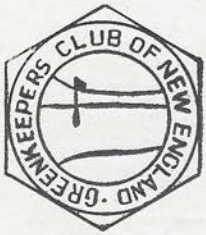

NEWS LETTER

INVESTIGATIONS REGARDING WEBWORMS

JUNE MEETING

GREENKEEPERS' FIELD DAY

ANNUAL LAWN DAY PROGRAM

GRASSES ON R. I. GOLF COURSES

OUTLINE FOR STUDY OF SEEDS

JUNE

1933

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.

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June, 1933 Vol. 5, No. 6

WHY WORRY?

There are only two reasons to worry,
Either you are successful or you are not successful.
If you are successful there is nothing to worry about,
If you are not successful there are only two things to worry about,
Your health is either good or bad.
If your health is good there is nothing to worry about,
If you are sick there are only two things to worry about.
You are going to get well or you are going to die.
If you are going to get well there is nothing to worry about.
If you are going to die there are only two things to worry about.
You are either going to Heaven or you are not going to Heaven.
If you are going to Heaven there is nothing to worry about.
If you are going to the other place, you will be so busy shaking hands with old friends,
You won't have time to worry.
SO, WHY WORRY?

—Anon.

INVESTIGATIONS REGARDING THE BLUEGRASS WEBWORMS IN TURF

by H. F. A. North and
G. A. Thompson, Jr.
(continued from last issue)

Preliminary Test of Another Trade Product

Another test was begun on October 10 and the data is given in table III. This test was placed on the plat of B. P. I. 14276 velvet bent planted in 1929. The plat lies between the Yorkshire and Kernwood plats used in the test described above. There were four subplats for each of three treatments "rotenone", "pyrethrum No. 1", and "arsenate of lead 2 pounds". Four subplats were left untreated as check plats. The rotenone is a trade extract of rotenone which is both a stomach and contact poison, not injurious to higher animals. An estimate was made on October 25 of the percent of area damaged. The last column of the table (III) gives the average damage for the 4 subplats.

(TABLE III)

The test indicates that some control was obtained with all materials tried and that arsenate of lead may be fully as effective as either rotenone or pyrethrum No. 1.

TABLE III.

Materials applied on October 10 for control of webworms on B. P. I. 14276 velvet bent and the results obtained in percent of area damaged as an average of four subplats.

Treatments	Average damage October 28
Check—no treatment	2.25
Rotenone—1½ pints per 111 gals. water per 1000 square feet. Cost—approximately the same as pyrethrum	.25
Pyrethrum No. 1—same as for rotenone	.50
Arsenate of lead—2 pounds in 20 gallons water per 1000 square feet	.00

The results of both experiments indicate that arsenate of lead 2 pounds was the most effective treatment for webworms under the conditions which prevailed during the past season. Since arsenate of lead is commonly used in the control of grubs, earthworms, and Mouse-ear Chickweed it could be applied as a spray for the control of webworms with little additional expense. Paris green was effective on the webworms but injured the turf severely. Rather high rankings among the insecticides were won by material A and pyrethrum No. 1 and somewhat less by pyrethrum No. 2. Arsenate of lead ½ pound and kerosene emulsion were least effective among the treatments.

Summary

Webworm damage in demonstration plats of velvet bent during 1930 and 1932 was rather serious. A test was begun in August 1932, of various promising insecticides. Two doses were applied on two varieties of velvet bent. The results indicate the following ranking as to effectiveness at the rates given per 1,000 square feet:

1. Arsenate of lead 2 pounds in 20 gallons of water sprayed into the turf. Pressure maintained at approximately 50 pounds.
2. Paris green, ½ pound, diluted and applied as No. 1.
3. Material A, brown patch and soil insecticide, one third pound in 20 gallons water as a spray.
4. Pyrethrum No. 1.—pyrethrum extract applied with a sprinkling can at the rate of 1½ pints in 111 gallons of water.
5. Pyrethrum No. 2—pyrethrum spray applied with a sprinkling can at the same rate as No. 4.
6. Arsenate of lead at ½ pound in 20 gallons of water as a spray.
7. No treatment or check plats.
8. Kerosene emulsion applied at the rate of 2-1/5 gallons of stock solution in 111 gallons of water and applied with a sprinkling can.

A similar test was begun on October 10 of rotenone, pyrethrum No. 1, and arsenate of lead 2 pounds for webworm control. In this test arsenate of lead 2 pounds was fully as effective as the other treatments.

JUNE MEETING

The June meeting was held at the Kittansett Club, Marion, Mass. on June 5th. There was a large attendance, with many guests, including several green chairmen, and many wives of members. The ladies made a tour of several large estates in Marion under escort of Mrs. Pierce.

