrationless and which provides surplus power for the very heaviest cutting.

RUBBER TIRED Transport Cart is furnished as standard equipment. Power driven cart, extra. Brush attachment also provided at slight extra cost.

Authorized Ideal Sales and Service

IDEAL MOWER SALES and SERVICE

111 Cypress Street, Brookline, Mass.

tact with another blade of grass, thus starting a fresh fungal growth.

As far as the author has been able to ascertain this is the first time this fungus has been reported from North America. From Australia and Great Britain have come descriptions of a fungus disease which seems to be identical with the one found locally.

The grass destroying fungus, *Corticium fuciforme* (Berk.) Wakef. (Syn. *Isaria fuciformis* Berk.; *Isaria graminiperda* Berk. and Muell.; *Hypochnus fuciformis* (Berk.) McAlp.; *Epithele fuciformis* V. Hohn. et Syd.) was first collected in 1854 at Mount Gambier, South Australia, but was not described or named until 1873, when Berkeley in "Australian Fungi" gave it the name *Isaria fuciformis*. In 1873 a specimen from Victoria was named by Berkeley *Isaria graminiperda* Berk. and Muell. The first material Berkeley described was pallid, but the second was coral pink; probably during the period from 1854 to 1873 the first specimen had become blanched. In many cases there does not seem to be any real difference between *Isaria fuciformis* and *Isaria graminiperda*, and M. C. Cooke in his handbook of Australian Fungi, practically combines the two. A. R. Wallis reported *Isaria graminiperda* on ryegrass from Victoria in 1873.

In Great Britain the fungus was first found in the South of England in 1880, and was recorded as *Isaria fuciformis* Berk. by M. C. Cooke in Grevillea. Worthington G. Smith wrote about it in the Gardeners' Chronicle in 1882 and called it *Isaria fuciformis*. He described it in his book "Diseases of Field and Garden Crops" published in 1884. It was found in Ireland in 1883 by Greenwood Pim on ensilage.

In 1899 and 1900 McAlpine gave an account of experiments on the eradication of the fungus under the name of *Isaria graminiperda* in the Annual Reports for the Department of Agriculture of Victoria. In 1906 McAlpine published an article in *Annales Mycologici*, entitled "A New Hymenomycete—the so-called *Isaria fuciformis* Berk." In this article he outlined the history of the fungus from 1854 onwards. He discovered that it had an effused hymenium with basidia and basidiospores and regarded it as being near *Corticium*. He thought, however it came nearer the genus *Hypochnus* and he therefore re-named it *Hypochnus fuciformis* (Berk.) McAlp. giving *Isaria fuciformis* Berk.

and *Isaria graminiperda* Berk. and Muell. as synonymous.

Following this article of McAlpine's there is a note by H. and P. Sydow pointing out that, according to Von Hohnel, *Hypochnus* is not a valid genus. The fungus concerned, however, belongs to Patouillard's sub-section *Epithele* of *Corticium*, and since this sub-section has now (1906) been raised to generic rank by Von Hohnel and Litschauer, the Sydows say that the fungus ought to be called *Epithele fuciformes* (Berk.) V. Hohn. et Syd.

After the Sydows' article no reference to the fungus appears in the literature for a decade. Previous articles which throw some light on the problem are listed in the accompanying bibliography.

In 1916 Miss Wakefield in her "Notes on British Thelephoraceae" decided that the fungus should preferably be called *Corticium fuciforme* (Berk.) Wakef. For the present we are abiding by Miss Wakefield's combination. While it is not a typical *Corticium* it is at the same time not more closely related to *Epithele*.

PRETTY NEAR NATURALIZED

Our German barber was objugating the thrift of some of his re-patriated countrymen. "Dey spend nudding here und go back to Shjermany rich. Von of dose guys neffer bought a cloes alla nine years he stay in dis goundry. He bick oud sox und bants und sweaters und B. V. D.'s from garbage und ash cans und dot vey liff in udder peoples' cloes. Den he dake den dousant dollars back home and zettle down. Helluva sport, I sez. Dake all he can get from Uncle Sam, safe it all, und den run oud on 'im cold. It's guys like him that's causin' this depression."

Nine years is enough it appears to absorb one highly popular conception of the Big Idea.

"Credit Where Credit Is Due."

"When in doubt say nothing."

"Publicity minus perfomance is waste."

WE DON'T STUTTER

when it comes to volume buying of quality seeds direct from leading shippers.

Wholesalers by trade and name, we step out of this role only in the solicitation of Golf Club buyers.

No need for you to hesitate, therefore, in wondering whether we are competent to serve you well and economically.

Our ability to know and buy good seeds is—the big thing behind—the Emerson name.

Don't go by price—go buy Emerson Seeds and close your eyes to indifferent seed quality that normally you would be up against.

THOMAS W. EMERSON CO.
BOSTON, MASS.

"New England's Largest Wholesale Seed House"

THESE IMPROVEMENTS ON FAIRWAY MOWER UNIT

Decrease Scalping—Cut Down Parts Wear—Make Knife Adjustment Easy

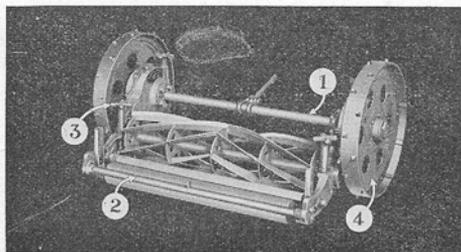
Axle (see No. 1) is larger, stronger. Back of the roller has been added a sturdy tie-rod (see No. 2). No twisting possible.

This new Worthington Fairway Unit scalps less than any other. We can prove it to you.

In addition to our usual quick-acting hand-shift for the gears (see No. 4), our new Unit is now equipped with one for the cutting knife (see No. 3). No fussing with wrenches. Just a turn of the hand-wheel. Self-locking in any position.

Offer on Scout Overgreen

We are still stubbornly contending and effectually proving, that our Overgreen Power Mower will pay for itself the first year, in savings. In fact, if the savings don't pay for it, you needn't. Write for full particulars.



None but the Worthington Unit is equipped with the herring bone reel blade. The alloy steel blade stays sharp longer. Lasts longer. Does not nick out.

Worthington
Mower
company

Main Office: Stroudsburg, Pa.



CHARLES RIVER COUNTRY CLUB
Newton Centre, Mass.

"The TORO Master 7 mows our 18 holes in
6½ hours."—R. T. Granger, Newport Country Club.

"The TORO Master 7 has cut our mowing time
in half."—F. H. Wilson, Jr.



FRANK H. WILSON, JR.
Greenkeeper.

Men Who Really Know Machinery - - - *BUY TORO*

Go around to any section and ask the most prominent Greenkeepers just what machinery to buy. They will answer "TORO".

There is a reason for this, because for fifteen years the TORO name has been associated with progress in high quality construction and courtesy in dealing with users.

If it's quality of construction—ease of operation—low upkeep expense—high speed mowing—long life equipment—localized service and parts station—and not the lowest initial investment you are looking for, then you will surely follow the judgment of experienced men, and your selection will be TORO.

Write for 1934 catalogue.

New England Toro Co.
1121 Washington Street
West Newton, Mass.