An 18 hole medal tournament was held with the following results:

1st gross, E. Masciocchi—77.
1st net, E. Phinney—84-12-72.
2nd net, W. McBride—96-20-76.
3rd net, P. Wanberg—102-25-77.
4th net, M. McDonough—93-15-78.
5th net, P. Hayden—101-22-79.
6th net, H. Darling—99-20-79.
Guest prizes,
Gross, Tom Howe, 79.
Net, J. J. Fitzgerald, 83-9-74.

Our thanks to the Kittansett Club and "Mike" Pierce for a very enjoyable day!

We were pleased to see Mr. Frederick Hood in attendance. Our first memories of Kittansett in the early days of that club and in the early history of our club contain Mr. Hood as a vivid part of the picture.

Applications are still coming in for membership. Is your friend nearby a member? Meetings such as this are one reason for him to join.

We venture to say that even if some guests might come to a meeting with a desire to play golf uppermost, they will upon returning home have a better idea of the Greenkeepers Club, and part of its activities.

GREENKEEPERS OF RHODE ISLAND AND ADJOINING TERRITORY MEET AT KINGSTON, R. I.

The 4th Annual Greenkeepers' Field Day was held at the Rhode Island State College and Experiment Station on May 22nd. The day was ideal and about 80 greenkeepers and other turf enthusiasts were present.

After registration the greenkeepers visited the turf experiments at the Experiment Station under the guidance of T. E. Odland and H. F. A. North. The season has been favorable and the grass

plats were in good condition. Various fertilizer tests, variety tests, bent grass strains from different clubs, bent grass for seed production and many other experiments and tests are under way.

From the grass plats the way led to the College dining hall where 81 were served lunch. After luncheon the visitors were extended greetings from the College by President Raymond G. Bressler. Director Gilbert of the Experiment Station acted as Chairman of the meeting and introduced a number of the greenkeepers and others present.

The chief address of the day was made by Dr. John Monteith, Jr. of the Green Section, U. S. Golf Association. His topic was "Turf Diseases and Their Control."

Following the dinner and talks, the annual business meeting of the Rhode Island Greenkeepers' Club was held. The following officers were elected:

President ..... Chas. B. Mulaney
Meshanticut Golf Club

Vice President ..... Everett Pyle
Providence Municipal Links

Treasurer ..... Martin Greene
Wannamoisett Country Club

Secretary ..... Woodworth Bradley
Providence, R. I.

Directors

Lawrence Hay, V. DiLucio, Chas. Mullaney, John Yule, Wallace Peckham, Col. Milton and Harry Browing.

A number of firms were represented with various lines of equipment. Demonstrations of equipment occupied the time from 3 P. M. to well toward 6 o'clock. The exhibits included lawn and putting green mowers, sprinklers and sprinkler equipment, water pumps, seeds, fertilizers, and miscellaneous golf equipment.

At no other time during the year is there a more genuinely interested and enthusiastic gathering at the College than when the greenkeepers have their field day.

PROGRAM FOR ANNUAL LAWN DAY AT MASS. STATE COLLEGE

Tuesday, July 25

LAWN DAY

Room—Stockbridge Hall

10.00 A. M. "Become acquainted with lawn fertilizers".
J. L. Haddock—M.S.C.

11.00 A. M. "The fundamentals of turf growing".
L. S. Dickinson—M.S.C.

12.15 P. M. Luncheon.

1.45 P. M. "Turf grasses, their characteristics and adaptability".
Dr. T. E. Odland, Agronomist
R. I. State College

3.00 P. M. "Practical maintenance of turf".
W. E. Perkins, Supt.
Yale Univ. Ath. Fields

4.00 P. M. "Summarizing the day's discussions".
L. S. Dickinson—M.S.C.

Twenty minutes of each lecture period is to be used for general discussion and questions.

All who are interested in turf growing should plan to visit the exhibition in Room 20, in the basement of Stockbridge Hall.

GRASSES FOUND ON THE GOLF COURSES OF R. I. AND TYPES AND VARIETIES USED IN THE R. I. EXPERIMENTS

By Prof. H. F. A. North.

(From Lecture Given at Rhode Island Short Course.)

Rhode Island was the first among the states to experiment with lawn and golf turf and two bulletins have been published on the set of plats originally planted in 1905. A few of the oldest golf courses in R. I. have been mown from meadows and pastures. The variety of bent grasses on the greens and fairways of such courses indicates that creeping and velvet as well as Colonial bent were present when the course was established. Ordinarily it is thought that only Colonial bent or red top will volunteer in Rhode Island.

In the rough the grasses must be sparce and bunchy. Kentucky Blue is the worst grass for rough; Canada Blue, Colonial bent, red fescue, sheep fescue, poverty grass and weeds are found. Canada Blue Grass and Sheep's Fescue are good, but the others form too continuous and dense a turf. The poverty grasses of value include broome sedge and Danthonia spicata.

On the fairway the ball must be well up on the cut ends of the grass. One of the finest set of fairways in the state is practically pure red fescue. Other grasses nearly always found are Colonial bent, velvet bent, sheep fescue, and

Kentucky blue grass. Traces of many more grasses, white clover, and weeds make up the remainder. The very light covering of grass is the main objection to most of the fairways and as a rule the use of lime and high nitrogen fertilizer will correct this condition.

On the green and tee the grasses may be the same. Although the tee is often covered by a mixture of grasses the greens are fast becoming pure bent grasses. The bent grasses rank in importance on greens approximately as follows: Colonial bent, velvet bent, poa annua, creeping bent from stolons, and seaside bent. When greens were not so closely clipped the fescues were very important but it is doubtful whether fescues will long survive competition with bent grasses at a clipping height of ¼ inch or slightly less.

The persistance of various grasses when plats were unwatered was as follows: red fescue, velvet bent, colonial bent, fine leaved fescue, seaside creeping bent and Washington creeping bent, Kentucky blue grass. Grasses which persisted but a few years were Canada blue grass, ryegrass, red top, crested cog's tail. Grasses which could not be established were Wood meadow grass, rough-stalked meadow grass, and bulbous blue grass.

Colonial bent grows well between the pH range of 4.8 to 7.29 but the seasonable average color is improved as the acidity is decreased. This is especially noticable during April, September, October, and November.

Kentucky blue grass when well limed makes a thicker and finer turf when fertilized with well rotted manure or sulphate of ammonia as compared with nitrate of soda. Clipping closer than 1 inch was harmful to the turf during May, June, and July, 1932.

The persistance of grasses grown on putting green plats show the bent grasses good, fescue medium, blue grasses poor. Ranking of the various kinds of bent would be colonial 77%, velvet 80%, seaside 63%, and creeping 62%.

Three distinct species of Colonial bent have been found, the Astoria, the Oregon, and the common Colonial such as Rhode Island bent.

A recent bill passed by the Massachusetts Legislature is of interest to many clubs, as it enables them to operate their tractors over the highways when necessary, not having a dual set of brakes. The act follows:

(Chap. 109)

An act relative to the braking equipment of certain small tractors designed for use elsewhere than on public ways.

Be it enacted, etc., as follows:

Section seven of chapter ninety of the General Laws, as most recently amended by chapter fifty-one of the acts of the current year, is hereby further amended by adding at the end of the second sentence the words:—; and provided, further, that a tractor having a draw-bar pull rating of ten horse power or less and capable of a maximum speed of not more than eighteen miles an hour and designed specially for use elsewhere than on the traveled part of ways may be operated thereon if equipped with a single braking system which shall suffice to stop such tractor within a proper distance as aforesaid,—so that said second sentence will read as follows:—Every automobile shall be provided with at least two braking systems, each with a separate means of application, each operating directly or indirectly on at least two wheels and each of which shall suffice alone to stop said automobile within a proper distance as defined in said rules and regulations; provided, that if said systems are connected, combined or have any part in common, such systems shall be so constructed that a breaking of any one element thereof will not leave the automobile without brakes acting directly or indirectly on at least two wheels; and provided, further, that a tractor having a draw-bar pull rating of ten horse power or less and capable of a maximum speed of not more than eighteen miles an hour and designed specially for use eslewhere than on the traveled part of ways may be operated thereon if equipped with a single braking system which shall suffice to stop such tractor within a proper distance as aforesaid.

Approved April 5, 1933.

The annual Turf Field Day at the New Jersey Agricultural Experiment Station will be held on June 19th.

OUTLINE FOR STUDY OF SEEDS

(Presented at R. I. State Short Course)

Important Bent Grasses

Red Top (Agrostis alba) (Agrostis stolonifera var. major). Lemma thick, firm, usually shining; callus-hairs often long and spreading; mid-vein often discontinued or protruding between the middle and apex; awns are rather rare. In general red top seeds average the largest of the commercial bent seeds. Palea half as long to longer than the grain and usually straight or notched at the apex. In bulk the seeds appear yellow and glossy. It is usually produced in the United States. The seed is sold in two grades "Unhulled" and "Fancy" or "Recleaned" red top from which the outer chaffy hull has been removed. Recleaned red top may be obtained with purity 94, weed content 15% and germination 90%.

R. I. Colonial Bent (Agrostis tenuis). Formerly (Agrostis capillaris) or (Agrostis vulgaris). Brown top is the name in New Zealand. German Bent is usually composed largely of Colonial Bent. The lemma is slightly dull, light-colored, mostly 3-veined at apex and with basal hairs often long and spreading. Some lemmas carry a large twisted awn from near the base. Palea from half the length to no longer than the grain and variously notched at apex. The paleas are usually thin and transparent. In bulk this seed appears slightly less glossy than red top. "Astoriana Bent" is very similar except that more seeds are awned and exceptionally large. "Oregon Bent" differs mainly by having 2 or 3 excerted veins at the apex of the lemma and a deeply notched palea. The seed of this species of bent is usually well cleaned with the exception of that coming from Germany. The purity of the latter may be as low as 70 per cent. The germination should be 80% or above.

Velvet Bent, Brown Bent (Agrostis canina). Velvet Bent is frequently found in German Bent from a trace to as much as 50 per cent. Velvet bent somewhat mixed with R. I. Colonial Bent is produced in Rhode Island, New Jersey, Prince Edward Island, and Alberta, Canada. Velvet bent seeds are readily recognized by their form, dull and roughened surface, the awn from

A PLEA FOR COOPERATION

This plea is addressed to all members who enjoy the NEWSLETTER, all who wish it were better, and all who will do a bit to help make it better. At the Annual Meeting the Editor was promised cooperation by over fifty members present. The Editor is now asking for a little concrete evidence of that promise.

To make this NEWSLETTER better, to make it more truly a club paper, we need more articles by members, articles on any phase of greenkeeping about which anyone cares to write. Are we asking too much when we ask for YOU to send us something to help your club paper?

Incidentally, if there are any of our green chairmen friends with any ideas on their chests which they care to send in, we offer the NEWSLETTER as the best clearing house of greenkeeping knowledge here in New England, and we are always pleased to receive such evidences of approval.

near the middle of the lemma, the minute palea and the soft grain which has semi-fluid content. It is seldom cleaned as thoroughly as Colonial Bent. If well cleaned a bulk sample is dull and rather red.

Seaside Creeping Bent (Agrostis palustris) (A. stolonifera var. compacta), New Brunswick Creeping Bent, "Cocoos" Bent. The lemma similar to that of Red Top except that the back above the callas is usually keeled and the hairs are short and not spreading. Palea similar to red top in texture but shorted and more often round or lobed at the apex. Good quality as regards purity and germination is the rule with this seed. In bulk it will appear similar to red top.

Important Blue Grasses

Kentucky Blue Grass (Poa pratensis). Intermediate veins on the back of the lemma distinct; seeds contracted at the apex and not wider above than below the middle; transparent margin of apex seldom present in rubbed or commercial seed. **The palea margin sparsely edged with short hairs.** This is the most common commercial kind of blue grass. It is produced in Central United States. Rather low germination is the rule and purity is only medium. Rough-stalked meadow grass (Poa trivialis) shows similarity to seeds of Kentucky blue grass.

Canadian Blue Grass (Poa compressa). Intermediate veins rather indistinct; seeds broader above than below the middle; transparent margin of apex usually evident and flaring. **The palea margin edged with many short hairs.** This is a common commercial blue grass. It is mainly produced in Central Canada. This grass germinates somewhat quicker than Kentucky blue grass and usually a higher germination is obtainable. It may be found as an adulterant in Kentucky blue grass as it is usually of less value commercially.

Important Fescue Grasses

Red Fescue. Chewing's New Zealand Red Fescue (Festuca rubra var. fallax) and European Red Fescue (Festuca rubra) are the two most common types commercially. In Red fescue some seeds are covered with hairs, many seeds are awned and they are more slender and more brown than Chewings Fescue seeds. Much hard fescue is found in the Red fescue from Germany, otherwise the quality is good. Chewing's fescue—awns very short or absent, seeds only occasionally hairy, light colored and tinged with purple. A high percentage purity is the rule but the germination may be low. This is a strain originated in England now grown in New Zealand.

Sheep Fescue (Festuca ovina). Seeds often carry an awn of medium length. Wooly hairs may cover part of the glumes and the seeds are darker brown than Chewing's fescue. Lemmas longer and more narrow than those of Chewing's fescue. They are frequently tinged with purple and less bent in outline than those of Chewing's fescue. They are slightly smaller than Red fescue seeds. This seed is produced in Europe. The purity should be 90 per cent and the germination at least 50 per cent.

Important Rye Grasses

Annual or Italian Rye Grass (Lolium multiflorum) and Perennial or English Rye Grass (Lolium perenne). Rye grass seeds resemble those of fescue somewhat although they are much wider and more flattened. The awn on the annual rye grass seed usually distinguishes it from the awnless perennial rye grass. The purity and germination of the seed is usually good but much perennial seed is often mixed with the annual. The annual seed is mainly imported from Europe, Argentina and New Zealand. Perennial rye grass seed may be from New Zealand, Europe or United States, the latter is called Domestic Rye Grass.

Plants Usually Undesirable on The Golf Course

Timothy (Phleum pratense). The seeds are distinctively round and easily recognized. This is too coarse a grass for golf purposes but is a useful hay and pasture plant. It is included here because the seed is often included in lawn grass mixtures since it is relatively cheap.

Orchard Grass (Dactylis glomerata). This is another grass commonly used to adulterate seed mixtures. It is coarse and bunchy in habit. The lemma carries spines on the keel towards the apex and is usually unsymmetrical.

White Clover (Trifolium repens). Many prepared seed mixtures contain white clover. As a rule white clover gives a poor lie and is not desired on a golf course for that reason. The seed is a clear lemon yellow unless it is old, when the color changes to pink, red and brown.

Alsike Clover (Trifolium hybridum). The seeds are similar to white clover in shape but are slightly larger and usually of an olive green color. The plants' characteristics are intermediate between white clover and red clover. It is probably of no value to a golf course.

Red Clover (Trifolium pratense). Seeds yellow, red and purple, shaped like the white clover. The plants are large, coarse leaved and unsuited for golf turf.

Weeds which may be serious that are rather commonly contained in grass seed

Mouse-ear Chickweed (Cerastium vulgatum). It will be noted that the seeds are very small. It is difficult to clean out of bent grass seed and may be found when the cleaning has been improperly done. The weed is one well known to greenkeepers as "Chickweed", and one which has occasioned much plugging. It withstands cold weather and it is said to mature seed every month in the year.

Yarrow (Achillea millefolium). The seeds are small, flattened and rather white appearing. They are often found in red top. The plant is dark green, has a feathery appearance, produces underground creeping stems and altogether is one of the most persistent weeds in turf.

Common Dandelion (Taraxacum officinale) and Fall Dandelion (Leontodon autumnale). Fall dandelion is probably as serious in Rhode Island as the common or spring flowering form. Both are well able to survive in fairway turf. The seeds of fall dandelion are longer and more slender than those of common dandelion.

Major Plantain (Plantago major) is a broad leaved species most often found in bent grass seed since the seeds are very small. The species which causes the most trouble in fairways is buckhorn plantain which is already widely distributed and is called "Black Head" in Rhode Island. The seeds are amber colored and rather large as compared with the seeds of major plantain.

Smooth or Small Crab Grass (Syntherisma ischaemum) and Rough or Large Crab Grass (Syntherisma sanguinalis). Large crab grass has hairy lower stems which take root at the points while the other is not hairy and the lower stems do not root at the joint. Both are rather serious in fairway or lawn turf but the smooth crab grass is probably more of a pest in putting greens. Large crab grass has the longer and more slender seeds of the two.

Our Sentiments

"If we print jokes, folks think we are silly.
If we don't, they think we are too serious.
If we publish original material, we lack variety.
If we publish things from other papers, they say we are too lazy to write.
If we don't print contributions, we don't show proper appreciation.
If we do print them the paper is filled with junk.
Like as not some fellow will say we purchased this from another paper.
We did and we thank him!"

Our congratulations to Mr. and Mrs. Herb Moran, formerly of Newport and Wyantenuck, on the arrival of William Edward Moran, March 18, 1933.

At a dance a gentleman lost a wallet containing $600. He got up on a chair and announced: "I've lost my pocketbook with $600 in it. To the man who finds it, I will give $50."

Voice from the floor: "I'll give $75."

1st Burg: "Think o' pore old 'arry bein' sent to jail. One o' the fastest-workin' burglars in the game."

2nd Burg: "Ah, well, he's takin' his time now."—Tid-bits.

The
Worthington Mower Company
announces
New Reduced 1933 Prices

****

Fairway Cutting Unit	$ 80.
Tractor—worm drive	625.
"Multigang" (7 units)	670.
"Quintuplex" (5 units)	480.
"Triple" (3 units)	290.

Putting Green Equipment

Scout Overgreen	490.
Scout Hand Putting Green Mower (complete with grass box and transport)	55.

Prices subject to increase without notice.

NEW ENGLAND BRANCH OFFICE

E. ROSSITER SAWTELLE ROBERT B. BEALE, JR.

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BOSTON

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